ESSEX

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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.
(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.

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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.

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Cover illustration: The illuminated initial of the charter granted to the Borough of Colchester in 1413 by Henry V. 1989 marks the 800th anniversary of the granting by Richard I of the Borough's first known Royal Charter. Reproduced by kind permission of Colchester Borough. From a photograph by the Colchester and Essex Museum. (Cover lay-out by Roger Massey-Ryan).

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Essex Archaeology and History **20** (1989), 1-29

A Roman rural site at Rayne, Essex; excavations 1987

by M. D. Smoothy

Summary

This report presents the results of a limited rescue evcavation which uncovered part of a Roman settlement site, c. 1 km west of the village of Rayne. The site was occupied from the late first to the early fourth centuries AD. The usual repertoire of features found on heavily ploughed sites was present, ie. ditches, pits, post holes and rubble spreads. One of the pits is interpreted as a shallow well and there is evidence of an associated timber building. Among the finds, two groups are worthy of note. The first is a substantial assemblage of box-flue tile, indicating perhaps a Romanised building nearby. The second is an assemblage of well preserved animal bone sufficiently large to provide some insight into the diet and economy of the site's occupants.

Introduction

Fieldwalking along the line of the Rayne/Braintree by-pass between October 1984 and April 1986 identified a Roman pottery scatter *c.* 1 km west of Rayne village. This area was considered worthy of further investigation, and so a rescue excavation was conducted over a 7 week period in June and July 1987. The work was directed for Essex County Council by the author using manpower from Braintree District Council's MSC-funded archaeology unit.

The site was located (Fig. 1), in Rayne civil parish, immediately south of the A120, at the point where the new bypass joins the present course of the road (NGR TL 7127 2235). It was situated at a height of 70 m O.D. on a gentle south-west facing slope on the east side of the Ter valley (some 250 m from the river; at this point the river Ter is a rather insignificant stream). The underlying drift geology is chalky boulder clay with isolated pockets of brickearth.

Roman settlement is well attested in the area with "small towns", at Braintree, 4.5 km to the east (Drury 1976; Smoothy, in prep), and at Great Dunmow, 8.5 km to the west (Wickenden 1989). Several villa sites are known from the area, the closest being at Stebbing/ Boxted Wood, approximately 2.6 km to the west-north-west (Fig. 2).

The modern A120 is presumed to follow the course of Roman Stane Street. No indication of the presence of the Roman road was observed during excavation (which at its nearest point was only 6 m south of the modern carriageway). The position of the Roman road is definitely known at Stebbing Ford, 4 km to the west and at Braintree, 4.5 km to the east; in both places it approximates very closely to the line of the modern road (at Stebbing Ford the modern road is approximately 25 m south of the Roman road). However, the author suggests that at Rayne the Roman road runs considerably to the north of its present position, taking the most direct route from Braintree to Stebbing Ford. If this is the case, the excavation lies approximately 0.5 km south of the contemporary Roman road.

Excavation

Following initial topsoil stripping by the contractors the site was cleared by machine (JCB), to a level just above the undisturbed subsoil (boulder clay). Apart from contexts 42 and 65 at the western end of the site (Fig. 3), no stratified deposits remained above the general level of the subsoil. The machined surface was then cleaned by hand (hoed and trowelled), in order to define the features cut into the subsoil. Several small extensions were subsequently excavated by hand in an attempt to elucidate particular features (Fig. 3). The majority of features were excavated by trowel (sections being recorded where appropriate). None of the deposits were sieved due to lack of time and facilities. The excavation took place in one of the wettest summers on record and flooding was a constant problem. Because of this it proved impossible to excavate completely all the features recognized.

The site was covered by a uniform layer of ploughsoil varying in depth from 40 to 60 cm, containing derived Roman finds. The lack of stratigraphy above the level of the subsoil and the derived artefacts distributed throughout the ploughsoil indicates the site has been subject to long term plough damage, the uppermost levels having been removed and the subsoil features truncated. During excavations context numbers were assigned as follows:

Contexts 1 to 111:	Fills/Layers.
Contexts 1000 to 1069:	Cuts.
Context 2000:	Structure.

Three broad phases were distinguished at the site, therefore the contexts will be described in their appropriate place according to phase. The division into three phases is principally based on the stratigraphy observed in the central area of the site (Fig. 4). Here the rectangular post-built structure appears to predate the linear ditch (context 1000), which in turn is cut by the curvilinear ditch (context 1002). This is the only area of

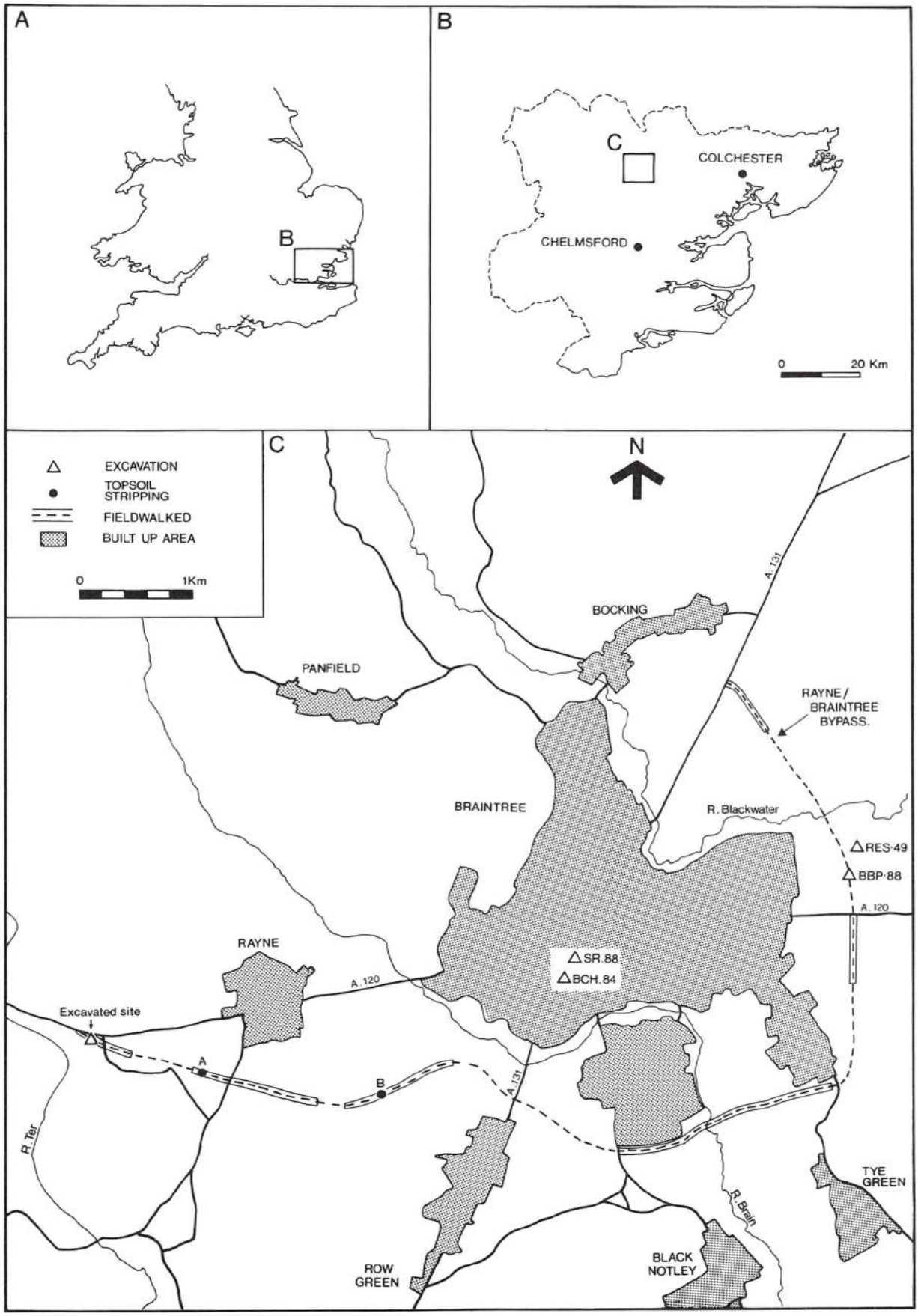

Fig. 1 Site location.

the site where the three phases can be demonstrated in a stratigraphic sequence. The phasing of other features is based upon spatial patterning and their contained finds. Unfortunately, for this reason the dating evidence is somewhat coarse-grained so all features allotted to a particular phase may not be strictly contemporary.

Phase 1 — Late 1st-early 2nd century AD (Fig. 5/1)
Phase 1 contained ephemeral traces of a rectangular post-built structure (*c.* 8 × 5.5 m), of indeterminate function. Immediately to the east were a pair of shallow parallel gullies which may mark the position of a trackway, possibly continuing as a shallow hollow way curving round to the north-east. Several isolated short lengths of shallow ditch/gully at the eastern end of the site may be interpreted as defining a contemporary boundary (possibly hedged). A pair of concentric penannular gullies, in the north east corner of the site may possibly represent part of a round house. A large pit was excavated 9 m north of the building, and is interpreted as a shallow well. The main features are described below.

The Well. Context 1029 (Fig. 4; Fig. 6, sect. 20)
Contexts 60, 90, 91 and 100 are layers filling a large pit (context 1029), near the northern edge of the site. The upper layers, contexts 60 and 100, were of dark and mid-brown clayey loam respectively. Both with moderate amounts of field stone and intermittently separated by a thin band of charcoal. Context 90 was a black (humic), silty loam overlying a primary deposit of soft, grey clayey silt (context 91). The pit itself was 1.42 m deep (below the top of the subsoil, *c.* 2 m below the modern ground surface), and 1.56 m in diameter at the top. The original form of the pit would appear to be steep sided and flat bottomed with a diameter of approximately 1 m (the larger, excavated, diameter is due to the formation of a decay cone).

During the excavation the water table (wt. on section 20), was only one metre below the top of the subsoil. After excavation, approximately 0.5 m of water was consistently present in the pit over a period of four weeks. The primary deposit (context 91), is consistent with having been formed in waterlogged conditions (although no macroscopic organic remains were preserved, probably due to dessication of the deposit at some time between its deposition and excavation). I would suggest that context 1029 is a shallow well (the presence of a pronounced decay cone suggests natural silting, rather than deliberate backfilling). The pottery from all the contexts indicates a later 1st or early 2nd century date for the feature. The primary silting cannot be separated from the secondary filling by means of the pottery dates. Context 60 contained a bronze brooch (Fig. 8/2), the manufacture of which may be dated to 50-70 AD.

Post-built Structure. Contexts 1012, 1013, 1014, 1025, 1033, 1036, 1037, 1047 and 1056 (Fig. 4; Fig. 6, sects. 12; 13, 15)
This consists of a number of postholes which appear to form a rectangular structure approximately 5.5 × 8.3 m (45.65 sq. m). The contexts are associated purely on the basis of spatial patterning. Figure 4 shows the proposed structure in detail. Where evidence survives, the posts used in its construction would appear to be 20-25 cm in diameter. The east "wall", is well defined by four obvious postholes, the other three sides present a less definite picture. The north side is indicated by two shallow postholes (contexts 73 and 74), at 90 degrees to the east side. They are of approximately the same diameter as the post pipes observed in contexts 1012, 1013, 1014 and 1033 (possibly representing driven posts?). Context 1036, in the north-east corner may represent a pair of intercutting postholes though excavation is inconclusive on this point. The south side is marked by a linear "slot", at 90 degrees to the east side, which is interpreted as the remains of a cill beam (distorted at its western end by a modern field drain). The western edge of the structure is largely conjectural; during machining three dark soil marks were observed (a, b and c on figure 4). These were thought to be the remains of postholes. Subsequently, this part of the site was flooded several times, the repeated cleaning this necessitated appears to have removed the ephemeral traces of the postholes. As a and b fit into the structural pattern they have been used to define the west wall in the absence of any other evidence. The north-west corner of the structure would have been destroyed by context 1000 and there is no trace of a corner post in the south-west. Context 1019, a shallow, irregular depression, may be contemporary on the basis of its contained pottery (possibly a drainage gully?). Two further postholes (contexts 1032 and 1042), lying beyond the south-east and north-east corners respectively, may be connected with the structure. Context 1032 is cut into the bottom of the western trackside gully (context 1031), and may be contemporary (the fill of the gully arrears to have built up against the *in situ* post).

The dating of the group is somewhat problematic. It clearly predates context 1000, which is dated by its contained pottery (context 7), to the latter 2nd century AD. A small quantity of 1st/2nd century pottery was recovered from the postholes themselves so the date for the structure is probably the late 1st or early 2nd century AD.

Ditched Trackway. Contexts 1010, 1026, 1031 and 1057 (Fig. 4; Fig. 6, sects. 10, 11 and 16)
These contexts consist of three gullies and their fills which form a consistent pattern. The fills all consist of brown clayey loams and the gullies are shallow, 10-15 cm deep, and slightly irregular in form. Contexts 1026 and 1031 are approximately 30 cm wide whilst context 1057 is *c.* 55 cm. The group also includes a shallow, irregular pit (context 1010), which is filled by contexts 6 and 40.

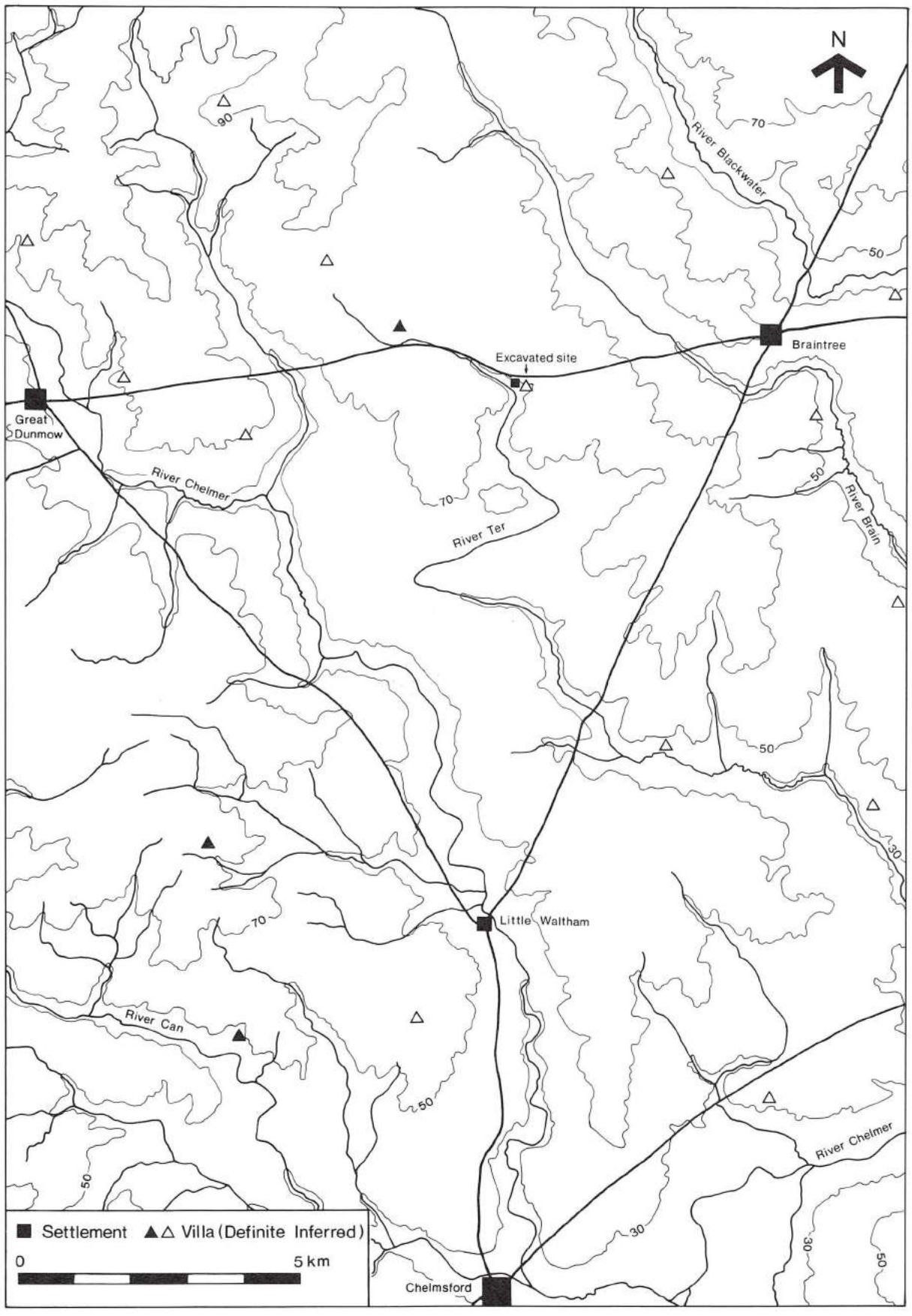

Fig. 2 Roman settlement in north-central Essex.

These features are probably the remains of drainage ditches flanking a trackway running into the site from the south. Context 1010 is interpreted as a contemporary continuation of context 1031, its shallow, irregular form suggests it may have resulted from trampling by livestock (probably cattle). Although no stratigraphic link exists between the trackway and the building immediately to the west, they would appear to be contemporary. The area of trampling lies just outside the south east corner of the structure and may indicate the position of a doorway, assuming the building was used for livestock. It may be noted that a relatively large quantity of iron slag was found in context 6, which may indicate an attempt to consolidate the trampled area whilst the building and trackway were still in use. Direct dating evidence for the trackway is sparse but the small amount of datable pottery recovered is consistent with its inclusion in phase 1.

An irregular linear depression (Fig. 7, sect. 21), exists to the north of the trackway ditches, curving round to the north-east; this is interpreted as marking the continuation of the track in the form of a shallow hollow-way (its deepest point, at the northern edge of the site, is *c.* 40 cm below the general level of the subsoil surface). There is a slight gradient sloping from north to south across the site and presumably repeated trampling by livestock was sufficient to cause erosion of the unsurfaced track. The depression was deliberately levelled-up during phase 3 (see below).

Penannular Gullies. Contexts 1003 and 1030 (Fig. 3; Fig. 6, sect. 18)
This pair of concentric curved gullies in the north east corner of the site are clearly related on the basis of alignment and fill. Context 1003 consists of a flat bottomed, steep sided slot, 50 cm wide and 20 cm deep. Context 1030 is much less substantial, being only 3-4 cm deep and varying in width from 20 cm at the northern end of 60 cm at the southern end where it spreads out and disapears (downslope). The general curve of the gullies could be traced as a discolouration of the subsoil as far as context 1001.

These gullies may be tentatively interpreted as the remains of a round house built in the native Iron Age tradition, possibly of ring-groove type (Allen *et al.* 1984), ie. with the deeper internal slot (context 1003), marking the position of a timber wall and the outer gully representing a shallow drip/drainage gully. The projected diameter of context 1003 is approximately 10 m which closely compares with much better preserved examples from Stansted (Brooks & Wall 1988), and Little Waltham (Drury 1978). No trace was found of a continuation of the gullies north-west of context 1001. This may be due to plough damage (if the features were originally shallower in this area they may have been removed entirely). Given the limited evidence available it is not possible to be certain of the identity of these features, but a heavily eroded round house would seem to be the most likely interpretation.

The dating of these features is problematic; the fill of context 1003 (context 1), is cut by context 1015 which is assigned to phase 2. The pottery contained in context 1 may generally be dated to the earlier second century, however the presence of three sherds of BB2 indicates that the context could not have been completely filled before the mid-second century. As this pottery may only date the final abandonment of the structure it may be assigned to phase 1 (late 1st/early 2nd century AD).

Enclosure. Contexts 1008, 1046 and 1069 (Fig. 3; Fig. 6, sect. 9)
These three lengths of intermittent shallow ditch, run across the south eastern corner of the site from just south of the penannular gullies to just east of the eastern trackway gully. Context 1008 was traced over a length of 10.5 m and was 25-45 cm wide and *c.* 15 cm deep being filled by dark brown clayey loam (context 26). Contexts 1046 and 1069 were traced over a distance of approximately 3 m each and are 20-30 cm wide and only 2-3 cm deep being filled by grey brown (context 30), and mid-brown (context 29), clayey loam respectively. Context 1008 cuts an earlier gully (context 27/1040), and in turn is cut by a pit (context 41/1011) and part of the rectilinear enclosure (context 1045), which are both assigned to phase 2 (context 27/1040 contains Roman material and must relate to a slightly earlier episode during phase 1). In addition to this stratigraphic evidence, the few finds contained in the gullies are consistent with a date within phase 1. The three separate lengths of ditch do not appear to be part of a single regular features but seem to define an indistinct boundary running between the penannular gullies (roundhouse?), and the trackway. Clearly the ditches are not sufficient in themselves to create an effective barrier to livestock but they may indicate the position of a former hedge/hedgebank, with context 1008 representing a shallow ditch on its northern side and contexts 1046 and 1069 indicating a severely truncated ditch on its southern side.

Phase 2 — Late 2nd-early 3rd century AD (Fig. 5/2)
There are two apparently unconnected elements present in phase 2 (a rectilinear enclosure and a group of 3 pits), which may be a conflation of more than one period of activity. However, neither the artifacts nor the stratigraphy allow sufficiently precise dating to resolve the matter.

Rectilinear Enclosure. Contexts 1000, 1045 and 1066 (Figs. 3 & 4; Fig. 6, sect. 2)
Phase 2 is defined straigraphically by the rectilinear ditch, context 1000, which cuts across the phase 1 post-built structure and is filled by context 7. Context 1000 is a long (*c.* 18.5 m excavated), straight ditch running north-south across the central area of the site. On average it is 50-60 cm wide and 20-30 cm deep with a rounded profile. Context 7 consists of mid-brown clayey

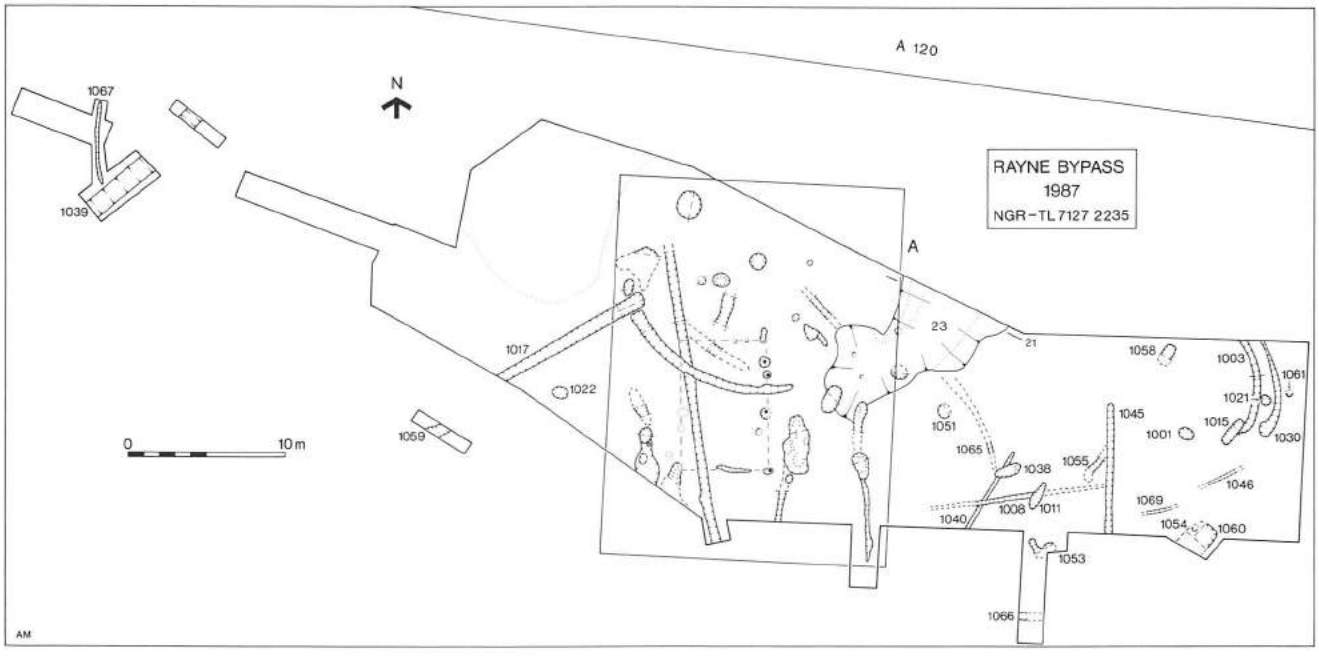

Fig. 3 General site plan.

loam with frequent charcoal inclusions. Based on patterning, context 1000 may be linked with contexts 1045 and 1066 which are both rectilinear ditches with similar dimensions and fills (contexts 28 and 104 respectively). If these ditches are assumed to be linked they appear to form an enclosure *c.* 26 m wide and at least 24 m long. Projecting the ditch alignments suggests a 90 degree junction at the south-east corner and a slightly obtuse junction at the south-west corner. No trace was found of a corresponding ditch along the north side of the enclosure. Contexts 1000 and 1045, which form the west and east sides of the enclosure respectively, both fade out at their northern ends which may suggest that the enclosure has been ploughed away in this area. The ditches produced few finds; however the datable pottery is consistent with a date in the later 2nd/early 3rd century AD. We may assume that the enclosure is connected with an agricultural function, though it is impossible to be more precise. There is no point of contact between the rectilinear enclosure and the "grave-shaped" pits discussed below, which are also assigned to phase 2.

"Grave-Shaped" Pits. Contexts 1015, 1028 and 1058 (Figs. 3 & 4; Fig. 6, sects. 6, 7 & 8)

These three features are grouped together on grounds of similar shape and orientation. They are all subrectangular steep sided pits orientated north-east/south-west. Their dimensions are as follows:

Cut	Fills	Length	Width	Depth	Orient. (OS)
1015	3,75,76,111	200 cm	70 cm	70 cm	40-220 deg.
1028	78,86	175 cm	100 cm	35 cm	34-214 deg.
1058	93	150 cm	80 cm	40 cm	33-213 deg.

The fills of contexts 1015 and 1028 are essentially similar, with a layer of virtually sterile yellow clay (contexts 75 and 86), overlaying a layer of black humic loam (contexts 76 and 78). Context 1015 contained two further layers, context 3 was a dark brown humic loam lying above context 75 and context 111 was a primary deposit of yellow clayey silt below context 76. The fill of context 1058 consists of homogenous light brown clayey loam.

In size and shape these features are reminiscent of graves (the orientation is similar to that observed in the Roman cemetery at Kelvedon [Rodwell 1988]). However, as animal bone has survived well on the site, the absence of skeletons is inexplicable. The problem is further compounded by the presence in context 3 of the only piece of adult human bone from the site. A substantial piece of adult human skull was recovered in excellent condition and it seems highly improbable that the rest of the skeleton was present and had decayed away *in situ* (it should be noted that context 3 is a teritiary deposit within context 1015). Two infant bones were recovered from context 86, though their presence may not be significant as neo-natal infant bones are relatively common on Roman domestic sites in the area. The layers of humic material in contexts 1015 and 1028 suggests the deposition of organic material in the base of the pits. The finds were generally unexceptional though an unusually large sherd of a fine samian platter (Ritterling XI), was recovered from context 76. The overlaying clay layers were presumably deliberately placed in order to seal the organic deposits. Context 3 indicates collapse or compaction of the underlying deposits. The fill of context 1058 is similar to most of the other pits on the site and only its shape and orientation

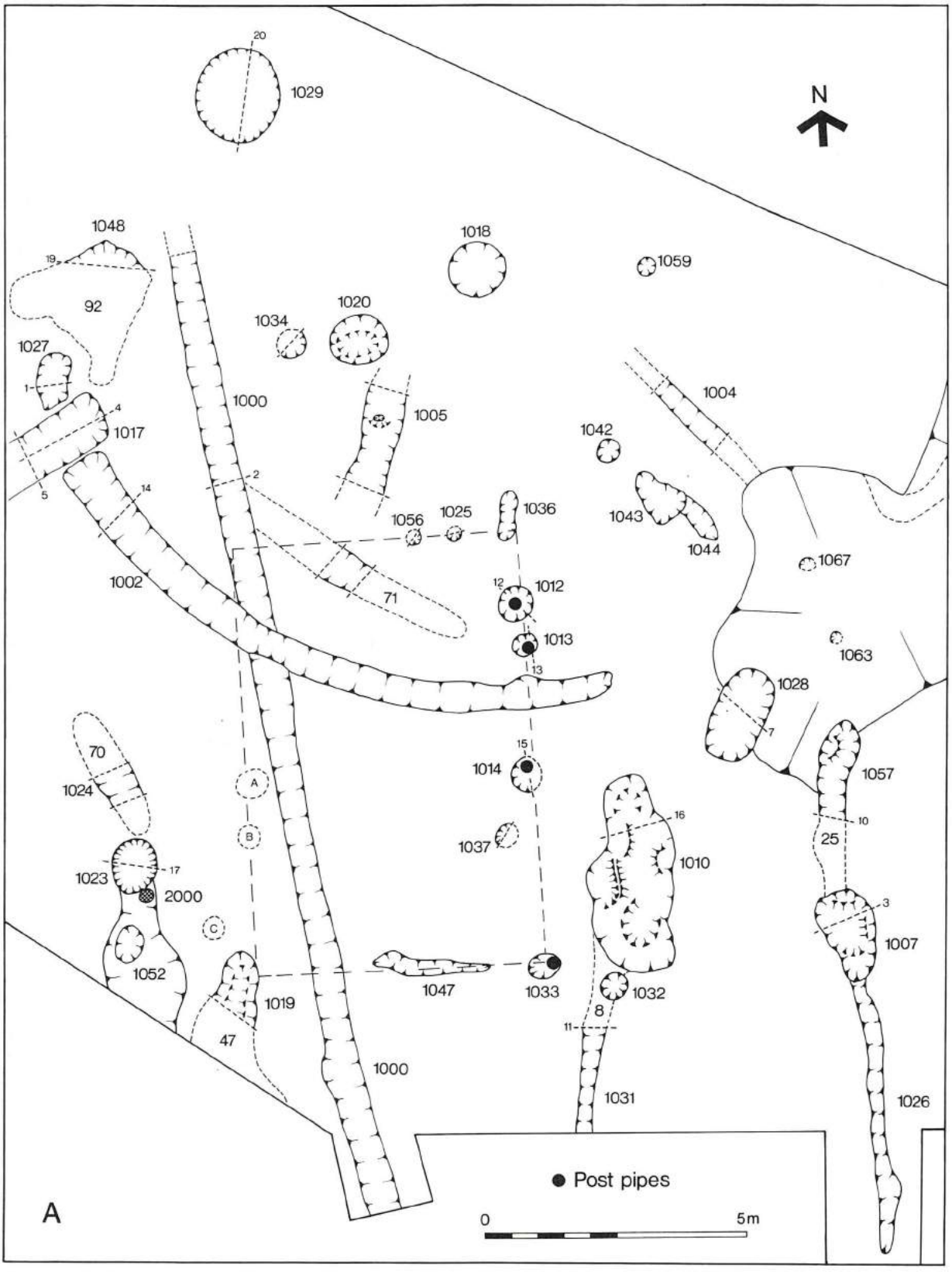

Fig. 4 Detailed plan of central area.

link it with contexts 1015 and 1028. Context 93 contained a Nauheim derivative brooch, probably dating to the mid 1st century AD (Fig. 8/4). The dating of these features to phase 2 is principally based on stratigraphic evidence, ie. context 1015 cuts context 1 which indicates a date in the mid 2nd century or later, supported by a sherd of BB2 from context 86. However, the brooch in context 93 and the samian in contexts 3, 76 and 78 are all 1st century types (with the samian surviving in unusually good condition). This may suggest that curated objects were deliberately deposited in the pits in the later 2nd century. In the absence of any obvious utilitarian explanation for the features a "ritual" function may be considered the best interpretation available.

Pit. Context 1007 (Fig. 3; Fig. 6, sect. 3)
This isolated feature measured 1.8 x 1.1 m and was 40 cm deep, with moderately sloping sides and a flat bottom. The upper fill (context 35), consists of dark brown/black clayey loam and the lower fill (context 36), of grey/yellow sandy clay. The pit cuts the eastern trackway gully. The latest sherds in the pit consisting of BB2 and samian of the Trajanic period, indicate the 120s AD as the earliest possible date for its deposition. The function of the pit is obscure.

Phase 3 — Late 3rd-early 4th century AD (Fig. 5/3)
This principally consists of two ditches, contexts 1002 and 1017. Context 1017 is a straight, regular V-shaped ditch running approximately north-east/south-west which abruptly ends where it intersects the line of context 1002, which is a curvilinear ditch forming an approximate quarter circle. The nature of the junction clearly demonstrates that the ditches are contemporary. A pit, dated to the same period, lies at the centre of the arc described by context 1002 and may represent a large post hole. A further ditch at the west end of the site is considered to belong to phase three as it closely parallels the line of context 1017. A large quantity of tile rubble was deposited on the site at this period, presumably as some kind of make up layer. The main features are described in greater detail below.

Rubble layer. Contexts 18 and 65 (Fig. 3; Fig. 7, sect. 21)
Context 18 is a rubble layer lying in the large depression (hollow-way, discussed above), in the north/central area of the site. The layer is 5-10 cm thick and consists of densely packed tile and mortar rubble and broken flint nodules in a matrix of mid-brown sandy loam. The layer contained few datable finds (apart from a quantity of broken relief-patterned flue-tiles dating to the Antonine period, which are certainly not in their primary context), but the presence of an irregular copy of a coin of Gallienus dated to 270-84 AD suggests a date in, or after, the last quarter of the 3rd century. The dating of the layer is clarified by the stratigraphy (Sect. 21). The hollow-way which was apparently initiated in phase 1 as a continuation of the ditched trackway discussed above, is filled by five separate contexts, ie. in ascending order, contexts 89, 53, 18/19, 23 and 5.

Context 89 is a thin irregular layer covering the bottomm of the hollow-way consisting of grey/yellow loamy clay with many flint nodules and clasts of yellow clay disturbed from the underlying subsoil. The small quantity of pottery from context 89 is consistent with a date within phase 1, and is interpreted as a layer of trampled soil contemporary with the use of the hollow-way as a track for livestock.

Context 53 is a layer of dark brown clayey loam (*c.* 10-15 cm thick), overlying context 89. This context contained a moderate quantity of pottery ranging in date from the later 1st century to the mid 3rd century (the latest sherds present being of Nene Valley colour coat). The deposit was probably closed before the end of the 3rd century (see the pottery discussion). I suggest that context 53 is a layer formed by natural silting over a long period of time following the abandoment of the phase 1 trackway. Deposition ceased when the context 53 was deliberately sealed by the layer of rubble referred to above (context 18), in phase 3.

Context 23 is a charcoal-rich layer of dark brown/black humic loam (*c.* 10-15 cm thick), overlying context 18 and directly overlain by the ploughsoil. Context 23 produced a large assemblage of pottery, much of which is residual, but the presence of Rettendon-type wares and the absence of distinctive later pottery types suggests that deposition took place between *c.* 275 and *c.* 350 AD. Context 23 appears to be similar to context 53 in its mode of deposition. Presumably the underlying rubble layer underwent gradual subsidence into the partially filled hollow-way allowing the accumulation of context 23. Context 5 is basically identical to context 23 but was disturbed by metal detector users.

Thus it can be seen that context 18 is securely bracketed by a pair of well-dated layers (contexts 53 and 23), if one accepts that context 53 was closed before the end of the third century and that context 23 was deposited after *c.* 275 AD (see pottery discussion), then context 18 must date to 275-300 AD (this is supported by the coin evidence cited above). The relief-patterned flue-tile present in context 18 suggests the rubble was derived from a high status building (possibly a villa bath house), constructed *c.* 120-130 AD. Presumably the rubble was brought to the site following the demolition/collapse of the building in the later 3rd century.

Contexts 18 and 23 appear to be directly analogous to contexts 65 and 42. Context 65 is a rubble layer similar in composition to context 18 which is overlain by context 42. These layers cover the north-west corner of the site and are probably part of a formerly more extensive layer of rubble make-up which also includes context 18. In the case of context 18 the layer survives because it is set in a depression and context 65 seems to have been protected by the depth of ploughsoil which is deeper than usual over the north-west corner of the site.

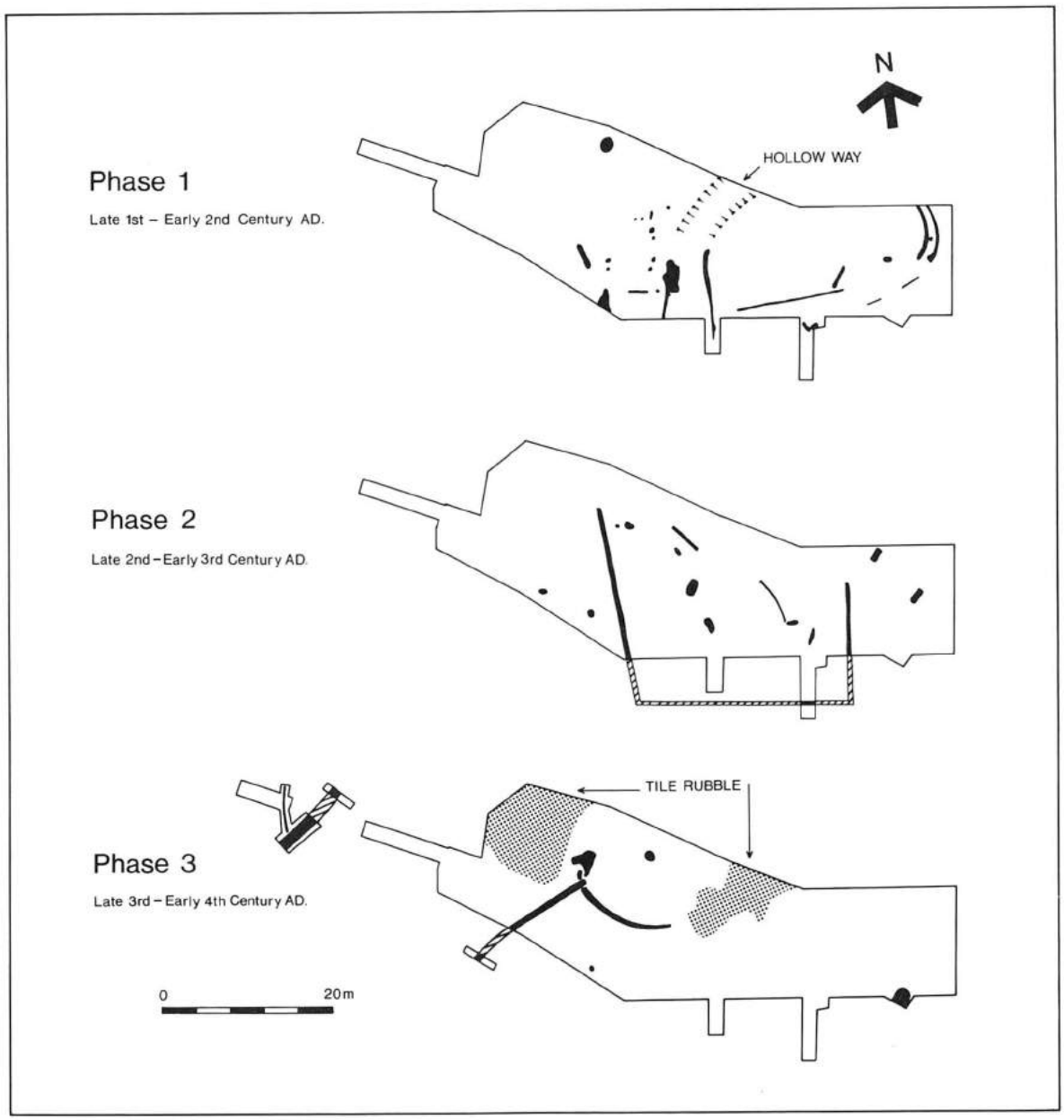

Fig. 5 Phase plans.

Ditches. Contexts 1002, 1017, 1039, 1060 and 1067 (Fig. 3 & 4; Fig. 6, sects. 4, 5 & 14)

Context 1002 is a curvilinear ditch forming approximately 20% of a circle (with a projected diameter of *c.* 19.2 m), its centre of arc coinciding with context 1018 (interpreted as a large post hole, diameter 1.10 m, depth 0.50 m, post diameter 0.40 m). The ditch is 12 m long, narrowing from 1 m at its north-west end of 0.5 m at the east. From a maximum depth of 0.40 m at the north-west it gradually shallows out towards the east. The profile is flat bottomed and steep sided. The primary silt (context 77), is orange/brown loamy clay which is more apparent at the north-west, lensing out towards the east. The main fill of the ditch (context 10), is a mid-brown clayey loam, which is virtually indistinguishable from the overlying ploughsoil.

Context 1017 is a rectilinear ditch running north-east/south-west and butting against the north-west end of context 1002. The ditch is at least 10.50 m long, 1.00 m wide at the north-east end, narrowing to 0.60 m at the south-west. From a maximum depth of 0.50 m at the north-east it gradually shallows to 0.40 m at the south-west (context 1059, picked up in a slot trench beyond the south-west edge of the site, may represent the continuation of context 1017, in which case the ditch is recorded for *c.* 16 m). The ditch is generally steep sided and flat bottomed; however, a break in profile along the southern edge (see section 5), together with a concave stone concentration noted in section, may indicate a recut. The primary silting (context 68), is orange/brown loamy clay and is more marked at the north-east, lensing out to the south-west. The main fill of the ditch (context 43), is a dark/mid-brown clayey loam. Context 43 contained a greater concentration of finds (principally pottery, bone and antler), than was usual on the site.

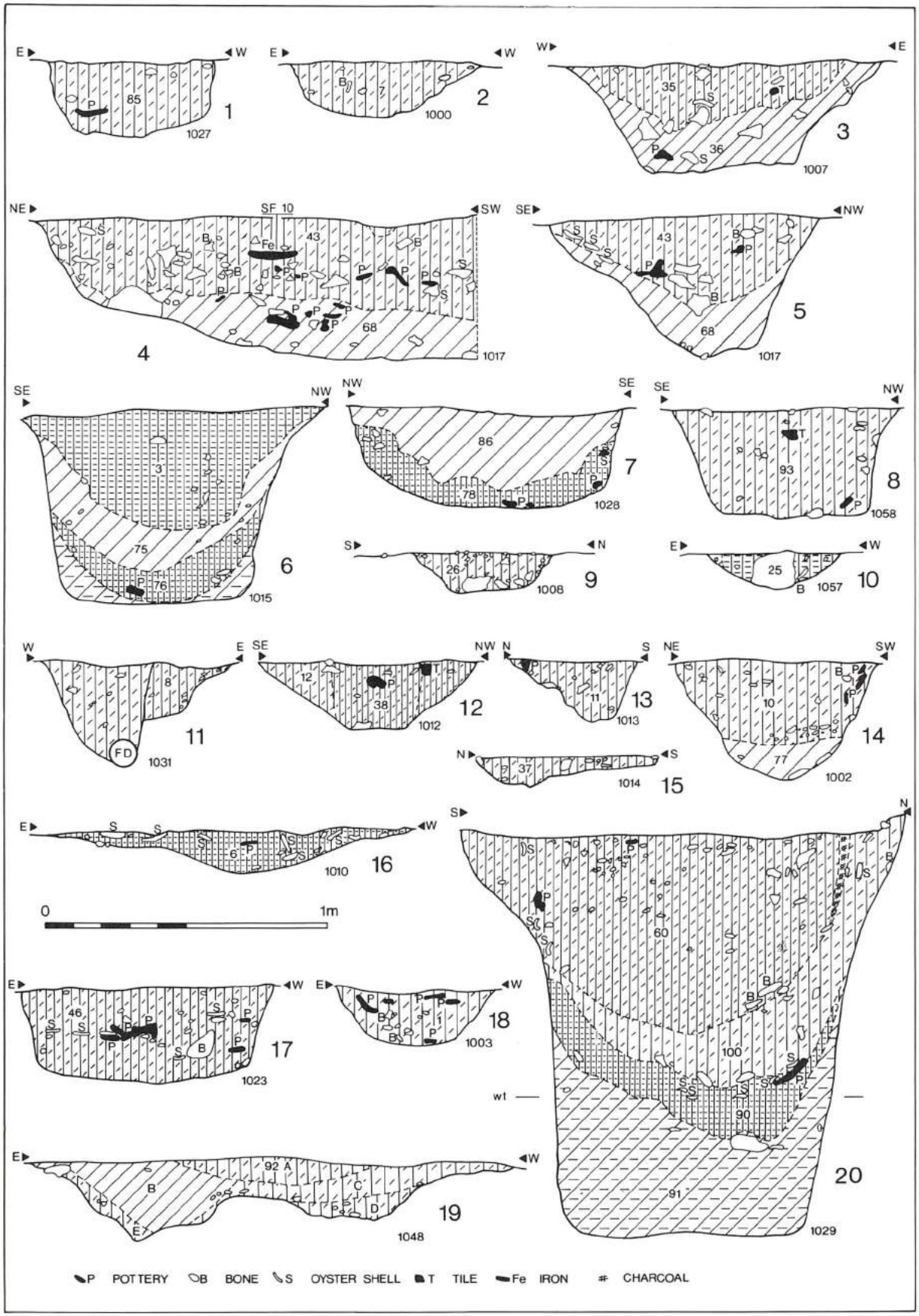

Fig. 6 Sections 1-20 (see Fig. 7 for key).

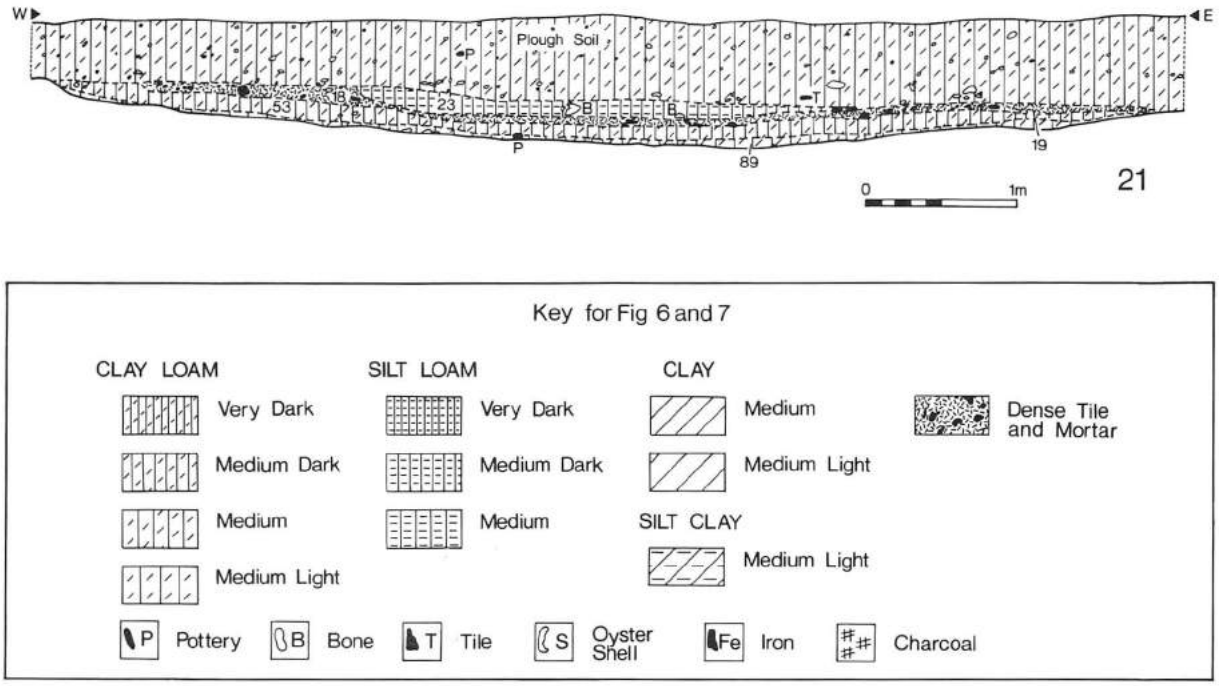

Fig. 7 Section 21.

That contexts 1002 and 1017 are contemporary is clearly demonstrated by their junction. Rather than running into or cutting each other, the north-west end of context 1002 butts against the north-east end of context 1017, with a substantial ridge of undisturbed subsoil separating the two features. The line of context 1002 is continued on the north side of context 1017 by an elongated pit (context 1027), which also butts against context 1017 with an intervening ridge.

Context 43 contained a relatively large assemblage of pottery which securely dates the filling of the ditches to the late 3rd/early 4th century AD. The pottery from context 10 presents a similar picture. Context 43 also contained a coin of Postumus (259–68 AD), indicating that the context could not have been filled before the third quarter of the third century. The primary silting of Context 1017 contained a denarius of Septimius Severus dated to 195–96 AD, indicating that the initial silting of the ditch could not have occured before the end of the second century.

The ditch (context 69/1039), at the western end of the site, together with its associated gully (context 66/1067), may be contemporary with context 1017 as the ditches are approximately parallel. The butt end of a ditch excavated in the south-east corner of the site (context 103/1060), may also be part of this pattern. If all these ditches are considered to be contemporary they appear to form part of a parallel system of land division trending north-east/south-west across the landscape.

Note. In all three phases a number of isolated features (pits, postholes, gullies, etc), have been assigned to a particular phase on the basis of their contained finds (Fig. 5); where these features do not materially contribute to the interpretation of the site no detailed description is given in this report (full details of all contexts are included in the site archive).

The Finds

The Coins

Only four coins were recovered from the site:

Context 18. Gallienus (260-268 AD). Ae Antoninianus. Pr.
Obv. Radiate head R. Legend illegible.
Rev. Figure standing L. Legend illegible.
Irregular copy. Date 270–84 AD.

Context 43. Postumus (259-268 AD). Ae Antoninianus. Fr.
Obv. Radiate burst R. . . . OSTUMUS . . . V . . .
Rev. Figure standing L. holding spear.
PM TR P COS . . .

Context 68. Septimius Severus (195-96 AD). Denarius, Fr/Pr.
Obv. Laureate head R. . . . PT SEV AUG PA . . . MAX . . .
Rev. Minerva standing L. holding spear and shield.
P M TR P III COS II PP
Mint of Rome.

Context 71. Faustina the Younger (161-175 AD). Sestertius, Fr.
Obv. Bust B. FAUSTINA AUG . . .
Rev. Hilaritas standing L. holding palm and cornucopia. SC in field. Legend illegible.

The coins recovered may not fully represent the original range of coins present as the site was repeatedly raided by metal detectors and it is impossible to determine what was stolen. The complete lack of fourth century types (usually very common finds on sites occupied throughout the fourth century), may indicate a real cessation of activity during this period.

[I am grateful to Mr. J. A. Davies for his comments on two of the coins. Any errors remain the responsibility of the author].

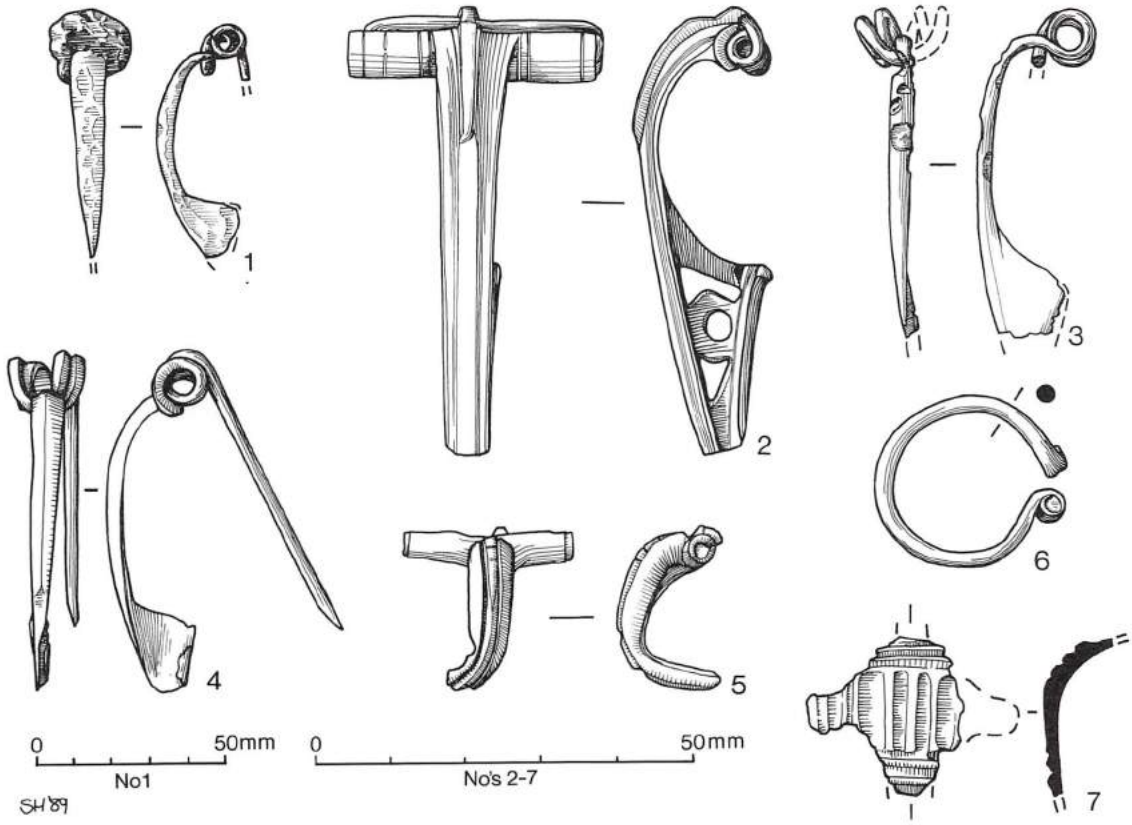

Fig. 8 Brooches. No. 1 Iron (side view drawn from X-ray)
Nos 2-7 Copper alloy

The Metalwork
by H. Major
Brooches
Seven brooches or brooch fragments were found, all except one made of copper alloy. All are first century AD in date, and with the possible exception of the iron brooch from context 7, probably belong round the middle of the century.

The brooches are copper alloy unless otherwise specified.

Context 7. (Fig. 8/1). Iron brooch with flat bow; most of pin and part of catch plate missing, spring very corroded. Probably first half of 1st cent. AD.

Context 60. (Fig. 8/2). Bow brooch, pin missing, spring in two pieces. 11? coils to spring. Wings decorated with lines across the ends and adjacent to the bow; perforated foot with circular cut-out. A Colchester B brooch, dated to *c.* 50-70 AD. The pierced bow is exactly paralleled in an unstratified brooch from Colchester (Hawkes and Hull 1947, 311, no. 41).

Context 70. (Fig. 8/3). Bow and 2 coils of spring, not attached but presumed to be part of same brooch. Foot incomplete. A Nauheim derivative, Hull's Type II as given in Crummy 1983, 8. The origins of the type are pre-conquest, but a post-conquest data cannot be ruled out.

Context 93. (Fig. 8/4). Nauheim derivative; slight damage to foot, 4 coil spring. D-shaped section to bow. Type and date as previous example.

Unstratified (Fig. 8/5). Bow and head of a small brooch with a hinged pin; in poor condition. The ridged bow has rouletting down the middle and is bent, with the foot missing. The side wings are cylindrical with lines across the ends. This appears to be related to the 'dolphin' brooch (Hull's type 94, Crummy 1983, 12), but these normally have semi-cylindrical wings. Probably *c.* 50-56 AD.

Unstratified (Fig. 8/6). Penannular brooch with rolled terminals; pin missing; Fowler Type C (1960, 152); Probably 1st cent. AD, but the type can be earlier.

Unstratified (Fig. 8/7). Part of the bow of a Hod Hill brooch; in poor condition, edges damaged. It has lateral lugs either side of the bow, possibly originally ending in knobs. The bow has longitudinal moulding, flanked at either end by transverse mouldings. Hull's type 61 as given in Crummy 1983, 10. The date is probably between the conquest and *c.* 65 AD.

Copper alloy
The copper alloy from the site is mainly fragmentary, and of little intrinsic interest apart from an unstratified terret fragment. Illustrated pieces are described below whilst notes on a further 10 fragments are in the archive.

Context 90 (Fig. 9/1). Sheet fragment; part of a fitting, perhaps for a box. The original shape is uncertain. The edges are bevelled, and the terminal may have been diamond shaped with a central performation. L. 45 mm.

Unstratified (Fig. 9/2). Terret ring; fragment of an oval terret ring with variable circular section and a moulded stop at the end of the semi-cylindrical attachment plate. It has a single surviving stud containing traces of red enamel; there would originally have been three studs set symmetrically.

This terret belongs to Leeds' group 5 (Leeds 1933), reclassified as MacGregor's platform type (MacGregor 1976, 38-9). The type is commonest in eastern England and may be of Brigantian or Icenian manufacture, with a probable date of 1st to 2nd. cent. AD (MacGregor 1976, 45). The only other examples from Essex are two fragments from Colchester (Hawkes and Hull 1947, 331,

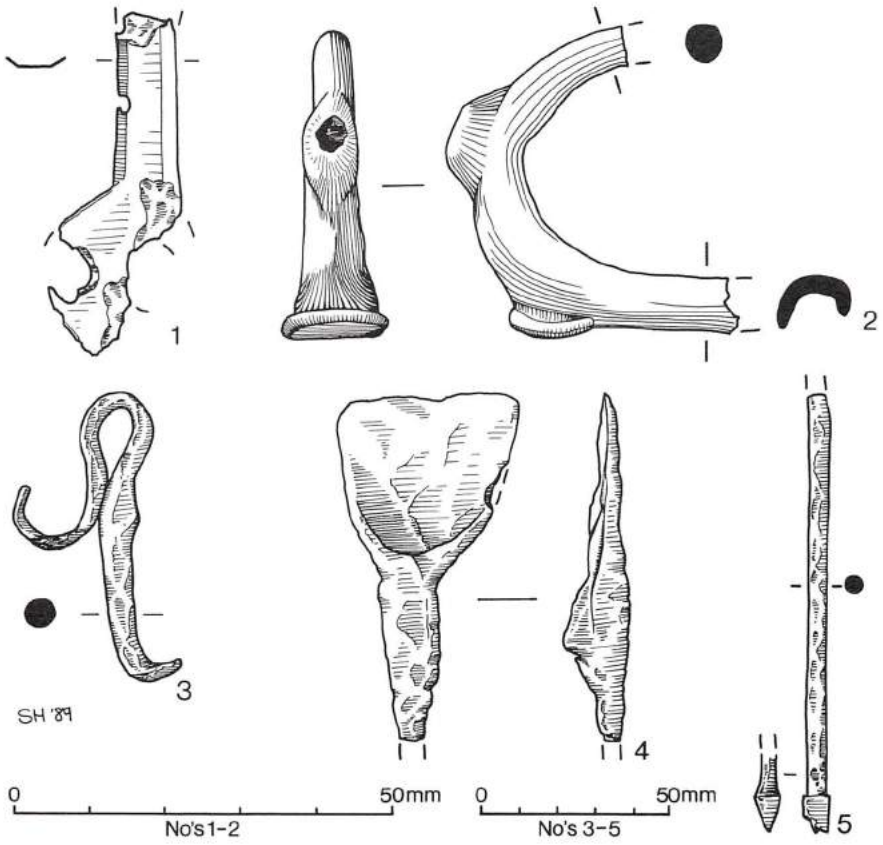

Fig. 9 Nos 1, 2 Copper alloy
Nos 3-5 Iron

pl. XXIV, 4-5). The enamelling on the studs or platforms is normally polychrome; only a small area of enamel remains on this example, but as the enamelled area was so small, it seems likely that in this case only a single colour was used to fill a relatively deep cell. The semi-cylindrical attachment plate is unusual as they more commonly have a solid section, but a terret from Colchester has a convex attachment plate (Crummy 1983, 106, no. 2542). The variations in attachment plate forms may reflect differences in methods of attachment to the harness.

Lead

Four small fragments, two described as waste, the other two as solidified puddles.

Iron

The ironwork from the site consists predominantly of small fragments. Identifiable pieces are mainly utilitarian, deriving from either agricultural or minor structural use. The group includes hipposandal fragments, an ox-goad, several knife blades, part of a pair of shears, a broken hinge and a latch-lifter. The only objects which are not so mundane are a stylus from context 47 and a brooch of the 1st century AD date from context 7 (described with the copper alloy brooches, above). The illustrated pieces are described below whilst the remainder of the assemblage is catalogued in the archive.

Context 23. (Fig. 9/3). Double hook with suspension loop, made from single rod. The hooks are of different sizes. L 77 mm, width of loop 23 mm.

Context 42. (Fig. 9/4). Tanged blade of spatula, with a wide triangular blade. This is similar to a modern painter's chisel knife (Salaman 1975, 250). L 90 mm, max. W of blade 47 mm.

Context 47. (Fig. 9/5). Stylus. Point missing, section probably circular, diam. 5 mm. L 115 mm.

Context 53. 27 hobnails, inc. 3 corroded together. Some shafts bent. Head diams. 12 mm, L c. 15 mm.

The nails as found *in situ* represented the heel and part of the sole of an adults shoe, and comprised a group of 12 hobnails at the heel and 15 forming a cross with its long axis along the length of the sole. The row of nails normally found round the edge of the sole is missing; as this feature occurs almost invariably, it is probable that the sole was incomplete when discarded. The vertical cross in the centre of the sole is parallelled on a shoe from London (Rhodes 1980, 104-5, shoe 532) in a context dated *c.* 70-100 AD.

The Iron Nails

by H. Major

Discussion

The nail fragments from the site represent between 239 and 493 nails. Definite modern nails (e.g. wire nails) are absent, and horse-shoe nails are absent apart from one possible unstratified example. The assemblage may therefore be regarded as largely, if not wholly, Roman.

As is normal on Roman sites, nails with round, flat heads and square-sectioned shafts predominate (Type 1 in the catalogue), and in this case form 72% of the assemblage, excluding shaft fragments. Only 34 examples are complete, with an average length of 56.4 mm, and an average head diameter of 14.2 mm. They range from 25 mm to 122 mm in length, but nearly three-quarters are between 40 and 69 mm long, consistent with use mainly for general carpentry.

The second most common type of woodworking nail on this site has an inverted triangular, or shouldered head in the same plane as the square-sectioned shaft (Type 2 in the catalogue). These nails are

suitable for use where the head need to be hidden by driving the nail fully into the wood, with the head parallel to the grain, e.g. in boxes. There are only 7 complete examples from the site, and their lengths range from 37 to 132 mm, with an average length of 64.6 mm. Given that the sample is small, there is little suggestion that this nail type was being extensively used for heavy structural carpentry on this site, although it may have been in other places. At Brading villa, for example, similar nails were almost all over 180 mm in length, and were probably used in building (Cleere 1958, 56-57).

Nearly half of the nail fragments (including hobnails) derive from phase 3 or later contexts, and only 15% from phases 1 and 2. This may be due to a number of factors, and does not necessarily mirror the actual level of activity on the site during particular phases. Since the number of complete examples is so small, analysis by phase is considered pointless. It may, however, be suggested that there is no evidence for major structural use of nails during any phase.

Hobnails were found in a few contexts, mainly singly, but context 53 contained a group which represents part of the sole of a shoe (see above).

The nail catalogue forms part of the archive.

The Pottery

by P. Cheer

The total assemblage comprised 18,312 sherds weighing 178,054 g with an Estimated Vessel Equivalent (EVE is the minimum number of vessels required to produce the assemblage [Orton 1975]), of 99.07. Fabric identifications were made with the aid of a X20 binocular microscope. This basic data is presented in table 1.

Table 1.

Complete Pottery Quantification

Fabric	No	Wt(g)	EVE	% EVE
GW1	10	58	.08	.08
GW2	3,013	17,588	12.49	12.61
GW2A	28	401	.48	.48
GW2B	77	705	1.11	1.12
GW2C	325	2,539	2.51	2.53
GW4	264	2,531	2.91	2.94
GW7	7,332	54,706	50.70	51.18
BB1	25	695	1.25	1.26
BB2	71	1,256	1.20	1.21
RW2	441	2,672	2.68	2.71
RW3	24	209	.09	.09
RW4	778	5,046	3.67	3.70
RW7	48	181	.45	.45
WS2	49	219	.00	.00
WS5	16	99	.00	.00
CB	278	1,115	.15	.15
WW1	43	208	.25	.25
WW2	154	1,176	1.66	1.68
WW5	251	1,790	2.71	2.74
MG1	3,718	68,418	2.96	2.99
MG2	96	946	.12	.12
GT1	48	1,141	.29	.29
GT2	348	2,996	3.34	3.37
FT1	30	174	.09	.09
FT2	176	2,029	1.85	1.87
SW	27	321	.24	.24
GW/SW	25	217	.00	.00
CG1	227	1,350	.88	.89
C1	28	63	.23	.23
C1C	2	7	.00	.00
C2	9	44	.20	.20
C2V	7	56	.07	.07
C3	1	2	.00	.00
C4	2	3	.00	.00
C11	43	155	.12	.12
MO	21	619	.56	.57
MO1	8	484	.26	.26
MO3	13	837	.50	.50
MO9	1	207	.00	.00
AM	2	415	.00	.00
AM1	24	1,579	.00	.00
AM1A	1	148	.00	.00
AM2	3	474	.00	.00
AM4	10	243	.00	.00
S(SG)	56	340	1.04	1.05
S(CG)	147	1,490	1.48	1.49
S(EG)	10	89	.45	.45
S	1	5	.00	.00
Crucible	1	8	.00	.00
TOTAL	18,312	178,054	99.07	100.00

The fabrics

The fabric codes used in table 1 are listed below. A full description is available in the site archive.

GW1 — Very fine grey ware
GW2 — Grey ware with dark micaceous surfaces
GW2A — Fine grey ware with dark micaceous surfaces
GW2B — Grey ware with dark surfaces and soapy feel
GW2C — Grey ware with dark surfaces and hackly fracture
GW4 — Fine grey ware
GW7 — Coarse grey ware
BB1 — Black burnished 1
BB2 — Black burnished 2
RW2 — Fine red ware
RW3 — Fine red ware with calcite inclusions
RW4 — Coarse red ware
RW7 — Hadham red slip ware
WS2 — Fine white slipped ware
WS5 — Coarse white slipped ware
CB — Colchester buff ware
WW1 — White ware
WW2 — Fine white ware
WW5 — Coarse white ware
MG1 — Mixed grit storage jar fabric
MG2 — Thinner and harder version of MG1
GT1 — Storage jar fabric with grog temper
GT2 — Wheelthrown grey ware with some grog temper
FT1 — Early Iron Age flint tempered ware
FT2 — Wheelthrown grey ware with sparse flint temper
SW — Coarse ware with much sand temper
GW/SW — Coarse grey ware with much sand temper
CG1 — Calcite gritted ware
C1 — Colchester type colour coated ware
C1C — Colchester colour coated ware
C2 — Nene Valley type colour coated ware
C2V — Nene Valley colour coated ware
C3 — Oxford colour coated ware
C4 — Trier colour coated ware
C11 — Nene Valley type colour coated ware?
MO — Unidentified mortaria fabric
MO1 — Colchester mortaria
MO3 — Buff mortaria fabric, source unidentified
MO9 — Nene Valley mortaria
AM — Unidentified amphora fabric
AM1 — Dressel 20 type amphora fabric
AM1A — Dressel 20 type amphora fabric with external slip
AM2 — Dressel 30 type amphora fabric
AM4 — Dressel 20 type amphora fabric?
S(SG) — South Gaulish samian
S(CG) — Central Gaulish samian
S(EG) — East Gaulish samian

Phase 1.

The Well — Context 1029. (463 sherds; 5,756 g; 4.64 EVE's)

Purely on the grounds of pottery alone these contexts appear to form a distinct group when compared with the rest of the site. The reason for this assertion is that they are the only contexts to contain GW2B

pottery, this is a coarseware with a dark grey to black surface and a "soapy" feel. Such a fabric is firmly in the native tradition that persisted through the mid to late first century AD.

The Post-Built Structure. (37 sherds; 467 g)
Very little can be said about the pottery from this group of contexts. The presence of three sherds (18 g) in a wheelthrown grey ware with quartz and sparse grog temper might possible suggest a first or second century date. Bearing in mind the small quantity of material concerned this conclusion should be accepted with caution.

Trackway Gullies — Contexts 1010, 1026, 1031 and 1057. (676 sherds; 3,809 g; 1.45 EVE's)
The only datable pieces from these contexts are some South Gaulish samian and some Colchester buff ware. This would support the suggestion of a late first or early second century date. Given the small quantity of datable pottery present this can be no more than a suggestion.

Penannular Gullies — Contexts 1003 and 1030. (923 sherds; 4,950 g; 1.75 EVE's)
These features contain 3 sherds of BB2 giving a date later than the mid-second century. If this material is intrusive a date in the early second century would be more suitable given the presence of a Dragendorff form 27 vessel in Central Gaulish samian, and calcite-gritted ware.

Phase 2.

"Grave-Shaped" Pits — Contexts 1015, 1028 and 1058 (541 sherds; 4,016 g; 1.81 EVE's)
These contain a single sherd of BB2. The Colchester buff wares and the calcite-gritted ware would argue for an earlier date, if this is intrusive. The picture presented by the South Gaulish samian is more complex. Context 3 contains sherds of a Dragendorff 24/25 vessel in an abraded condition, whilst context 76 contains sherds of a Ritterling XI and context 78 sherds of a Ritterling XII vessel in good condition. This could be accounted for by two possibilities: one, that they were deposited in the later first century; two, that the features were filled in the early second century, the vessels in contexts 76 and 78 having for some reason survived upto that date in good condition.

Pit — Context 1007. (123 sherds; 614 g; 0.59 EVE's)
This group dates from early to mid second century, the latest pottery being 1 small sherd of BB2. However, if this is considered intrusive the *terminus post quem* is provided by a Dragendorff form 27 in Central Gaulish samian, of Trajanic date (98-117 AD). This assemblage would fit well with an early/mid second century date.

Phase 3.

Rubble Layer — Context 18. (98 sherds; 934 g; 0.41 EVE's)
This assemblage contained one small sherd of Colchester-type colour-coated ware which would date from the mid-second to third century. Whilst such a date for these contexts is not impossible, an earlier date must also be considered. The presence of Colchester buff ware and Central Gaulish samian suggests the first half of the second century AD. The small size of the sample makes more precise dating impossible.

Ditches — Contexts 1002 and 1017. (2,591 sherds; 23,990 g; 15.04 EVE's)
This group appears to be basically mid to late third century and includes two Hadham flagons from context 43. Green (Harden and Green 1978), suggests that these may appear in the mid-third century, whilst Turner (1987), dates an example from Braintree to the late third century. The presence in this group of BB2, Colchester-type colour-coated ware, coupled with the absence of distinctive late third to fourth century pottery such as Oxfordshire wares and late Roman shell-tempered ware, would tend to support a mid rather than late third century date.

The group also contains residual pottery of first to mid-second century date: BB1, calcite-gritted ware, South, Central and East Gaulish samian. It also contained 4 small sherds of Iron Age flint tempered pottery.

The samian
The samian pottery from the whole site is listed by form and production area in table 2.

Table 2.

Terra Sigillata (Samian)

South Gaul	No. Vess.	% SG. Vess.	% All Vess.
Ritt. I	1	6.67	2.33
Ritt. IX	1	6.67	2.33
Drag. 18	1	6.67	2.33
Drag. 18/31	1	6.67	2.33
Drag. 24/25	1	6.67	2.33
Drag. 27	6	40.00	13.95
Drag. 33	2	13.33	4.65
Drag. 35	1	6.67	2.33
Drag. 37	1	6.67	2.33
Total	15	100.00	34.88
Central Gaul	**No. Vess.**	**% CG Vess.**	**% All Vess.**
Drag. 18	1	4.00	2.33
Drag. 18/31	1	4.00	2.33
Drag. 27	7	28.00	16.28
Drag. 30	1	4.00	2.33
Drag. 31	5	20.00	11.63
Drag. 33	4	16.00	9.30
Drag. 37	4	16.00	9.30
Drag. 38	1	4.00	2.33
Drag. 46	1	4.00	2.33
Total	25	100.00	58.14
East Gaul	**No. Vess.**	**% EG Vess.**	**% All Vess.**
Drag. 31	2	66.67	4.65
Drag. 33	1	33.33	2.33
Total	3	100.00	6.98
TOTAL	43		100.00

Only five samian stamps were recovered from the site, they are all illustrated (Fig. 12, 8-12), and described below.

Catalogue of illustrated pottery
Figure 10
Context 43.

1 Brockley Hill Mortaria. Granular light-yellow/brown fabric. *c.* 160-200 AD.
2 MO3. Wall sided Mortaria. Buff fabric. Source unidentified. *c.* 160-200 AD.
3 Neckless jar with ledge rim. Coarse red/black fabric. 2nd-mid 3rd century AD.
4 BB1 Jar. *c.* 125-150 AD.
5 BB2 Dish. Mid 2nd-mid 3rd century AD.
6 Grey ware jar, a development of Camulodunum form 218. 1st-early 2nd century AD.
7 Grey ware necked jar. 2nd century AD.
8 Bead-rimmed deep dish/bowl in fine grey ware. *c.* 140-250 AD.
9 Grey ware narrow necked jar with bear rim. 3rd-4th century AD.
10/11 Ledge-rimmed jars in shell tempered ware. Mid 1st century AD.
12 WW2. Neck and handle of small white ware flagon.
13 Pedestal base in coarse buff/white fabric with occasional flint temper.
14 Storage jar in grey mixed gritted fabric.

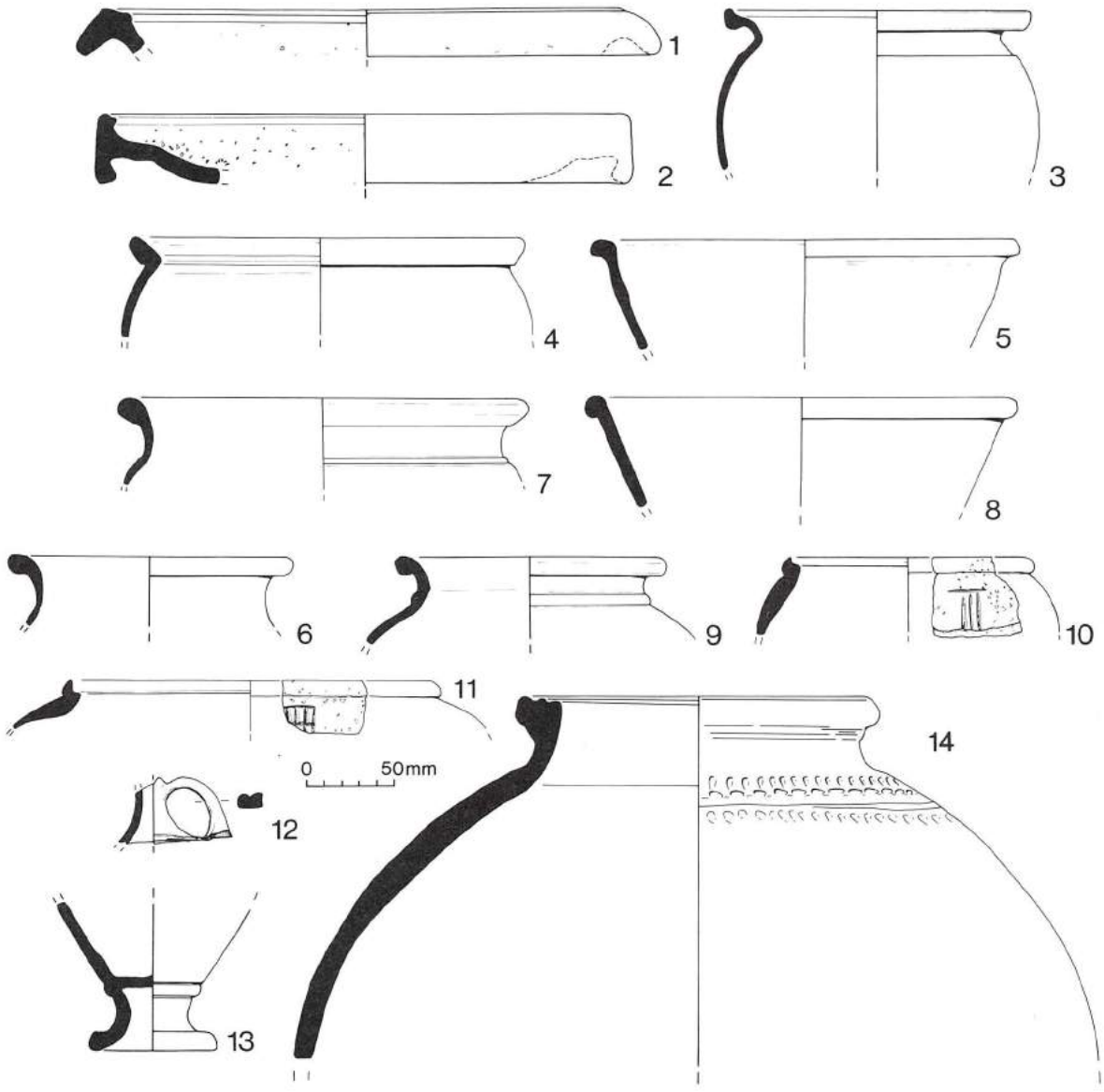

Fig. 10 Roman pottery.

Figure 11

15 Globular Hadham ware flagon. Oxidised fabric with reduced interior. Mid-late 3rd century AD.

Context 23.

16 Grey ware "pie dish", with lightly burnished curvilinear pattern on base. *c.* 125/50-230/50 AD.

17 BB1 Flanged bowl.

18 GW4. Grey ware dish. *c.* 125/50-230/50 AD.

19 GW7. Grey ware jar. 1st-2nd century AD.

20 GW7. Grey ware bowl/jar. 3rd-4th century AD.

21 GW7. Grey ware "pie dish". *c.* 125/50-230/50 AD.

22 MO3. Wall sided Mortaria. Buff fabric. Source unidentified. *c.* 160-200 AD.

23 GW7. Grey ware, narrow necked jar/flagon. 2nd-3rd century AD.

24-5 Context 3.
Ledge rimmed jars in shell tempered ware. Mid 1st century AD.

Figure 12

1-4 (1/2, Context 3; 3/4, Context 43). Symbols incised on shell tempered ledge rimmed jars before firing (see Fig. 10, 10/11 and Fig. 11, 24/25 for forms). The distribution given in Jones (1972), can now be extended to include Chelmsford, Colchester, Great Dunmow and Felsted. For examples from Chelmsford see Going (1987, 102, fig. 49 1-10).

5 Context 8. Ring stamp on GW2 vessel.

6 Context 7. Ring stamp.

7 Context 60. Ring stamp on RW2 vessel.

8-12: Samian Stamps.

8 Context 23. Incomplete stamp (Central Gaulish fabric).

9 Context 23. Regulus of Lezoux, *c.* 140-190 AD.

10 Context 23. Unidentified stamp.

11 Context 23. Stamp on Drag. 33 base. Die 1h (University of Leeds number), of Martius iv of Lezoux, *c.* 155-175 AD.

12 Context 7. Incomplete stamp (Central Gaulish fabric).

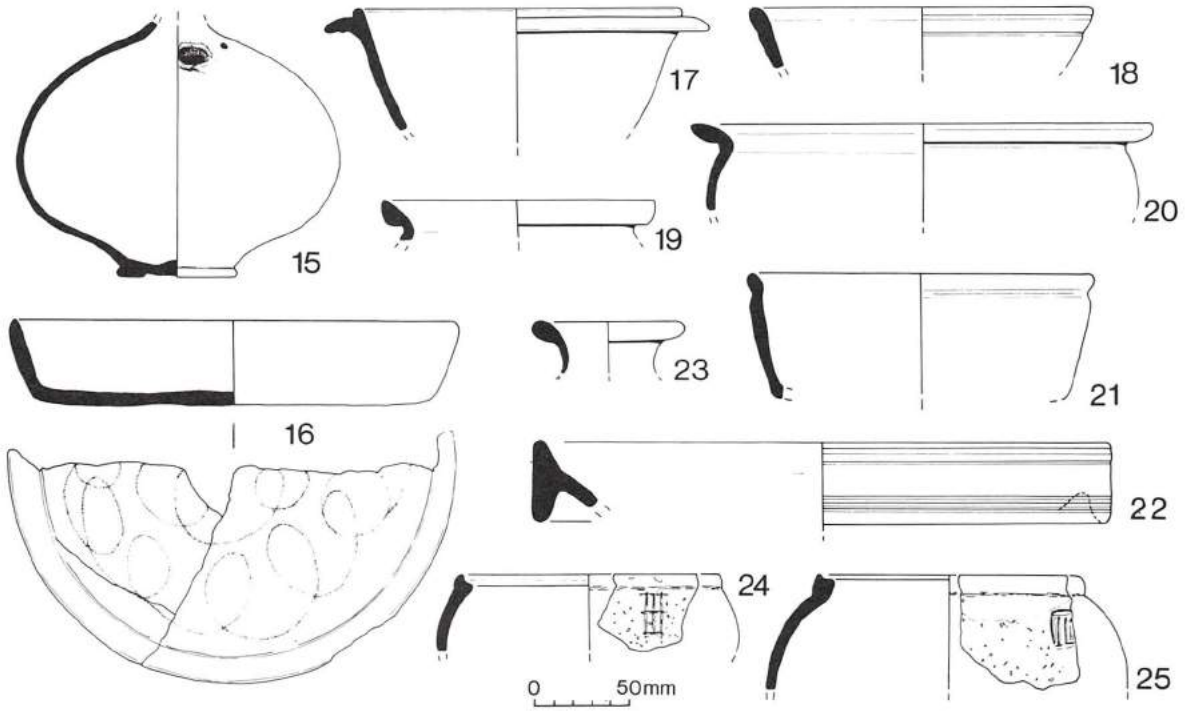

Fig. 11 Roman pottery.

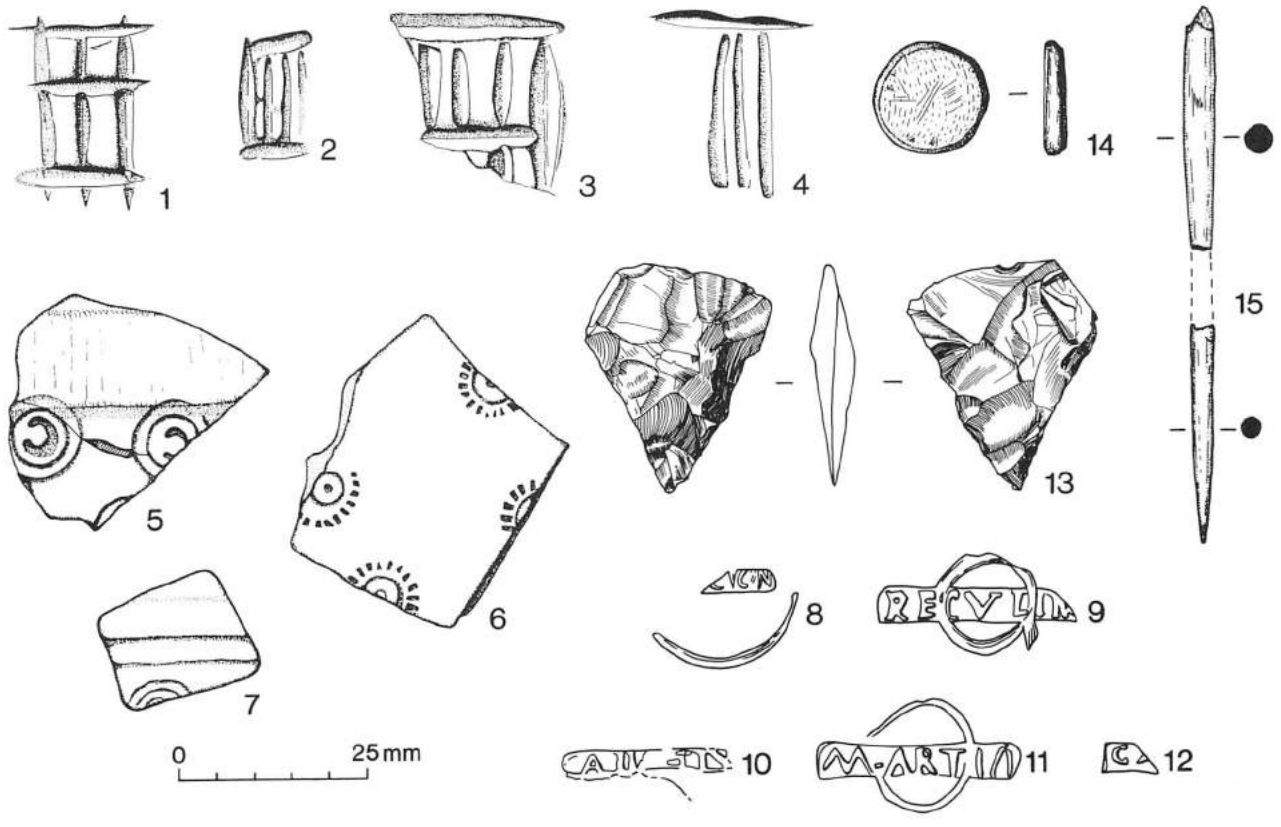

Fig. 12 Roman pottery (details), worked bone and flint.

A brief discussion of the Romano-British pottery assemblage
by C. J. Going

[Editorial Note: With the departure of Mr P. Cheer from the Braintree project the author of the report (MDS), asked the writer (CJG), to assess the dating evidence for the site and to briefly discuss the assemblage in relation to its regional background. The basic pottery report is the work of Mr Cheer].

Introduction

The assemblage of pottery recovered from this site (over 178 kg), is one of the largest to have been excavated from a rural site in north-central Essex in recent years. In terms of the range of fabrics represented, the collection closely matches others from rural sites in the region (e.g. villa sites such as Stebbing/Boxted Wood and Stebbing/Porters Hall, both close by to the north west), and Felsted Station, save for fabrics characteristic of the later half of the 4th century (when the Rayne site appears to have been abandoned).

The overwhelming bulk of the pottery comprises coarse wares of local (i.e. Essex), origin. Wares originating from more distant provincial sources (such as BB1), or continental imports are very sparsely represented. Very few fine or table wares are present (colour-coated fabrics, together with Samian, for example, total only 3.62% of the entire assemblage [by EVE]). This is much in line with data from other rural sites, contrasting with figures from small towns such as Chelmsford (Going 1987, table 1), and, perhaps to a lesser extent, Great Dunmow and Braintree. Differences between these rural sites in general, and larger urban sites in the region such as Colchester, and finally, London are extremely marked. Clearly there is a steep (social?), gradient evident in the ceramic assemblages from these different sites. Since the lack of certain fabrics is unlikely to be explained by locational factors alone (the site, after all, is beside or close by Stane Street, and halfway between Great Dunmow and Braintree, both likely to have been *pagus* markets), it is quite probable that a social element is involved.

Phase 1 (Late 1st - early to mid 2nd century AD)

Pottery from contexts assigned to phase 1 exhibits characteristics in keeping with Chelmsford ceramic phases 1-2 (60 - 120/5 AD. Going 1987), and may thus be broadly contemporary. There is a complete lack of imported colour-coated fabrics. However, without clear relative stratigraphic information the bulk of the features were only datable by their contents and it is usually difficult to hazard their date with much confidence. The well contained no obviously later material save in the weathering cone (context 60). The penannular gully (context 1003), contained sherds of BB2, suggesting infilling after *c.* 120-125 AD.

Phase 2 (2nd century AD?)

Taken together, the pottery evidence from contexts assigned to phase 2 suggests activity during the second century AD but none of it is very strong. The bulk of the assemblage derives from context 7, which contains two sherds of colour-coated ware (probably of Colchester origin), suggesting a date after *c.* 150-160 AD. There is no obviously late Antonine or later material.

Phase 3 (Late 3rd - early 4th century AD)
Ditches (Contexts 1002 and 1017)

Context 10 (the principal fill of context 1002), contained a medium-sized assemblage (3.48 EVE), which included sherds of ?Colchester and Nene Valley colour coats, suggesting accumulation in the mid-later 3rd century AD. The absence of Rettendon-type wares suggests little material was added after *c.* 275/80 AD.

Context 43 (the principal fill of context 1017), contained a large group of pottery (9.14 EVE's), which included sherds of both BB1 and BB2, among which was a late type of bead rimmed dish, late Antonine or later (Fig. 10/5). Also found in the feature was the bulk of an oxidised Hadham were flagon in a soft, drab orangey/brown fabric (Fig. 10/15). It probably dates to the later 3rd century, or slightly after.

The Hollow-way layers (Contexts 53 and 23)

Context 53. A large group (7.96 EVE's), containing sherds of Nene Valley colour coat suggesting a date in the third century. The absence of flint-tempered wares of "Rettendon" type suggests the deposit was closed before the end of the third century (see above).

Context 23. A substantial group (18.28 EVE's), perhaps representing an accumulation of material, came from this context. Fabrics represented include Nene Valley colour coat and a quality of Rettendon-type wares (4.66% by EVE's). This suggests that the deposit took place after *c.* 275 AD. The absence of later Hadham wares, Oxfordshire colour coats, late shell tempered or Alice Holt fabrics suggests the deposit was closed before *c.* 350 AD.

Considered as a whole, the assemblages from the ditches and hollow-way infill, together with the lack of material of an obviously later date from the unstratified levels (save one sherd of Oxfordshire ware), suggests little activity on the site after the first, and certainly the second, quarter of the fourth century AD.

The Glass
by J. D. Shepherd

Twenty three fragments of glass were submitted for identification. Of these, one was modern (no. 21). The remaining 22 (19 vessel and 3 window glass fragments), are all of Roman date. All 23 piece are catalogued below:

Catalogue

Con.	Cat. No.	Form	Comment	Date
US	1	Vess	Trailed decoration	Roman
	2	Bott	Body, Is. 50/51	L 1st/2nd C
	3	Bott/S	Body, Is. 50	L 1st/2nd C
	4	Wind	Cast, matt/glossy, edge	Roman
	5	Vess	Body	Roman
1	6	Bott/S	Body, Is. 50	L 1st/2nd C
6	7	Vess	Body	Roman
18	8	Flag/Bott	Neck, Is. 51/52/55	L 1st/E 2nd C
23	9	Bott/S	Body, Is. 50	L 1st/2nd C
	10	Bott	Body, Is. 50/51	L 1st/2nd C
	11	Vess	Trailed dec, poor metal	Roman
	12	Vess	Trailed dec, poor metal	Roman
42	13	Wind	Cast, matt/glossy	Roman
53	14	Bott/S	Body, Is. 50	L 1st/2nd C
	15	Bott/S	Body, Is. 50	L 1st/2nd C
	16*	Bott/S	Handle, Is. 50	L 1st/E 2nd C
55	17	Vess	Trailed dec, poor metal	Roman
	18	Vess	Trailed dec, poor metal	Roman
65	19	Wind	Cast, matt/glossy	Roman
	20*	Bott	Handle, Is. 50/51	L 1st/2nd C
87	21	Bott	Machine made	Modern
	22	Bott/S	Body, Is. 50	L 1st/2nd C
96	23*	Flag	Handle, Is. 52/55	L 1st/E 2nd C

Notes to catalogue:

Bott	= Bottle	Bott/S	= Square Bottle
Flag	= Flagon	Vess	= Unidentified Vessel
Wing	= Window Glass	*	= Illustrated

All pieces are natural greenish-blue glass, except no. 21 which is amber-brown (modern).

Description

Cat. No. 16. Context 53. Figure 13/1.
Fragment from the handle of a small square-sectioned bottle (Isings

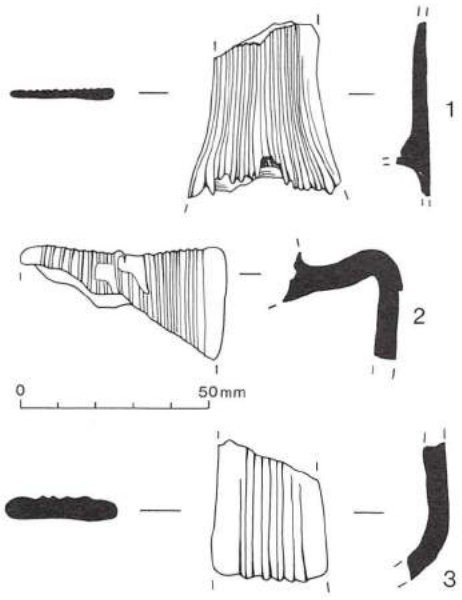

Fig. 13 Roman glass.

1957, 63-67, Form 50). Natural greenish-blue glass; applied to a mould-blown vessel. Face of handle combed. Late 1st or 2nd century AD.

Cat. No. 20. Context 65. Figure 13/2.

Fragment from the handle of a square-sectioned (Isings Form 50), or cylindrical bottle (Islings 1957, 67-69, Form 51). Natural greenish-blue glass; applied to a mould-blown or free-blown form. Face of handle combed. Late 1st or early 2nd century AD.

Cat. No. 23. Context 96. Figure 13/3.

Fragment from the upper part of a strap handle, with four vertical ribs, of a flagon (Isings 1957, 69-71, Form 52 to 72-74, Form 55). Natural greenish-blue glass; applied to a free-blown form. Late 1st or early 2nd century AD.

Cat. No. 1, 11, 12, 17, 18. Decorated Pieces.

Five fragments of naturally coloured greenish-blue glass from free-blown vessels of indeterminate form (nos. 11, 12, 17 and 18 contain abundant air bubbles). The pieces are decorated with single applied trails of the same metal. Roman.

Cat. No. 4, 13, 19. Window Glass.

Three fragments of naturally coloured greenish-blue window glass. All are of the cast matt/glossy variety. The unstratified piece (no. 4), has a single rolled edge. Roman.

Discussion

The square and cylindrical bottle forms predominate here (nos. 3, 6, 9, 14-16, 20, 22). These vessels are very well known among glass assemblages of the late 1st and 2nd centuries AD (Price 1978, 75-6). The vessels performed as storage and in-transit containers for liquid commodities. The flagon handle fragment (no. 23), represents a tableware vessel of a higher quality than these bottles (Price 1978, 74). Such vessels, with tall cylindrical necks, bulbous or conical bodies and tall, slim handles, are also well attested among late 1st and 2nd century assemblages in Britain, the Netherlands, Germany and Northern France.

Unfortunately the remaining vessel fragments cannot be positively identified, although the pieces with applied trails (nos. 1, 11, 12, 17, 18), may come from the body of a flagon such as no. 23 or from the contemporary bulbous jar form (Isings 1957, 88, Form 67c; Price 1978, 74).

The Beads

Only four beads were recovered from the site:

Unstratified Melon Bead. Turquoise frit.
Length 16 mm, Diameter 19 mm,
Perforation diameter 8 mm.

Unstratified Melon Bead. Turquoise frit. (Broken).
Length 15 mm, Diameter 18 mm,
Perforation diameter 9 mm.

Beads of this type are generally found in 1st/2nd century AD contexts in Colchester (Crummy 1983, 30, fig. 32).

Context 1. Plain Annular Bead. Translucent greenish glass.
Length 7 mm, Diameter 17 mm,
Perforation diameter 8 mm.

Beads of this type are found throughout the Roman period in Colchester (Crummy 1983, 32, fig. 33).

Context 43. Short Oblate Bead. Translucent greenish glass.
Length 2 mm, Diameter 3 mm,
Perforation diameter 1 mm.

Beads of this type are generally found in 3rd/4th century contexts in Colchester (Crummy 1983, 32, fig. 34).

The Tile

by K. M. Groarke

A total of 4,914 fragments of Roman tile, weighing *c.* 219 kg was recovered. The assemblage was sorted to type, of which five were recognized (*tegula, imbrex,* flat/brick, flue tile and relief-patterned flue tile). The remainder was classified as unidentifiable (table 3). A description of the tile fabrics is available in the site archive.

Table 3 — Tile Type Breakdown by weight and number

Type	Wt(grams)	%	No.	%	Av(grams)
Tegula	40,466	18.46	301	3.13	134.44
Imbrex	2,743	1.25	44	0.90	62.44
Flat/Brick	88,508	40.38	362	7.37	244.50
Flue Tile	38,605	17.61	836	17.01	46.19
R-P Flue T.	5,979	2.73	107	2.18	55.88
Un. ID.	42,903	19.57	3,264	66.42	13.14
Total	219,204 g		4,914		44.61

Tegulae — comprised 18% of the sample. Fourteen measurable flanges were noted, the heights being in the range 20.4 — 48.4 mm. All but four lay in the range 20.4 - 29.5 mm, with an average height of 24.90 mm. Overall the average internal height was 28.5 mm.

Twenty five pieces had markings of some sort, 14% by weight (table 4). The most common were single, straight knife-scored lines. As with the other markings, i.e. rainbow signatures and knife-scored lattices, they were present on both upper and lower faces. This suggests that some of the tile was intended for structural rather than roofing purposes.

Table 4 — Tile Markings.

	Tegulae		*Imbrices*		Flat/Brick
	U	L	U	L	
Rainbow	5	1	1	1	7
Straight Line	10	3	3	1	7
Lattice	1	4	0	0	0
Finger Marks	0	0	0	0	3
Stab Marks	0	0	0	0	1
Graffiti?	1	0	0	0	1
Total	17	8	4	2	19

U = Upper Face. L = Lower Face.

Imbrices — were rare in relation to *tegulae*, amounting to 1.25% of the sample by weight. A similar disparity in numbers has been note at two nearby sites, Rayne Road, Braintree (Drury in Pratt 1976), and College House, Braintree (Cheer unpublished Ms), though at the latter site the imbalance was not so marked. This brings the possible uses of the "roofing" titles into question. From the average weights produced for the site at Beauport Park, Sussex (Brodribb 1987), we may assume a figure of 5,820 g for a *tegula* and 2,470 g for an imbrex. Using a ratio of 7 *tegulae* to 4 *imbrices* (Rook 1979), we arrive at an expected weight for the *imbrices* at 9,814 g. Only 2,743 g were

recovered from the site, less than 28% of the expected weight. Due to their smaller mass and lighter construction *imbrices* are less likely to survive in a recognizable condition than *tegulae*, but despite this there are fewer present than one would expect for roofing purposes. 18% of the sample was marked, either with rainbows or straight, knife-scored lines (table 4).

Flat/Brick — were the most common type found on the site, over 40% of the total by weight. A non-specific type-name was used for this category as the fragmentary nature of the sample precluded accurate identification of the various types. Where possible the fragments were measured for thickness, this being the only dimension generally present. Any pieces less than 30 mm thick were attributed to *tegula* mid-sections (Rudling 1986). When plotted as a histogram, the remainder fall into two clear groups, at 40 and 50 mm respectively (these groups accounted for 64% of the measurable sample). Only one brick was definitely identified, a *lydion* (Broadribb 1987), of width 260 mm, depth 50 mm, length unknown (reconstructed from 6 fragments from contexts 78 and 86). Nineteen examples were marked, 19% of the sample by weight.

Flue-Tile — at 18% by weight, formed a significant proportion of the sample, only slightly less than tegulae. 98.47% of the stratified flue-tile was recovered from phase 3 contexts. Two types of flue-tile are present, the full box-flue (*tubulus*), and several examples of the rarer half-box.

Table 5 — Flue Tile: Types.

	Tubulus		Half-Box	
Combined	14,649g	41.3%	1,071g	33.9%
Scored	4,670g	13.2%	1,239g	39.1%
Plain	16,127g	45.5%	854g	27.0%
Total	35,446g		3,159g	

[Nb. Excluding relief-patterned flue-tile].

No average dimensions were arrived at due to the fragmentary nature of the sample. Two full side-sections were recovered, both of 108 mm. Two incomplete side cut-outs were also noted. The majority of pieces of both types had some form of keying, applied either by knife, comb or roller-die. The relief-patterned tile is considered elsewhere. Or the remainder, 56% was keyed.

Table 6 — Flue Tile: Keying.

	Tubulus		Half-Box	
Combing	14,649g	75.8%	1,071g	46.5%
Rainbow	75g	0.4%		
Oval Holes	121g	0.6%		
Lattice	3,816g	19.8%	1,234g	53.5%
Straight Line	632g	3.3%		
Graffiti?	26g	0.1%		
Total	19,319g	100.0%	2,305g	100.0%

The half-box tiles were sub-divided into two types, A and B. The distinction is due to different methods of manufacture. Type A has the appearance of a small *tegula* with a distinct, square-section flange. Type B, while having a low flange, is much less *tegula*-like. It appears that type A was formed in a similar manner to a *tegula*, in an open box-mould, with excess clay cut away leaving a sharply formed flange (Rook 1979). Type B seems to have been made by folding the clay over a wooden former. Two fragmentary cut-outs were noted in type A flanges, both semi-circular in form.

Table 7 — Half-Box Tiles: Types.

	Type A	Type B
Thickness Range	12-22 mm	10-11 mm
Average	16 mm	10.5 mm
External Flange		
Height Range	26-49 mm	17-28 mm
Average	38 mm	23 mm

Where possible, comb tracks were measured and the number of teeth noted. The most frequently found was a comb of seven teeth with a track width of 38 mm, accounting for 15 examples out of a sample of 48 (i.e. 31.2%). The data is listed in table 8.

Table 8 — Flue Tile: Comb Tracks.

Teeth	Track-Width	Frequency	%
3	27 mm	1	2.1
5	34 mm	1	2.1
6	25 mm	2	4.2
6	33 mm	11	22.9
7	38 mm	15	31.2
7	48 mm	7	14.6
8	37 mm	4	8.3
9	37 mm	1	2.1
9	47 mm	1	2.1
10	47 mm	5	10.4

Relief-Patterned Flue-Tile — (Although the R-P flue tile is discussed in a separate report by E. W. Black the basic figures are given here). Relief-patterned flue-tile comprises 2.73% of the entire assemblage and derives exclusively from phase 3 contexts (apart from one specimen from context 89 which is probably derived from the overlying layer [context 53]). The sample may be divided into groups (after Lowther 1948), as follows:

Group 1 (W-Chevron)	33 pieces at 1,899 g.
Group 3 (Florid)	51 pieces at 3,073 g.
Group 5 (Diamond & Lattice)	23 pieces at 1,007 g.
Total	107 pieces at 5,979 g.

Discussion

The tile seems to occur primarily (possibly exclusively), in contexts of re-use. A conclusion supported by the very fragmentary nature of the sample, the disparity in the *tegula/imbrex* ratio and the existence of mortar on many of the pieces (often occuring in both faces). The existence of rubble make-up layers in the northern part of the site, acounting for over 67% of the tile sample, further supports this view. The presence of so much good quality flue-tile suggests that the inhabitants of the site had ready access to either a major building complex or to a kiln making tile for such a structure. The former suggestion appears more likely as many of the flue-tiles have sooting on their inner faces, indicating that they have been used as part of a heating system (villa bath house?). The dates derived from the relief-patterned tile suggest a structure of the Antonine period, presumably in the immediate vicinity, was the source of this material.

A note on the Relief-Patterned Flue-Tile.

by E. W. Black

The following dies were present: die 5A (34 fragments); die 9 (41 fragments) *; die 13 (14 fragments); die 16 (1 fragment). The patterns are illustrated in Lowther 1948, 27 and 29 (dies 9, 13 and 16), and in Rudling 1986, 210 (die 5A).

In Essex die 5A is known from Bradwell and Ivy Chimneys, Witham. It is also recorced from London, and from Hampshire, Hertfordshire and Sussex (the distributions given here are taken from Betts *et al.* forthcoming).

Die 9 is widely distributed from Richborough in Kent to Scampton in Lincolnshire. The Rayne site is the only occurrence so far from Essex, though it is known from Baylham Mill, Coddenham, in Suffolk.

Die 13 is also widely distributed. In Essex it is represented from the grounds of the Royal Grammar School at Colchester where it was associated with die 5 (the re-cut of die 5A). Dies 9 and 13 are present together at six other sites apart from Rayne.

Die 16 is present from widely spaced sites from Wall in Staffordshire to Canterbury in Kent, and seems to be a die particularly associated with construction work at *mansiones* in the early Hadrianic period (Black 1985, 359-60). In Essex it is represented at the *mansio* at Chelmsford, and possibly at Heybridge and Warren's Farm, Great Tey.

There seems no reason not to consider the group of dies from Rayne as contemporary. Their context is not helpful for dating them, though of course their deposition may coincide with some alteration to, or demolition of, the building in which they were fitted. The tile-kiln at Hartfield in Sussex where die 5A was found has an archeomagnetic date of *c.* 100/130 AD with a 68% confidence of accuracy (Rudling 1986, 198). Die 16 at Chlemsford seems to be associated with the Hadrianic phase of the *mansio* baths (Drury 1988). Therefore a date for the assemblage of relief-patterned tile from Rayne of *c.* 120-130 AD or slightly later seems to be required.

The unequal representation of fragments from different dies could be simply a matter of chance, but it is worth noting that a similar imbalance is present among the dies from the Chelmsford *mansio* (where die 16 is predominant and some others represented by a very small number of fragments), and that Drury (ibid), explains this by suggesting that tiles were supplied from the stock of a builders-merchant rather than from a tilery.

* An additional fragment of die 9 was found in the construction workers spoil following the excavation and was given to G. de la Bedoyere (pers. comm.).

The Mortar

A total of 25.57 kg of mortar was recovered from the site, from 56 individual contexts. No detailed analysis has been made of mortar type/fabric. The bulk of the material consists of pale pink/white lime mortar with sparse to moderate gravel and tile inclusions. Mortar occurs in contexts of all three phases but is much more abundant in phase 3 (principally associated with the rubble make-up layers). This distribution closely matches that of the tile from the site and we may assume that the mortar derives from the same source.

The Slag

28.14 kg of slag were recovered from the site of which 22.325 kg was from phased contexts. It has not proved possible to undertake a comprehensive analysis of this material. For the purposes of this report it is broken down into two categories (table 9):

Table 9 — Slag Distribution. [All weights in grams]

Con.	Phase	Furnace Lining	%	Other Slag	%	Metal Slag
U/S	—	250	21.56	5375	19.93	*
1	1	200	17.24	1900	7.04	**
2	1	15	1.29	75	0.28	
3	2	—	—	200	0.74	
6	1	275	23.71	8975	33.27	**
7	2	5	0.43	160	0.59	
8	1	10	0.86	290	1.07	
10	3	225	19.40	950	3.52	*
11	1	—	—	10	0.04	
12	1	—	—	5	0.02	
14	1	—	—	5	0.02	
16	3	5	0.43	40	0.15	
17	2	—	—	10	0.04	
19	3	—	—	25	0.09	
23	3	25	2.16	3125	11.58	*
26	1	—	—	10	0.04	
33	—	—	—	20	0.07	
35	2	—	—	2225	8.25	*
36	2	—	—	80	0.30	
40	1	10	0.86	75	0.28	
42	3	—	—	70	0.26	
43	3	—	—	225	0.83	*
44	2	—	—	175	0.65	
46	2	—	—	200	0.74	
53	3	—	—	475	1.76	*
55	3	40	3.45	325	1.20	
60	1	—	—	275	1.02	*
61	2	—	—	5	0.02	
65	3	—	—	50	0.19	
78	2	—	—	550	2.04	
83	1	50	4.31	100	0.37	
85	3	—	—	10	0.04	
86	2	—	—	45	0.17	
89	1	—	—	35	0.13	
93	2	—	—	25	0.09	
94	2	—	—	125	0.46	
97	1	—	—	5	0.03	
101	—	—	—	90	0.33	
105	1	—	—	610	2.26	
110	—	50	4.31	30	0.11	
Tot.		1160g		26980g		
Gr. Tot.		28140g				

* = Metal slag present. ** = Metal slag abundant.

"Furnace Lining" — includes all pieces with a layer of oxidised clay adhering to one surface. In most cases the slag involved is of a light vitreous character. Furnace lining is used as a convenient descriptive term but further analysis is required in order to determine the origin of the material.

"Other Slag" — this category includes material ranging from heavy metallic slag to light porous ash slag. Whilst a number of specimens could be separated out as very heavy or light the material grades imperceptibly from one extreme to the other. Thus is was not thought worthwhile to subdivide the sample on such subjective criteria. Those contexts which produced definite metallic slag are noted in table 9, in two cases (Contexts 1 & 6), in relative abundance.

This material probably represents slag from a number of sources. Iron working residues are certainly present, though part of the material probably consists of combustion products of indeterminate origin.

Table 10 — Slag by Phase.

Phase	Furnace Lining	%	Other Slag	%
1	560	48.28	12370	45.85
2	5	0.43	3800	14.08
3	295	25.43	5295	19.63
Unphased	300	25.86	5515	20.44
Tot.	1160g		26980g	

It is clear from table 10 that slag is most comon in phase 1 contexts, including both instances of abundant metallic slag. None of the features excavated at the site have any trace of *in situ.* metalworking, but it is reasonable to assume that iron working was taking place in the immediate vicinity during phase 1. The slag recovered from phases 2 and 3 may indicate continued small scale metalworking or may be residual from the phase 1 episode.

Worked Bone

Only two worked bone objects were recovered from the site:

Context 10: Bone Counter (Fig. 12/14).
Polished bone roundel (diameter 15 mm, thickness 2.5 mm). Bevelled edge, no sign of indentation for lathe centre. Numerous examples of gaming counters of this type (type 1), are known from Colchester (Crummy 1983, 91-2), where they range in date throughout the Roman period.

Context 23: Bone Pin (Fig. 12/15).
Polished bone pin (broken into two pieces), with head missing (remaining portion: length 60 mm, maximum diameter 4.2 mm). The pin is finely polished and well rounded with marked swelling in its mid-section. As the head is missing it is impossible to attribute the pin to any of the six types defined at Colchester (Crummy 1983, 19-25). Though it may be noted that the swelling on the shaft is most common in group 3 which is dated to the later half of the Roman period.

The site produced no evidence of bone working in the immediate vicinity (for antler working see the main bone report).

Worked Flint

The site produced one flint arrowhead and 13 flakes. These were all found, presumably derived, in Romano-British contexts. The description of the arrowhead (Fig. 12/13), is as follows:

Context 36 — Triangular arrowhead with pressure flaking on its long edges, short edge convex (height = 29 mm, breadth = 24 mm). The original striking platform is preserved and shows signs of polishing (the flake on which the arrowhead was made may be struck from a polished flint axe). The specimen does not readily fit into any of the standard classes of flint arrowhead (Green 1980). A Late Neolithic/Early Bronze Age date would seem probable.

Discussion

Although the small size of the sample makes characterization difficult, I would suggest the assemblage may be broken down into three groups:

1. The flake from context 55 is much more patinated than the rest of the sample. It is also distinguished by a more refined flaking technique. The flake may be of Mesolithic origin.
2. Five flakes are slightly patinated and have generally similar bulbs and striking platforms. They would not look out of place in a late Neolithic or Bronze Age context and may derive from an unlocated site in the vicinity (several flakes of similar type were picked up during fieldwalking prior to excavation). The arrowhead should be included with this group.
3. The remaining seven flakes form a consistent group. They are virtually unpatinated, crudely struck and have large bulbs of percussion. It is possible that they may be contemporary with the Romano-British contexts from which they derive.

[I am grateful to Hazel Martingell for her comments on the assemblage. Any errors remain the responsibility of the author].

Worked Stone

by H. Major

Querns

Fragments of lava, grit and possibly sandstone querns were found in eight contexts. The lava was in poor condition and occurred in phase 1 and later contexts. Grit quern fragments occurred from phase 2 onwards, and some pieces had been re-used. One fragment had a diameter of *c.* 600 mm, and is probably an upper millstone rather than a quern. Because of the lack of good stone in Essex, re-use of quern fragments, particularly grit, is common, and it cannot be assumed that querns as such were being used on the site. However, this small assemblage is typical of most Roman sites in Essex, with lava querns present from the first century onwards, and an increasing proportion of millstone grit querns from the second century onwards, when the trade in lava from the continent appears to have slackened.

Context Description (Note T = Thickness).

65 Grit; millstone, or possibly large quern, possibly upper stone. The grinding surface is worn, the other surface and edge smooth. The edge of the central hole is not present. The non-grinding surface is bevelled, and the stone is thicker towards the centre of the stone. Diam *c.* 600 mm, T at edge 45 mm, Max T 68 mm.

Other utilised stone

The assemblage comprises several fragments of shaped building stone (limestone and septaria), which presumably originate from a near-by villa, and not from any buildings on the excavated site; a whetstone (stone type unidentified), and a quartzite rubber.

The animal and human bone

Introduction

The excavation produced a total of 5,179 pieces of bone, weighing 41,151g. Of this assemblage 1,877 pieces were ideintified to species level (29,711g). The remaining 3,302 pieces were too fragmented for reliable identification (11,440g). The basic species breakdown is given in table 11:

Table 11 — Species breakdown by number and weight.

	No.	%	Wt(grams)	%	Av(grams)
Cattle	983	52.4	21,692	73.0	22.1
Sheep	439	23.4	1,916	6.4	4.4
Horse	196	10.4	3,636	12.2	18.6
Dog	104	5.5	367	1.2	3.5
Pig	89	4.7	617	2.1	6.9
Deer	48	2.6	1,429	4.8	29.8
Chicken	11	0.6	12	0.1	1.1
Human	6	0.3	57	0.2	9.8
Hare	1	0.1	1	0.1	1.0
Tot. ID.	1,877	36.2	29,711	72.2	15.8
Un. ID.	3,302	63.8	11,440	27.8	3.5
TOTAL	5,179		41,151		7.9

A subset of the identified sample was used to calculate the Minimum Number of Invididuals (MNI), by means of a computer program supplied by Professor Richard Klein of Chicago University. The methodology is fully described in Klein & Cruz-Uribe (1984), and Cruz-Uribe & Klein (1986). Of the identified bones/teeth, only 843 were suitable for use in these calculations. The results for the whole sample are listed in table 12:

Table 12 — Species breakdown by Minimum Number of Individuals.

	Cattle	Sheep	Pig	Horse	Dog	Deer
MIN (B)	10	5	2	2	2	2
	43.5%	21.7%	8.7%	8.7%	8.7%	8.7%
Sa (B)	265	100	21	18	21	6
	61.5%	23.3%	4.9%	4.2%	4.9%	1.4%
MNI (T)	14	13	4	1	4	2
	37.8%	35.1%	10.8%	2.7%	10.8%	2.7%
Sa (T)	190	139	46	20	16	1
	46.1%	33.7%	11.2%	4.9%	3.9%	0.2%
MNI (C)	14	13	4	2	4	2
	35.9%	33.3%	10.3%	5.1%	10.3%	5.1%
Sa (C)	455	239	67	38	37	7
	54.0%	28.4%	8.0%	4.5	4.4%	0.8%

(B) = Bones. (T) = Teeth. (C) = Bones + Teeth.

Most of the bone examined was well preserved and it appears that the soil conditions on the site allowed good survival. However, the bulk of the 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 so the smaller species are certainly under-represented.

Species breakdown

According to the bone fragment count (table 11), the assemblage is dominated by cattle (52%), with sheep next in order of importance (23%), followed by horse (10%), dog (6%), pig (5%), deer (3%) and chicken (1%). The figure for horse is exaggerated due to the inclusion of a single, very fragmented, skull (many of the fragments would have been classified as unidentifiable if they had been found in isolation).

When one considers the MNI for the sample (table 12), discrepancies such as those introduced by the fragmented horse skull in context 43 are eliminated. The order of importance according to MNI is cattle — 14 individuals, sheep — 13 ind., pig - 4 ind., dog - 4 ind., horse - 2 ind. and deer - 2 ind. [The figure for deer includes one red deer (*Cervus elaphus*), and one roe deer (*Capreolus capreolus*)]. The MNI for chicken was calculated by hand to be one.

The figures for MNI reduce the relative importance of cattle and horse in favour of the smaller species. This is particularly marked in the case of cattle versus sheep, which appear to be deposited on the site in approximately equal numbers. when the MNI figures are calculated on the basis of bone only the cattle/sheep ratio is 2:1, however the same ratio worked out using teeth only is 1.08:1. This is indicative of the attritional processes operating on a site where the bone preservation may be considered relatively good. In all cases (excluding horse and deer), the MNI calculated for teeth gives a higher figure than for bone.

Species breakdown by phase

In order to ascertain if the species distribution outlined above is valid over the whole period of the site's occupation the sample was broken down by phase (table 13).

Table 13 — Species Breakdown by Phase [MNI]

	Cattle	Sheep	Pig	Horse	Dog	Deer
Phase 1	4	4	1	2	0	1
Sa=145	33%	33%	8%	17%		8%
Phase 2	8	5	2	1	2	1
Sa=149	42%	26%	11%	5%	11%	5%
Phase 3	8	5	2	1	2	2
Sa=422	40%	25%	10%	5%	10%	10%

In the case of pig, horse, dog and deer the variation present is no more than one would expect in a random distribution. However, the proportion of cattle to sheep does appear to show a consistent trend, with cattle increasing in importance, relative to sheep, between phase 1 and 2. The distribution in phases 2 and 3 remains constant. This move to a greater reliance on cattle after the 1st century has been noted on a number of Roman sites (King 1978), and certainly occurs in bone assemblages excavated in the nearby Roman "small town" of Braintree (Smoothy Unpublished Ms).

Ageing and metrical data

For cattle, sheep and pig an attempt was made to age the material by Mandible Wear Stage, or MWS (see Grant 1982 for details of the method). Although fusion states were recorded for the MNI calculations I have not generally used this data for ageing purposes as MWS is a simpler and more reliable method. Unfortunately, the sample for all three species is small and may not be fully representative (the sample was: cattle 16; sheep 11; pig 5 specimens). The data is listed in the archive.

Due to the fragmented nature of the sample few useful measurements were obtrained. Those taken (on cattle metapodia and phalanges, a horse tibia and red deer metacarpal), are listed in the archive.

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). The three complete metapodia give a mean withers height of 1.18 m with a range of 1.30 to 1.04 m (calculated as in Bourdillon & Coy 1980). The MWS data, indicates that the aged mandibles fall into two groups, one centred on MWS 20 and the other on MWS 51. MWS may be approximately equated with absolute age as follows (based on Grant 1984 and Sissons & Grossman 1975):

MWS 1-8	up to 1 year (Young)
MWS 9-16	1 to 1.5 years [M2 erupting] (Young Juvenile)
MWS 17-28	1.5 to 2.5 years [M3 erupting] (Juvenile)
MWS 29-38	2.5 to 4 years (Young Mature)
MWS 39-51	4 years + (Fully Mature)
MWS 52+	? (Old)

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

Considering the age distribution one notes the absence of young mature and younger fully mature animals from the death assemblage, suggesting selection and off site disposal. Given the pattern observed in cattle bones from Baintree (where these age classes dominate the assemblage. Smoothy, in prep), I suggest that cattle were moved from the surroundiung countryside into the town for slaughter. A larger sample from further rural sites in the area is required to confirm this suggestion.

The skeletal part distribution for cattle does not 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. The relative under-representation of prime meat bearing bones (i.e. upper limb bones), may be accounted for by their very fragmented condition, possibly caused by deliberate breakage for marrow extraction (though similar patterns of breakage may be caused by dogs, Binford 1981). Most of the bone listed as unidentified was composed of fragments of large mammal limb bone which could not be definitely attributed to species/skeletal part, though most are probably from cattle.

Butchery marks were not systematically recorded, however knife and chopper marks were observed to be fairly common. They were especially common as transverse cuts/chops on rib fragments. From the vertebrae present it is clear that carcases were not split longitudinally as in recent butchery practice. No other patterning was observed in the sample.

Sheep — this term is used in a general sense and may also include goat bones. However no bone in the sample may be definitely attributed to goat.

As with the cattle, the sheep bones are generally similar to those described by Luff (1982) from Roman levels in Colchester and Chelmsford. The sheep appear to be from a hornless breed as no horn cores were recovered (though fragmented skulls were certainly present). This is the case with all the Roman sheep bone the author has examined from sites in the district.

The MWS sample is too small (11 specimens), to show any significant patterning and one is limited to the observation that the specimens cover a range of mandible wear stages from MWS 8 to 52 (an unusually old specimen).

The skeletal part distribution, is essentially similar to that for cattle and the same comments apply. The more marked discrepancy between the MNI for skulls (based on teeth), and the other categories demonstrates an even greater degree of fragmentation in the case of sheep bone (though some off site transport of sheep meat may also be occurring; the complete absence of identifiable femur may be indicative of this process). Butchery marks are less frequent than with cattle, though of a similar character.

Pig — beyond noting its relative importance in the assemblage (10.3% by MNI), the size and very fragmented nature of the sample precludes any detailed discussion of the pigs present on the site.

Horse — although the horse bone from the site was distinctly less fragmented than the cattle bone, reliable metrical data is limited to a single complete tibia from content 60. Its dimensions fall near the middle of the range of the Iron Age horse bones from Danebury, Hampshire (Grant 1984, 521). A near complete femur was recovered from context 46, but could not be reliably measured as both epiphyses were unfused, indicating an age of less than 3.5 years (Schmid 1972).

The horse skull in context 43 was crushed by earth moving machinery during the initial stripping of the site. Due to this damage no useful measurements could be taken on the skull. However it was possible to age the individual by means of Crown Height Measurement of the cheek teeth (Levine 1982). The age estimates range from 6 to 9.5 years, but taken together indicate an approximate age of 7 to 8 years. The size range of the teeth does not differ significantly from that of the New Forest ponies used in Levine's study.

The skeletal part distribution shows no obvious patterning, all parts of the skeleton being represented. Although the MNI is only 2 (based on the presence of 2 left tibia), with such a scattered sample (e.g. the measured tibia is from a 1st century pit and the skull is from the fill of a 4th century ditch), it cannot be assumed that any two bones actually derived from the same animal (Perkins 1973). No butchery marks were observed on any of the horse bone.

Dog — the remains of at least four dogs were recovered from the site. Generally the bones were scattered, isolated finds. However, a fragmented skull was found in context 43 together with 14 vertebrae, indicating a partially articulated body (the remainder of the skelton was missing). No reliable measurements could be made on 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). The skull present in context 43 had a full adult dentition which implies an age of four years or over (Schmid 1972). None of the dog bones displayed any butchery marks.

Deer — both red deer (*Cervus elaphas*), and roe deer (*Capreolus capreolus*), are present in the sample and are the only wild species (except for *Lepus sp.*), present at the site.

The sample divides into two parts: a, bones and b, shed antler.

a. Bones: Roe deer is represented by a pair of frontlets with antler attached (one from context 23 and one from context 65). The antlers match precisely and one may assume they come from the same individual. The fact that the antlers are fully grown but unshed indicates the buck was killed between May and October (Schmid 1972, 90). All the other bone present appears to be from red deer. The only piece worthy of comment is a complete metacarpal from context 53.

b. Shed Antler: Fragments of red deer antler are comparatively common on the size (in all cases where the burr is present the antler is definitely shed). Presumably the antler was collected in February/ March shortly after shedding. Apart from a concentration in context 43, the fragments tend to be small, show no sign of working and are randomly distributed.

Context 43 contained an almost complete antler with definite traces of working (Fig. 14). The piece is a right hand antler of red deer, the beam is broken above the trez tine which has been chopped and snapped off approximately half way along its length. The brow and bez tines are intact and the antler is apparently from a 10 or 12 point stag. In addition to the chopping marks on the trez tine, working is apparent on the beam. An area of approximately 140 × 20 mm on the posterior face of the beam, directly behind the trez tine, has been "planed" to a flat surface (curving along the length of the beam). A smaller area on the inside face of the beam has been similarly treated so as to form a 90 degree angle above the trez tine. Tool marks are clearly visible running transversely across the beam. The beam has been pierced above and below the trez tine, presumably by nail holes. I have been unable to find any parallels for this treatment of an antler in a Roman context. It appears to have been attached (nailed?), to some other object (possibly mounted on a wall?). The reason for this behavior remains obscure. Context 43 also contained a large section of beam with the tines removed, apparently from an 8 point stag.

Chicken — this was rare on the site 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).

Hare — one complete metatarsal of hare (*Lepus sp*), was recovered from context 23. This probably comes from the brown hare (*Lepus capensis*), but definite specific attribution is impossible on the basis of a single metatarsal.

Human — six human bones were recovered from the site, from the following contexts:

Context 3 — Left frontal bone (Adult).	Phase 2.
Context 10 — Right tibia (infant) — 2 fragments.	Phase 3.
Context 86 — Right tibia (infant) — 2 fragments.	Phase 3.
Context 86 — Right proximal humerus (infant).	Phase 3.

Context 3: Left frontal bone. The greater part of the bone is present, including the upper part of the left orbit. The bone is broken from just to the right of the supra-orbital notch to the junction of the coronal and sagittal sutures. On the left hand edge the bone is broken along the line of the coronal suture, which is unfused. From the size and thickness of the bone the individual was clearly adult, the unfused coronal suture is of no use in determining a more precise age estimate (Brothwell 1972). There is insufficient information to sex the skull.

Contexts 10 and 86: The infant bones listed above are all from neonatal individuals (MNI = 2), more precise ageing is impossible. They are all unarticulated, isolated finds.

Discussion

A. Diet

Meat weights, based on MNI, have been calculated for cattle, sheep, pig and horse (table 14). The calculations use a live weight of 275 kg for cattle, 37.5 kg for sheep, 87.5 kg for pig and 300 kg for horse. The meat weight is assumed to be 50% of live weight, bone weight is 7% live weight (figures from Bourdillon & Coy 1980, based on data from Manching [Boessneck *et al.* 1971]). Given the number of assumptions involved these figures should be treated with due caution.

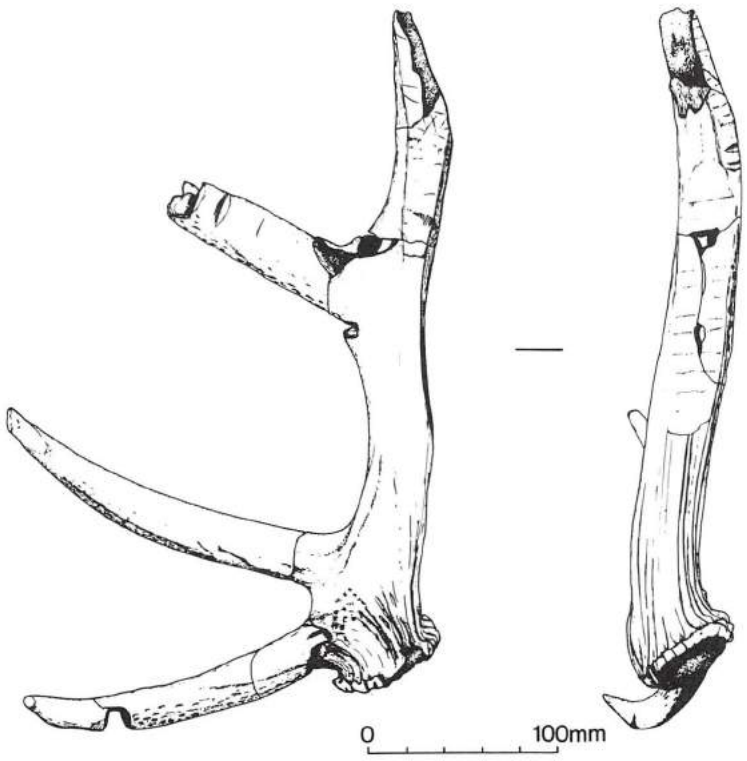

Fig. 14 Worked antler.

Table 14 — Meat Weight Estimates.

	Cattle	Sheep	Pig	Horse
Whole	1,925 kg	244 kg	175 kg	300 kg
Sample	72.8%	9.2%	6.6%	11.3%
Phase 1	550 kg	75 kg	44 kg	300 kg
	56.8%	7.7%	4.5%	31.0%
Phase 2	1,100 kg	94 kg	88 kg	150 kg
	76.9%	6.6%	6.1%	10.5%
Phase 3	1,100 kg	94 kg	88 kg	150 kg
	76.9%	6.6%	6.1%	10.5%
Sum	2,750 kg	263 kg	220 kg	600 kg
Phases 1-3	71.7%	6.9%	5.7%	15.7%

If one assumes all the individuals present were utilised for food, then cattle provided the bulk of the meat diet (73%), followed by horse (11%), sheep (9%) and pig (7%). The figures should be adjusted if one cares to exclude horse from the menu (although there is no direct evidence from the site that horse was eaten, e.g. butchery marks, there is no reason to suppose that such an obvious food resource would have been ignored). Presumably, most of the other species present i.e. red and roe deer (with meat weights of 110 kg and 9.5 kg respectively [Bay-Petersen 1978]), chicken and hare would all make a contribution to the meat diet of the inhabitants. Whilst it is possible to gain an impression of the relative importance of the various meat producing animals it is impossible to give a reliable estimate of the absolute quantities of meat consumed on the site. The relative importance of meat versus plant foods is also impossible to estimate.

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, the general distribution observed at the Rayne site is essentially similar to that from several sites in Braintree and may be considered typical of Roman animal husbandry in the area.

The evidence indicates a mixed farming economy in which cattle and sheep are present in roughly equal numbers. Horse and pig are consistently present in the assemblages but at a much lower level. Although cattle and sheep are of equal importance in terms of numbers, the bulk of the meat available would be from cattle (on the basis of the figures given above one cow would yield as much meat as seven sheep). This would tend to suggest that sheep were important for their secondary products (principally wool). There is some evidence that prime meat cattle were being exported from the site, presumably to the small towns in the area.

C. Wild Species.

The only wild species present were red deer, roe deer and hare. Although all these could have made a contribution to the inhabitants' diet, wild resources were clearly of negligible importance in the economy of the site. This is generally the case with Roman sites in the area. Shed red deer antler was brought to the site in some quantity, but apart from the near complete antler in context 43 (Fig. 14), there is little sign of antler working. The pieces in question appears to have been utilised for decorative/ritual purposes (the pair of roe deer antlers may have been similarly regarded, perhaps as a hunting trophy?)

D. Human Bone.

The presence of disarticulated infant bones should occasion no surprise as infant bones are comparatively common on Roman domestic sites in the district (four articulated infant burials were found in Roman Braintree along with a number of disarticulated bones). However, adult human bone is rare on Roman occupation sites in the area and the presence of part of an adult human skull in context 3 is rather unusual. It is impossible to explain convincingly the occurrence of an isolated bone of this type and it is possible that it was incorporated into context 3 by chance. The possibility also exists that it was deliberately deposited (ritual behaviour?), or derived from a disturbed inhumation. Context 3 displayed other unusual features which are discussed in the main excavation report.

Oyster Shell

Oyster shell was present in most contexts, usually in low concentrations. All the shell was weighed by context and the MNI was also recorded (I am grateful to P. Cheer for information on the MNI methodology which is described in Winder 1980. The analysis was carried out by Ms. A. Neville). The total weighed 34,198 g, with an MNI of 498 individuals. The breakdown by phase was as follows: phase 1 — 17.7%; phase 2 — 9.5%; phase 3 — 46.7%. It is clear that small quantities of oysters were reaching the site throughout its period of occupation.

According to Winder's figure of 7.5 g average meat weight per oyster, the MNI of 498 represents a meat weight of 3.735 kg. It is impossible to determine the precise relative importance of oysters in the diet of the inhabitants, but even allowing that MNI is a minimum figure, we may presume that in terms of total meat intake it was minimal. The ubiquitous presence of oyster shell of Roman sites in the district should not be allowed to exaggerate their importance as a food resource, "Approximately 52,267 oysters would be required to supply the calorific equivalent of a single red deer carcase" (Bailey 1978). Fragments of mussel shell were occasionally noted during excavation but were too fragmented for any quantitative analysis.

We may assume that both oysters and mussels were imported from the Essex coast, a distance of approximately 20 km. Given the low relative food value of these species we may further assume that they were looked upon as a palatable delicacy by the inhabitants of the site and played no significant role in its economy.

General discussion

The excavation must be viewed in its proper context in order to understand what it can, and cannot, tell us about the Roman landscape of the area. The excavation was undertaken under rescue conditions which limited the area under study to that directly threatened by the construction of the road. Because of this only a very small area of what is evidently a much larger "site" was examined. Indeed when considering settlement in a rural landscape the concept of an isolated "archaeological site", becomes almost meaningless, whatever the scale of excavaton the "site" will only represent a small area of the landscape as a whole.

Despite these limitations and the degree of plough damage (a factor likely to affect most Roman sites in the area), the excavation has yielded some interesting information concerning former settlement.

a) Prehistoric activity: No prehistoric features were present at the site but a flint arrowhead and several flint flakes may indicate prehistoric activity in the area, though the nature and date of this activity is impossible to determine (the arrowhead may be of the later Neolithic/early Bronze Age). Similarly, the presence of a small quantity of late Bronze/early Iron Age flint tempered pottery found in a number of Roman features may suggest occupation in the vicinity at this period. However, there is no evidence of occupation on the site itself before the Roman period.

b) Roman activity: Three broad phases of occupation can be distinguished during the Roman period, ranging from the later 1st century to the early 4th century AD. As both the stratigraphic and artefactual dating evidence from the site tends to be rather "coarse grained", not all features assigned to a particular phase are necessarily strictly contemporary. However, the phasing may be regarded as a general framework within which to interpret Roman activity in the area.

Phase 1: Late 1st — early 2nd century AD.
Phase one appears to represent part of a dispersed agricultural settlement, consisting of a rectangular post-built building set within a small enclosure with an unsurfaced trackway running through it in the general direction on the major Roman road to the north (towards the northern edge of the site the track was eroded to form a slight hollow way). There are also traces of a roundhouse, built in the native Iron Age tradition, set into the north eastern corner of the enclosure. However, the identification of this feature is far from certain. There is no direct evidence for the function of the rectangular building as all trace of its original floor level has been destroyed. A ready source of water was obviously considered necesary as a shallow well was dug nearby. These features may be connected with some aspect of animal husbandry, the shallow irregular nature of the western trackway gully at the south-east corner of the building, and the hollow way, are suggestive of trampling by animals (cattle/sheep?). It is tempting to see the building as a byre with a drove-way passing nearby, with the postulated hedged enclosure being connected with stock management. If one accepts the presence of a roundhouse, this may be interpreted as living quarters, presumably for agricultural workers (it should be emphasised that there is no direct evidence for the function of the roundhouse). This scenario is consistent with the excavated evidence but given the nature of the site it is impossible to be certain of the interpretation.

Generally the finds from phase 1 contexts are unexceptional in the setting of a low status rural settlement, consisting of fairly low concentrations of ordinary domestic debris. The faunal evidence indicates the pastoral economy placed an equal emphasis on the rearing of sheep and cattle (in terms on numbers of animals); this contrasts with phases 2 and 3 where cattle appear to dominate the faunal assemblage. The dating of phase 1 is rather imprecise, there is no evidence of a late Iron Age origin for the site and the pottery evidence suggests an approximate datje range of 60-125 AD. It may be noted that all the brooches from the site (7 specimens), are mid 1st century types, presumably this may be indicative of curation due to the relative poverty of the settlement (of the four phased examples two come from phase 1 contexts and two from phase 2).

Phase 2: Mid/late 2nd - early 3rd century AD
Clearly, at least two periods of activity are represented in phase two, the rectilinear enclosure and the grave-shaped pits. There is no stratigraphic link between any of the pits and the enclosure but the general patterning of the site suggests they belong to two separate episodes. A number of other features (pits, post holes, gullies, etc.), have been placed in phase two on the basis of their contents (principally pottery), but no obvious patterning is apparent and they do not materially contribute to the interpretation of the site. The rectilinear enclosure may be interpreted as some sort of agricultural enclosure/ field boundary. On stratigraphic grounds the enclosure clearly post-dates the phase 1 rectangular building and predates the phase 3 curvilinear ditch (context 1002), the small assemblage of pottery from the enclosure ditches indicates its filling during the later 2nd/earlier 3rd century. The hollow way which was initiated in phase 1 was also silting up at this time.

The lack of pottery specifically dated to the earlier 3rd century may indicate an hiatus in the occupation of the site at this period.

The "grave-shaped" pits present several problems of interpretaton. In terms of date they must post-date phase 1 as context 1015 cuts the fill of one of the penannular gullies (context 1), and on this basis they are placed in phase 2. However, the pottery from the features is indicative of an early/mid 2nd century date (context 93 contained a Nauheim derivative bow brooch dating to the mid 1st century). When one considers the overall patterning of the site these features appear to be out of place in both phase 1 and 2 (as defined by the rectilinear enclosure). Therefore it seems most probable that they immediately post-date the phase one settlement but pre-date the phase 2 rectilinear enclosure, i.e. *c.* mid 2nd century AD. The interpretation of the pits in terms of function is even more problematic. Following the abandonment of the phase 1 settlement these three pits were dug and in two cases were apparently filled with an organic deposit (nature indeterminate), and then sealed with a capping of clean yellow clay (in the other case the fill is identical to the majority of pits on the site). They are unquestionably grave-like, but apart from a single fragment of human frontal bone, contained no skeletal material. A simple utilitarian explanation is difficult and a ritual interpretation may be preferred. Although one should not expect "ritual" behavior to be entirely rational this does appear to be a rather unusual sequence of events. The only other possibility which springs to mind is that these pits were originally graves and that the bodies/skeletons were removed during the Roman period (this could explain the presence of a piece of human skull in the upper fill of context 1015). It is possible that the broken samian platter in context 1015 and the brooch in context 1058 may represent the remains of grave goods. If this is the case it may provide an explanation for the generally early date assigned to the finds from these features as one might expect curated objects to be prominently represented as funeral offerings. It is impossible to determine if these features have any direct connection with the precedeing settlement. Subsequently the site appears to have reverted to an agricultural function as represented by the rectilinear enclosure discussed above.

Phase 3: late 3rd - early 4th century AD
Phase three shows a more unified picture than that presented in phase two, but the function of the site remains enigmatic. The ditches (contexts 1017 and 1039), presumably served as boundary markers and

seem to define an enclosure approximately 26 m wide (length indeterminate), trending north-east/south-west. The butt end of a ditch excavated in the south eastern corner of the site (context 1060), may represent part of the same system. The function of the curvilinear ditch (context 1002), is obscure, the presence of a large post hole at its centre of arc is worth noting but may be coincidental. A similar, but slighter, curved ditch (context 1067), was excavated west of context 1039. It should be noted that the nature of the junction between contexts 1002 and 1017 suggests that they were not primarily intended as drainage ditches as the undisturbed subsoil ridge separating the two features would have impeded water flow. A large irregular area of intense burning (context 92), was noted to the north of the ditch junction. The filling of context 1017 (contexts 43 and 68), produced a greater concentration of finds than was usual (e.g. two complete Hadham-ware flagons, complete horse and dog skulls, several large pieces of modified red deer antler, an iron latchlifter, etc.), which may suggest a more intensive occupation of the area than in the two preceding phases. The pottery from the ditches suggests that they were filled, at the latest, by the early years of the fourth century.

The other principal phase 3 feature consists of a dense rubble spread composed mainly of tile and mortar rubble preserved in the upper filling of the hollow way and the north-western corner of the site. It seems probable that this material represents part of a formerly more extensive layer. There is no trace of a substantial building on the site from which this rubble could be derived so we must assume it was imported to the site and deliberately deposited as a make-up layer or to provide a more stable surface. Although the site is prone to become boggy during wet weather, the reason why a consolidated surface was required at this particular time/place is not apparent. The deposition of this rubble layer is securely dated to 275-300 AD (see pottery discussion). The general scarcity of tile in the phase 3 ditches suggests that they had largely silted up by the time the tile rubble was deposited on the site. The only feature on the site which preserves any trace of activity following the deposition of the rubble layer is context 23 (here the subsidence of the rubble layer into the partially filled hollow way has protected the overlying deposits from plough damage). No structures are present but the relatively large pottery assemblage may indicate continued use of the site up until the mid 4th century (although coins are generally rare on the site, the total lack of the normally common Constantinian and later issues argues against a prolonged 4th century occupation). The nature of any activity following the deposition of the rubble layers is unknown as any other deposits relating to this period have apparently been removed by the plough.

The phase 3 ditch system is probably best interpreted in an agricultural context, though several of its features are difficult to explain in purely utilitarian terms, e.g. the curvilinear ditch (context 1002). The presence of relatively large quantities of domestic refuse in context 43 suggests occupation in the immediate vicinity. The rubble layer was apparently laid down after the ditches had been allowed to silt up, but its precise purpose, beyond the provision of a hard surface, is unknown. The site appears to have been finally abandoned (no post-Roman features are present on the site apart from modern field drains), by 350 AD at the latest.

The tile deposited on the site during phase 3 raises the intesting question of its place of origin. Within the large assemblage was a significant quantity of relief-patterned flue-tile which may be dated to *c.* 120-130 AD. It is likely that these tiles derive from a high quality building (possibly a villa bath house), constructed in the Antonine period; presumably the bulk of the other tile derives from the same source. Assuming the dating outlined above to be correct this building was probably demolished (or remodelled), at the end of the third century, making the tile rubble available for use as hardcore. Given the difficulty of transporting such a heavy, low value commodity as rubble over long distances this suggests the presence of a substantial romanised building (in this context probably a villa), in the immediate vicinity of the site. Therefore the Rayne site may possibly be part of a "native" type settlement attached to a villa estate, though further field work would be required to confirm this possibility.

If the site is accepted as marking the approximate position of a villa, it further extends the remarkably regular distribution of villas observed around Great Dunmow to the north-west (Going 1988) and Braintree to the east (Rodwell 1978). This distribution shows villas spaced at intervals of 3-4 Km along the river valleys (Fig. 2). Generally, the impression is of a well organised and heavily exploited landscape. The faunal evidence from the Rayne site hints at the function of these establishments in supplying agricultural produce (the evidence from Rayne specifically relates to cattle), for use in, and presumably redistribution through, the small towns in the area. Thus the site at Rayne may be viewed as an example of the lowest level in the Roman provincial settlement heirarchy, e.g. "native" rural settlement — villa — small town — large town (civitas capital, colonia, etc) — provincial capital.

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[A detailed archive report is available in the ECC sites and monuments record.]

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Bibliography

Allen, T., Miles, D. and Palmer, S., 1984 — "Iron Age Buildings in the Upper Thames Region". In *Aspects of the Iron Age in Central Southern Britain.* (ed. Cunliffe & Miles), OUCA Monograph No. **2**.

Bailey, G. N. 1978 — "Shell Middens as Indicators of Post-Glacial Economies: A Territorial Perspective". In *The Early Post-Glacial Settlement of Northern Europe.* (ed. Mellars, P), Duckworth, London. 37–63.

Bay-Petersen, J. L. 1978 — "Animal Exploitation in Mesolithic Denmark". In *The Early Post-Glacial Settlement of Northern Europe.* (ed. Mellars, P), Duckworth, London. 115-45.

Betts, I. M., Black, E. W., Gower, J. L. and Stone, M. S. — Forthcoming. *A New Corpus of Relief-Patterned Flue Tile.*

Binford, L. R., 1981 — *Bones: Ancient Men and Modern Myths.* Academic Press. New York.

Black, E. W., 1985 — "The Dating of Relief-Patterned Flue Tiles". *Oxford J. Archaeol.*, **4.3**, 353-76.

Boessneck, J. A. et al. 1971 — "Die Tierknochenfunde aus dem Keltischen Oppidum von Manching". *Die Ausgrabungen in Manching, 6.* Wiesbaden.

Bourdillon, J. and Coy, J. P. 1980 — "The Animal Bones". In *Excavations at Melbourne Street, Southampton, 1971-76.* (ed. Holdworth, P.). Counc. Brit. Archaeol. Res. Rep. **33**, 79–121.

Brodribb, G. 1987 — *Roman Brick and Tile.* Sutton, Gloucester.

Brooks, H. and Wall, W., 1988 — "The Stansted Project: Second Interim Report". ECC Archaeol. Section. Archive report.

Brothwell, D. R., 1972 — *Digging Up Bones.* BM. London.

Cheer, P., Unpublished Ms. — "The Roman Tile". In *Excavations at College House, Braintree, Essex 1984-87.* by Bakewell, J. C. (in prep.).

Cleere, H. F., 1958 — "Roman Domestic Ironwork as Illustrated by the Brading, Isle of Wight, Villa". *Bull. Inst. Archaeol.* **1**, 55-74.

Crummy, N., 1983 — *The Roman Small Finds from Excavations in* Colchester, 1971-9. Colchester Archaeol. Rep. **2**. Colchester.

Cruz-Uribe, K. and Klein, R. G. 1986 — "Pascal Programs for Computing Taxonomic Abundance in Samples of Fossil Mammals". *J. Archaeol. Sci.* **13**, 171-87.

Drury, P. J., 1976 — "Braintree: Excavations and Research, 1971-76". *Essex Archaeol. Hist.* **8**, 1-143.

Drury, P. J., 1978 — *Excavations at Little Waltham, 1970-71.* Chelmsford Archaeol. Trust Rep. 1. (Counc. Brit. Archaeol. Res. Rep. **26**).

Drury, P. J., 1988 — *The Mansio and Other Sites in the South-Eastern Sector of Caesaromagus.* Chelmsford Archaeol. Trust Rep. 3.1. (Counc. Brit. Archaeol. Res. Rep. **66**).

Fowler, E., 1960 — "The Origin and Development of the Penannular Brooch in Europe". *Proc. Prehist. Soc.* **26**, 149-77.

Going, C. J., 1987 — *The Mansio and Other Sites in the South-Eastern Sector of Caesaromagus: The Roman Pottery.* Counc. Brit. Archaeol Res. Rep. **61**.

Going, C. J., 1988 — "The Countryside around Great Dunmow". In *Excavations at Great Dunmow, Essex: A Romano-British Small Town in the Trinovantian Civitas.* by Wickenden, N. P. E.Anglian Archaeol. **41**, 86-88.

Grant, A., 1982 — "The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates". In *Ageing and Sexing Animal Bones from Archaeological Sites.* (ed. Wilson, Grigson & Payne), Brit. Archaeol. Rep. **109**, 91-108.

Grant, A., 1984 — "Animal Husbandry". In *Danebury: an Iron Age Hillfort in Hampshire. Vol. 2.* by Cunliffe, B. W. Counc. Brit. Arch. Res. Rep. **52**, 496-548.

Green, H. S., 1980 — *The Flint Arrowheads of the British Isles.* Brit. Archaeol. Rep. **75**.

Harden, D. and Green, C., 1978 — "A Late Roman Grave Group from the Minories, Aldgate". In *Collectanea Londinensia,* London & Middlesex Archaeol. Soc. Spec. Pap. **2**, 163-75.

Hawkes, C. F. C. and Hull, M. R., 1947 — *Camulodunum.* Soc. Antiq. Res. Rep. **14**.

Isings, C., 1957. *Roman Glass from Dated Finds*. Groningen.

Jones, M. U., 1972 "Pottery Graffitti from Mucking, Essex". *Antiq. J.* **52**, 335-8.

King, A., 1978 "A Comparative Survey of Bone Assemblages from Roman Sites in Britain". *Bull. Inst. Archaeol.* **15**, 207-32.

Klein, R. G. and Cruz-Uribe, K., 1984 *The Analysis of Animal Bone from Archaeological Sites*. University of Chicago Press.

Leeds, E. T., 1933 *Celtic Ornament*. Oxford.

Levine, M. A., 1982 "The Use of Crown Height Measurements and Eruption-Wear Sequences to Age Horse Teeth". In *Ageing and Sexing Animal Bone from Archaeological Sites*. (eg. Wilson, Grigson & Payne), Brit. Archaeol. Rep. **109**, 223-50.

Lowther, A. W. G., 1948 *A Study of Patterns on Roman Flue-Tiles and their Distribution*. Surrey Archaeol. Soc. Res. paper **1**.

Luff, R. M., 1982 *A Zooarchaeological Study of the Roman North-Western Provinces*. Brit. Archaeol. Rep. (Int. Ser). **137**.

MacGregor, M., 1976 *Early Celtic Art in Northern Britain*. Leicester.

Orton, C. R., 1975 "Quantitative Pottery Studies. Some Progress, Problems and Prospects". *Sci. and Archaeol.* **16**, 30-5.

Perkins, D., 1973 "A Critique on the Methods of Quantifying Faunal Remains from Archaeological Sites". In *Domestikationsforschung und Geschichte der Haustiere*. (ed. Matolcsi). Budapest.

Pratt, G. D., 1976 "Excavations at 51-57, Rayne Road (Site E)". In Drury 1976, 3-65.

Price, J., 1978 "Trade in Glass". In *Roman Shipping and Trade: Britain and the Rhine Provinces*. (ed. Plat Taylor & Cleere). Counc. Brit. Archaeol. Res. Rep. **24**, 70-78.

Rhodes, M., 1980 "Leather Footwear". In *Excavations at Billingsgate Buildings "Triangle", Lower Thames Street, 1974* by Jones, D. M. London & Middlesex Archaeol. Soc. Special Paper **4**, 99-128.

Rodwell, K. A., 1988 *The Prehestoric and Roman Settlement at Kelvedon, Essex*. Counc. Brit. Arch. Res. Rep. **63**.

Rodwell, W. J., 1978 "Rivenhall and the Emergence of First Century Villas in Northern Essex". *In Studies in the Romano-British Villa*. (ed. Todd, M.). Leicester.

Rook, T., 1979 "Tiled Roofs". In *Roman Brick and Tile*. (ed. McWhirr & Viner). Brit. Archaeol. Rep. (Int. Ser). **68**.

Rudling, D., 1986 "The Excavation of a Roman Tilery on Gt. Cansiron Farm, Hartfield, Sussex". *Britannia* **17**, 191-230.

Salaman, R. A., 1975 *Dictionary of Tools*. London.

Schmid, E., 1972 *Atlas of Animal Bones*. Amsterdam.

Sisson, S. and Grossman, J. D., 1975 *The Anatomy of the Domestic Animals*. (5th ed. Getty, R.). Philadelphia.

Smoothy, M. D., Unpublished Ms. "The Animal and Human Bones". In *Excavations at College House, Braintree, Essex, 1984-87*. by Bakewell, J. C. (in prep.).

Smoothy, M. D., In prep. "Excavations at George Yard/Sandpit Road, Braintree, Essex, 1984-88".

Turner, C., 1987 "The Pottery". In "Excavations in Braintree 1980 and 1984". by Milton, B. *Essex Archaeol. Hist.* **17**, 82-95.

Wickenden, N. P., 1988 *Excavations at Great Dunmow, Essex: A Romano-British Small Town in the Trinovantian Civitas*. E.Anglian Archaeol. **41**.

Winder, J., 1980 "The Marine Mollusca". In *Excavations at Melbourne Street, Southampton, 1971-76*. by Holdsworth, P. Counc. Brit. Archaeol. Res. Rep. **33**.

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Essex Archaeology and History **20** (1989), 30-33

A valiant constable of Colchester Castle, AD 1155

by C. L. Sinclair Williams

In his *General Chronicle of England,* first published in 1580, John Stow related an incident at the siege of Bridgnorth when a certain Hubert de St. Clair, then Constable of Colchester, saved the life of King Henry II by sacrificing his own.[1] Camden made a brief reference to the incident in his *Britannia* which first appeared, in Latin, in 1586, though in Gibson's translation not until 1695.[2] It was repeated with considerable embellishment and some inaccuracy by the Devonshire historian Tristram Risdon, 1580-1640, in his account of the St. Clair family of East Budleigh,[3] and by his eighteenth-century successor Richard Polwhele, with still further embroidery.[4] A whole chapter is devoted to Hubert de St. Clair and his deed at Bridgnorth by the anonymous author of a work on the English family St. Clair, now long out of print.[5] For the most part the value of this work is limited by the failure to quote the sources of its information, but, by exception, in the case of the Bridgnorth incident the author grudgingly reveals his source as a chronicle of Ralph Niger, who was roughly contemporary with Henry II.

Except for a passing reference in a footnote to an article on the St. Clairs of Tidwell, near East Budleigh,[6] the event seems to have been disregarded by recent historians, perhaps because the contemporary source escaped attention, and the story was consequently distrusted as legendary. Yet, if true, it concerns an event which determined the course of English history, and the line of succession to the throne, for the siege of Bridgnorth occurred before the births of King Henry's only sons to surive him, the future kings Richard I and John.

Among the chronicles contemporary, or nearly contemporary, with Henry II, only Ralph Niger has been found to record this crucial occurrence in the first year of Henry II's reign.

Ralph Niger was a profilic writer of theological works, but late in life he wrote two chronicles. The earliest surviving manuscripts of these chronicles are preserved in The British Library. They are believed not to be Ralph Niger's autographs, but are thought to be copies dating from the early thirteenth century, soon after Ralph's death. The account of the siege of Bridgnorth occurs in the second chronicle, *Chronicon II.*[7] The annal is incorrectly dated 1165 in the margin of the manuscript (Fig. 1) instead of the correct 1155.[8] This incorrect dating is believed to be a copyist's scribal error. Stow, who presumably used this chronicle as his source, followed this error, and it remains uncorrected in Anstruther's printed edition of the chronicles.[9]

With the exception of Camden's brief summary in Edmund Gibson's English translation of *Britannia,* all the printed versions of the incident at Bridgnorth contain inaccuracies of transcription, translation or interpretation. The following is therefore offered as an attempt at a literal, if somewhat inelegant, translation unencumbered by the later embroideries. (Henry II had been mentioned in the preceding sentence):

> In a certain siege at Bridgnorth against Hugh de Mortimer, when an arrow was aimed at the same king, one of his captains, Hubert de St. Clair, constable of Colchester, at the critical moment steadfastly interposed himself, and accepted death for the sake of his lord. Whose only daughter [the king] afterwards took into his wardship, her father dying in the same place and interceding with the king on her behalf, and gave her in marriage, along with her paternal inheritance, to William de Lanvalei, who had by her a son, giving him his own name and surname.

Problems of interpretation stemmed from the final passage. Stow understood it to mean that the child was named after his grandfather, though whether paternal or maternal he does not say. Risdon was so carried away by the story of the heroic deed that he seems to have cast aside the text and inserted as a condition of the marriage that 'for perpetuating the memory of so famous a man as St. Cleere, and his magnanimous resolution, he should bear both name and surname of her father, and be called Hubert de St. Cleere'.[10] This misinterpretatoin was repeated by Polwhele. That the child was named William de Lanvalei after his father is well-documented; but before attempting to assess the validity of Ralph Niger's account, something should be said about the origins of the St. Clair family and Sir Hubert's place in it.

It is a common misapprehension that anyone bearing the surname Sinclair, the modern form of St. Clair, must be of Scottish origin. The English St. Clairs are, in fact, of greater antiquity in Britain than the Scottish: indeed, there is evidence that the founder of the Scottish clan Sinclair was one of the younger sons of English nobles granted lands in Scotland by the Scottish King William, 1166-1214.[11]

The Anglo-Norman St. Clairs came from Saint-Clair-sur-Elle, *arr.* Saint-Lô, Manche.[12] Three St. Clairs appear in Domesday Book: Bretel with nine manors in Somerset, nine in Dorset and three in Devon; Hubert with one manor in Somerset and three in Dorset; and Richard de Sencler with just one manor, at Wortham, Suffolk. Neither Bretel nor Hubert is surnamed in the Exchequer Domesday, but Bretel is identified as St. Clair in the Geld Rolls,[13] and Hubert as *de Sancto Claro*

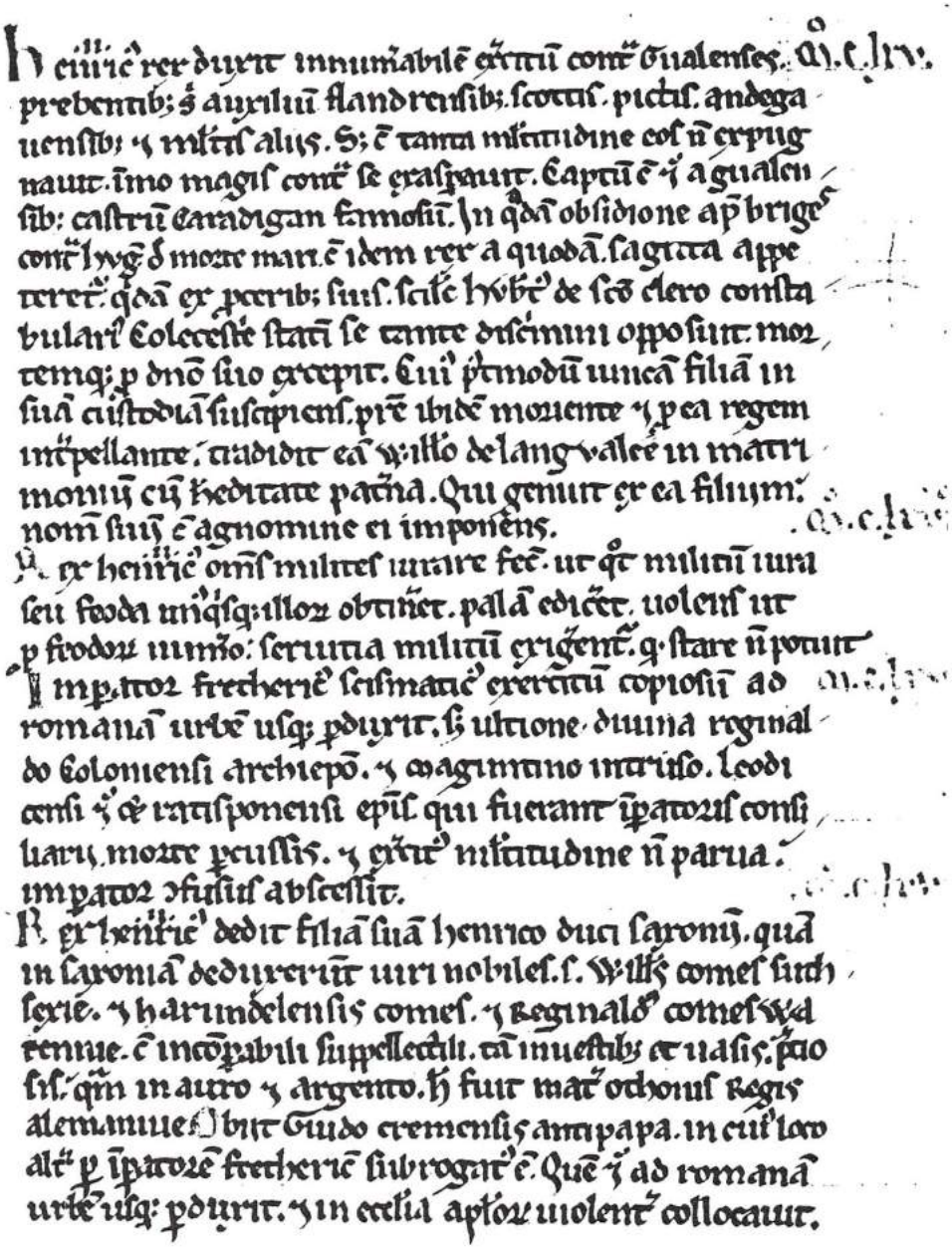

Fig. 1 Folio 36 from Ralph Niger's *Chronicon II*, MS. *Cotton. Vespasian D.X.* Reproduced by kind permission of the British Library.

in Exeter Domesday. That Richard's surname should take the form 'de Sencler' in a Latin context is noteworthy at such an early date.

Bretel appears to be the ancestor of the Somerset, Dorset, Devon and Hampshire branches of the family. Richard's descendants, if there were any, have not been identified. The Essex and East Anglian lines of St. Clairs descended from Hubert, who had two sons, Hamon and William.

In addition to the manors he inherited in Somerset, Hamon acquired lands in Bedfordshire, Buckinghamshire, Hertfordshire and Kent. With the death of Eudo the Steward in 1120 he succeeded to the 'farm' of Colchester.[14] He was the father of Hubert who lost his life at Bridgnorth. William retained lands in Normandy,[15] and in England he held estates in Essex, Huntingdonshire and Dorset.[16]

Hubert, son of Hamon, inherited his father's lands and, as we learn from Ralph Niger (above), was Constable of Colchester at the time of his death in 1155. He left a widow Clemency, who lived to a great age, and a daughter Gunnore who was his sole hieress. With the

marriage of Gunnore to William de Lanvalei, the lands of this branch of the St. Clairs passed out of the family.

Conclusive evidence that the son of William de Lanvalei and Gunnore was named after his father, and not, as Risdon believed, after his maternal grandfather, is found in the record of a dispute over land at Eaton Socon and Sandy, Bedfordshire, in the year 1200. William de Lanvalei based his claim against Hugh de Beauchamp on the grounds that these lands had descended to him, via his mother Gunnore, from Hamon de St. Clair.[17] As William de Lanvalei I and Gunnore had a daughter, also Gunnore, who married William de Beauchamp,[18] it is probable that the 'dispute' was amicably simulated in order to obtain documentary title to the lands concerned (a common expedient of which records are preserved in 'Feet of Fines').[19] Hamon had received remission of Danegeld for both these estates in 1130[20] and, significantly for our present discussion, William de Lanvalei received remission for the same two estates in 1156.[21]

We may now consider whether Ralph Niger's story of Hubert de St. Clair's valiant deed at Bridgnorth should be accepted as history, or whether it should be treated with caution as possibly legendary.

The foregoing establishes that Hubert de St. Clair was an historical person. His family origins, relationships and land-holdings are well-documented. What little is said about him in Ralph Niger's brief, laconic account of the incident at Bridgnorth is entirely consistent with what is known from other sources. Hubert had died by 1156. He did leave an only daughter who was his heiress, and she did marry William de Lanvalei and had a son also named William de Lanvalei. By this marriage Hubert's estates did pass to the Lanvalei family, and those which later formed part of the honour Lanvalei had formerly been held by Hubert's father, Hamon de St. Clair. That Hubert should have been at the side of the king at Bridgnorth accords with what became almost a tradition of personal service to the sovereign in the medieval St. Clair family.[22] An early instance is the appearance of Hubert's father Hamon as a witness to Stephen's charter in 1136.[23]

Apart from his works, little is known with certainty about Ralph Niger, except that he studied in Paris in the 1160s, and by 1168 had achieved the status of *Magister (magister artium),* and corresponded with John of Salisbury.[24] He was born probably around 1140 and died in 1199 or a year or two later.[25] He appears to have been a member of the entourage of Henry, son of Henry II, whom the king had had crowned in his own lifetime in what proved to be a vain attempt to secure his succession to the throne. He supported Thomas Becket against Henry II and was consequently exiled.[26] He returned to England soon after the accession of Richard I in 1190.

Ralph Niger appears to have been associated with Essex and Suffolk, but there seems to be no evidence for the belief that he was a native of Bury St. Edmunds apart from the fact that his works were preserved in the medieval monastic library there.[27] However, his writings were admired by Gervase of Tilbury who also glossed his work on Aristotle,[28] and it is said that Ralph de Coggeshall used Niger's *Chronicon II* as the starting point for his own chronicle.[29] If Ralph Niger had connexions with Essex or Suffolk, there is every likelihood that he would have been conversant with the activities of the St. Clair and Lanvalei families. He might even have heard of the heroic death of the Constable of Colchester from St. Clair men-at-arms who had taken part in the seige of Bridgnorth: if the date of his birth is correctly conjectured, he would have been aged about 15 at the time. Hubert's widow Clemency was still living when Ralph returned to England; in fact, she appears to have outlived him.

There is uncertainty about the date up to which Ralph Niger carried his *Chronicon II,* and who then continued it; but again there are Essex associations. According to the D.N.B. the chronicle is Niger's own work only until the annal for 1161, and it was then continued by Ralph de Coggeshall. Flahiff, however, says that Niger continued his chronicle until about 1180,[30] though he also names Ralph de Coggeshall as the continuator.[31] More recently, references in the chronicle to St. Osyth, Essex, have prompted the suggestion that it was continued by the canons of the Augustinian priory there.[32] If Ralph de Coggeshall was the continuator it is surprising that, in his own chronicle, for the year 1155 he says only: 'King Henry the Second conquers Hugh de Mortimer. King Henry the Third is born.'[33] The suggestion that the canons of St. Osyth were possibly the continuators is interesting, for the manor of St. Osyth, anciently Chiche, was once held by the St. Clair family. The older part of the moated St. Cleres Hall, which may still be seen south of the village, was almost certainly built by John Saintclere, or his son Thomas: the latter was active *c.* 1371.[34]

It will be noted that in his brief account of the siege of Bridgnorth, Ralph Niger displays none of the hostility towards Henry II for which, in his support for Becket, he became notorious. There is also no trace of antipathy to the St. Clairs, which might be expected, for not only had Hubert demonstrated outstanding loyalty to the king, but Hugh de St. Clair, probably of Essex,[35] was excommunicated by Becket. Several reasons were given for Hugh's proscription. He appears among those excommunicated in 1169 for assisting at the coronation of the younger Henry by the Archbishop of York in Becket's absence;[36] but in a letter to the Pope in 1167 Becket is reported to have said that he had excommunicated Hugh de St. Clair for seizing property of the church of Canterbury[37] and, elsewhere, for 'malignant backslidings'[38]. However, the absence of any note of hostility towards the king or the St. Clairs in Ralph Niger's account of the siege of Bridgnorth cannot be taken as negative evidence that this annal was written by his continuator, even if the *D.N.B.* version of the date at which the continuator took over were accepted without allowance for the error in dating in the surviving copy.

Although it cannot be claimed that the truth of Ralph Niger's anecdote is conclusively established, no reason to doubt it has been found, and where the attendant circumstances are recorded in surviving official documents, Ralph Niger is proved correct.

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I am indebted to Mrs Patricia Basing, Curator, The Manuscript Collections, The British Library, for information about Ralph Niger's Chronicon II, and to Mr R. J. C. Woollard, History Librarian, University of London Library, for going to a great deal of trouble to provide a photocopy from Anstruther, *The Chronicles of Ralph Niger* (the only two known copies of which are not available for loan). I also wish to thank the Library Requests Service for obtaining some dozen chronicles from various libraries until my quest ended with Ralph Niger. I am particularly grateful to the editor's (necessarily anonymous) referee for suggesting improvements, which have been adopted, to my translation from Ralph Niger.

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References

1. John Stow, *Annales, or a General Chronicle of England,* London, 1631,152.
2. William Camden, *Britannia,* translated into English by Edmund Gibson, London 1695/Newton Abbot 1971, 542.
3. T. Risdon, *The Chorographical Description or Survey of the County of Devon,* London 1811/Barnstaple 1970, 52.
4. R. Polwhele, *History of Devonshire,* ii, London, 1798/Dorking, 1977, 218-9.
5. Anon., *The Sinclairs of England,* London, 1887, 210-217.
6. H. J. Hanham, 'The Seyntcleres of Tidwell', *The Devonshire Association Report and Transactions,* vol. 99, Exeter, 1967, 139 (f.n.).
7. British Library M.S. *Cotton., Vespasian, D. X.,* f.36.
8. *Vide* W. L. Warren, *Henry II,* London, 1973, 60-61, 234; *English Historical Documents, 1042-1189,* (eds.) D. C. Douglas and G. W. Greenaway, London, 1953, 324; A. L. Poole, *From Domesday Book to Magna Carta, 1087-1216,* Oxford, 1951, 322; *Radulphi de Coggeshall Chronicon Anglicanum,* (ed.) J. Stephenson, 1875, 15.
9. *The Chronicles of Ralph Niger,* (ed.) B. Anstruther, London, 1851, 170.
10. Risdon, *loc. cit.*
11. Stow, *op. cit.,* 153.
12. C. Loyd, *The Origins of some Anglo-Norman Families,* Leeds, 1951, 8.
13. *Victoria County History of Somerset,* i, 536.
14. W. Farrer, *Honors and Knights' Fees,* iii, Manchester, 1925, 168.
15. *Documents Preserved in France,* i, (ed.) J. H. Round, London, 1899, 290.
16. Farrer, *op. cit.,* 291; Loyd, *op. cit.* 88.
17. *Curia Regis Rolls,* i, H.M.S.O., London, 1923, 360.
18. Farrer, *op. cit.,* 291.
19. cf. M. S. Giuseppi, *Guide to the Contents of the Public Record Office,* i (revised), London, 1963,. 135-6.
20. Farrer, *op. cit.,* 248.
21. *Ibid.,* 280.
22. C. L. Sinclair Williams, 'The Arms of St. Clair', *The Coat of Arms* Nos. 135 & 136, London, 1985/6, 208.
23. *English Historical Documents, 1042-1189,* (eds.) D. C. Douglas and G. W. Greenaway, London, 1953, No. 21.
24. G. B. Flahiff, 'Ralph Niger', *Medieval Studies,* iii, London, 1940, 104-6.
25. *Ibid.,* 114.
26. *Dictionary of National Biography.*
27. Flahiff, *op. cit.,* 104-5.
28. *Ibid.,* 112.
29. *Ibid.,* 123.
30. *Ibid.,* 123.
31. *Ibid.,* 122.
32. Antonia Gransden, *Historical Writing in England, c. 550 to c. 1307,* London, 1974, 331.
33. *Radulphi de Coggeshall Chronicon Anglicanum,* (ed.) J. Stephenson, London, 1875, 15.
34. *Calendar of Close Rolls, Edward III,* xiii, H.M.S.O., London 1912, 274, 492.
35. *Curia Regis Rolls,* i, H.M.S.O., London, 1923, 340.
36. *English Historical Documents, 1042-1189, op. cit.,* 153.
37. The Annals of Roger de Hovenden, i., (ed.) H. T. Riley, London, 1853, 294.
38. *Ibid.,* 313.

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The textile industry in Essex in the late 12th and 13th centuries: a study based on occupational names in charter sources

by Michael Gervers

Introduction

The present study is concerned with the manufacture of textiles for the purpose of trade and commerce extending beyond domestic and local market consumption. In this context, the history of textile production in Essex in the late twelfth and thirteenth centuries is closely tied to the economic activity generated by the ancient town of Colchester and, to a lesser extent, by the border town of Sudbury in Suffolk. Even for these places, however, there is very little evidence of industrial activity prior to *c.* 1230. Seeking to identify other early centres, historians have repeatedly cited the reference in the Domesday of Ipswich to the cloths of 'Coggeshale, Maldoun, Colecestre, [and] Sudbery' which were exported from that port sometime around the turn of the fourteenth century.[1] Further evidence for early sites of production may be derived from the East Anglian wool returns of the thirteenth century. N. Heard argues that the towns which paid the highest tax on wool sales subsequently became centres of cloth manufacture. Based on this criterion, he confirms the prominence of Colchester and Sudbury as well as of Coggeshall and Halstead.[2] For E. Miller, the towns of 'Coggeshall and Maldon stand for the newer, semi-rural centres which had developed during the thirteenth century.'[3] No other places are mentioned in the literature, although, with the exception of Maldon the consensus based upon this slim evidence is that the industry was concentrated in the north-central part of the county between Sudbury and Colchester and that, outside these two established places, such industry was new in the thirteenth century. It has been argued that prior to that time, cloth-making in England as a whole was centred in the towns, but that for economic and sometimes technological reasons (especially the advent of the water-powered fulling mill) a movement began which sent the textile processing trades into rural areas. The result was an urban/rural competition which led, by the late thirteenth century, to the end of the urban monopoly over cloth manufacture.[4]

This thesis is not without its critics. A. R. Bridbury finds it nonsense 'to see town and country as rivals.'[5] Confirming the growing importance of town manufacturing in the twelfth century, Miller emphasizes the indigenous nature of country industry and points out 'that some rural industry was being positively encouraged by urban entrepreneurs.'[6]

One cannot deny the antiquity of weaving in rural England as a means of providing textiles for the individual villager, but neither can the early appearance of rural weavers, fullers and tailors, presumably working for local or domestic markets, be considered industrial beginnings for the increasing number of 'semi-rural' cloth-making centres which are known to have prospered in the fourteenth and fifteenth centuries. Even Colchester's early thirteenth-century production may be questioned for, unlike other cloth centres, the town is not recorded in the Pipe Roll of 1201/02 (3 John) as having requested exemption from the Assize of Cloth.[7] For nowhere else in Essex was exemption sought either, suggesting that whatever textiles were being produced were for local consumption and not for trade further afield. It is a large step which leads from the modest signs of activity, especially semi-rural activity, at the beginning of the century to the end when an established, if geographically limited, industry is identified by the Ipswich Domesday. Such a change can be explained only by significant developments which have not left their traces in the traditional sources of inquiry.

Nearly half a century ago, E. M. Carus-Wilson emphasized how little source material there was to draw upon for the study of the rural cloth industry in the late twelfth and early thirteenth centuries.[8] She, like G. A. Thornton, pointed to the lack of court rolls which, from the fourteenth century, throw valuable light 'on the technique and structure of the industry.'[9] Most medieval records have their chronological limitations, but it is the common title deed or charter which pervades all periods. It is in such sources that Miller has found villagers in the early thirteenth century whose occupational names reveal various aspects of the textile crafts.[10] Admittedly, charters provide little information about industrial activity other than through occupational names, but, when considered in the context of the document itself and among other documents of the same type, informative patterns emerge about the chronology and topography of the trade, as well as about the economic status and property-holding capabilities of those who dealt in it.[11] It is from the roles played by members of the textile professions in conveyances, and their relationship to the property conveyed, that one can provide an answer to Carus-

Wilson's question as to 'what manner of men they were.'[12]

The Sources

The ubiquitous charter may enable historians to identify a much broader geographic base for late twelfth- and thirteenth-century industrial activity in England than has previously been recognized.[13] This paper represents the first systematic attempt to use such sources to that end. Its substance is based in part upon the analysis of approximately 4000 property exchange documents and related records which correspond to the Documents of Essex England Data Set or D.E.E.D.S. database at the University of Toronto. The database includes material from *c.* 1120 to 1300. This study draws upon the nearly 1,000 twelfth- and thirteenth-century Latin charters in the cartulary of the Knights of the Hospital of St. John of Jerusalem in England (hereafter BLC),[14] 2,720 final concords for the period known as the Essex Feet of Fines (hereafter EFF),[15] and 300 inquisitions post mortem (hereafter IPM)[16] which refer to Essex properties. These sources were selected because of the precise dates associated with the final concords, because of the author's long familiarity with the Hospitaller charters, and because of the broad topographical spread of both. Evidence from these records, to be referred to as the 'sample' (Appendix 1), is used wherever possible in conjunction with that from a randomly selected second series of comparable size extracted from a nearly similar number of documents from other sources. This second series will be referred to as the 'Control' group (Appendix 2). Even though the dating of its content is generally less precise than that of the sample, the topographical and occupational indications it provides are equally valuable. Where evidence from the Control is either not available or incomplete, however, the discussion will depend on that provided by BLC/EFF.

Conveyances in BLC and the Control group deal largely with property transfers, but there are major distinctions between them and the concords in the EFF. Each of the latter is precisely dated; thirteenth-century charters rarely are. These charters generally contain witness lists; entries in the EFF never do. With the exception of manors belonging to the royal demesne, the EFF cover much of the county (27 parishes go unmentioned);[17] a considerable proportion of BLC entries pertains to north-central Essex, particularly to Hinckford Hundred, although this concentration is largely balanced by the entries in the Control group. Charters for Sudbury, located in Suffolk on the northern border of Hinckford Hundred, appear in BLC (only once in the Control group); being out of the county there are few references to that industrial centre in EFF. Entries in BLC date from *c.* 1120 and in the Control group from *c.* 1150, while the EFF begin only in 1187. On the whole, thirteenth-century concords from the EFF concern properties of greater economic value than do charters in BLC and the Control group for the same period. Despite these differences, the two types are complementary. The dated EFF serve as a context for the undated charters in BLC and the Control group and together they provide information about individuals from a broad spectrum of economic and social backgrounds.

The record is by no means complete. The nearly 8,000 documents from which the occupational names analyzed here are derived represent probably no more than a quarter of the county's extant conveyances for the period under consideration. Large gaps both chronological and topographical are thus bound to

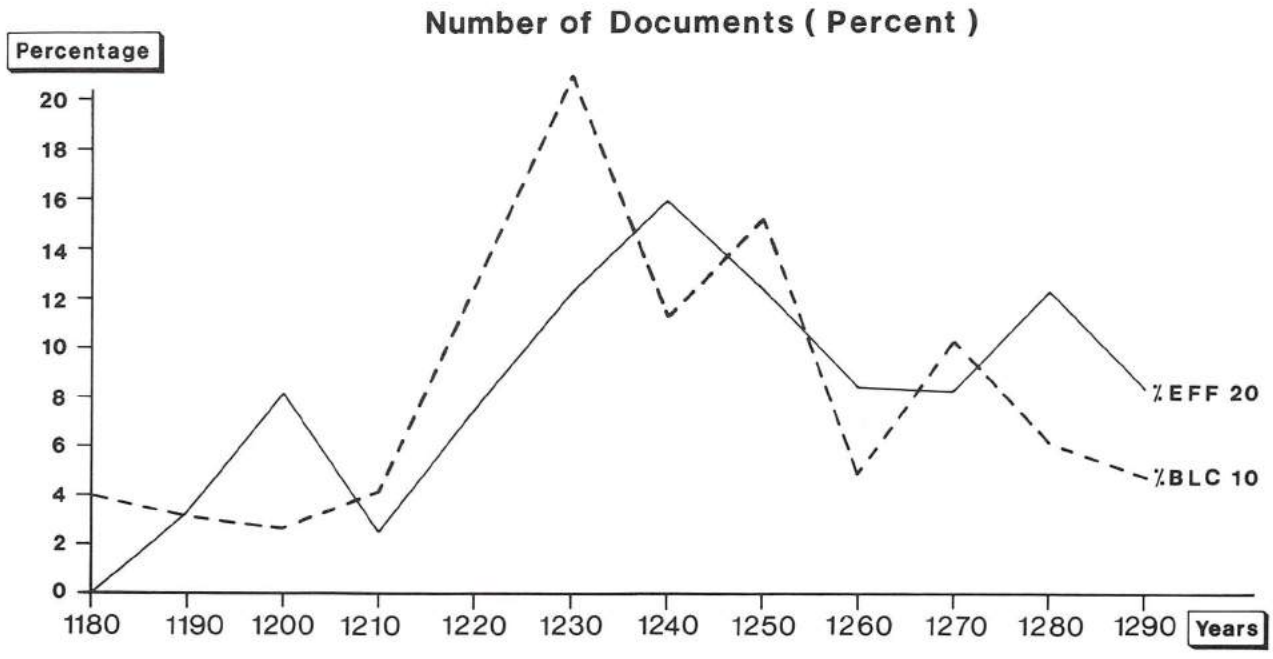

Fig. 1 Percentage frequency of documents from BLC/EFF issued over 10 year intervals.

occur, but taken as a whole the data reflect general trends.

BLC and EFF contain references to 89 men and one woman whose occupational names suggest their association with the textile trades. The Control group includes the names of 90 men and two women. Thirteen professions are indicated; they include burel[18] and chalon merchants, coif makers, drapers, dyers, fullers, hatters, hood makers, a napper, quilters, a stitcher, tailors and weavers.[19] The individuals act as conveyors, recipients, tenants (a role which includes references to neighbours), witnesses and agents. The information from three groupings concerning 1) individuals, 2) their roles, and 3) the property with which they are associated is analyzed separately. The lists in the appendices cite the name, occupation and role of each individual, the date or approximate date where available of his or her occurrence, the place and property with which he or she is associated in the document and a reference to the source whence the information is derived. These lists, together with information in tables 6 and 7, point to marked distinctions between those engaged in the manufacturing, tailoring and trading of cloth.

BLC provides 48 names (28 of which occur as witnesses), EFF 42. Relative to the number of records from each source, the frequency of individuals involved in the textile trades is 23% greater in BLC than in EFF.[20] This differentiation is undoubtedly due to the fact that the EFF reflect property transfer among a generally more wealthy stratum of society than do the charters, a stratum by no means accessible to all members of the textile professions. All of the occupations except quilter occur in BLC. Coif makers, hatters, hood makers, the napper and the stitcher are absent from EFF, undoubtedly because of the inferior economic standing of these trades. On the other hand, although the ratio of appearances of occupations in BLC is higher than in EFF, such occupations as burel merchant, chaloner, draper, dyer and tailor, which represent the wealthier side of the trade, have a higher frequency of occurrence as holders or conveyors of property in EFF than in BLC or even the Control group.

Table 1 provides a comparison of the number of properties transferred and of conveyances transferring them between a) BLC and EFF and b) the Control group and EFF. In BLC the number of conveyances providing names of textile workers is 2.7 times less than the number in EFF, while in the Control group the number is approximately 1.25 times more. Even if the numbers from BLC were extrapolated by multiplying them by 2.7, the percentage differences in both cases would favour EFF.

Although the records which were searched for textile occupational names present an unequal chronological and topographical coverage of the county, it is nevertheless more than likely that those places with the most active economies are identified in them. The 48 textile workers derived from BLC are connected with 26 parishes, the 42 from EFF with 41, and the 92 in the Control with 46; resulting in a total of 90 different parishes in Essex and four (Clare, Haverhill, Stoke and Sudbury) in Suffolk. The only places which are associated with the textile professions more than once each in both BLC and EFF, and which also occur in the Control group, are Colchester and Halstead.[21] The 90 Essex parishes represent nearly a quarter of the 399 parishes in the county.[22] Twenty-three percent of the parishes contained in BLC bear reference to the textile trades, while in EFF the ratio is only 11%. Despite the broader scope of EFF, the lower percentage of occurrences of textile occupational names from that source and the fact that records bearing such names from all sources are more numerous for Colchester and Halstead than for any other sites, suggest that in the twelfth and for much of the thirteenth century at least, commercial textile manufacture outside those two places was relatively limited.

The purpose of the charters and final concords was to record property exchange. As a consequence, they have obvious limits when used to identify the development of industrial activity. They indicate in differing degrees of accuracy who did what, when and where. A large proportion of occupational names comes from the witness lists. In cartulary copies, these lists are often either abbreviated or entirely missing. Furthermore, occupational names can be considered a valid means of identifying profession only to the beginning of the fourteenth century when there was an increasing tendency to adopt them as family names.[23] The association of witnesses and agents with the places mentioned in the documents must be done with some care as these roles need have had no precise bearing on the individual's place of residence or where he held land. For those men who made sufficient profits to enable them to invest in rents or landed property, or to engage in money lending, their roles as conveyor or recipient may not be a good indicator either of where they practiced their profession. Attempts must, therefore, be

Table 1.

Comparative Occurrence of Occupations in Active Roles

OCCUPATION	BLC		EFF		CONTROL	
	Properties Transferred	Total Conveyances	Properties Transferred	Total Conveyances	Properties Transferred	Total Conveyances
BURELLERS	0	0	3	2	0	0
CHALONERS	3	2	9	3	3	2
DRAPERS	6	2	17	11	13	7
DYERS	0	0	5	4	1	1
TAILORS	1	1	53	25	6	4

made to distinguish between residential/commercial property and investment property.[24]

There are no explicit references in the sources used to the organization or process of textile manufacture or trade. The documents shed no direct light on the nature, size, quality, quantity, colour or value of what was being produced, nor whence the raw material came, nor where the finished product went. We do not know for sure what the weavers wove, the dyers dyed, the tailors cut or the drapers traded. In short, with the exception of the rare references to livery, the corpus makes no mention of textiles whatsoever. The use of conveyances as the basis of this enquiry means, therefore, that our conclusions will depend largely on the interpretation of occupational names in terms of their chronological and topographical context. By so doing, while it will sometimes even be possible to infer what kinds of textiles were being produced and where, conclusions throughout must remain tentative.

Chronology

In order to establish the nature, if not the origins, of a commercial textile industry outside Colchester and Sudbury (as opposed to widespread production for local consumption), it is necessary both to distinguish between weaving as a profession (part-time or otherwise) and as a household chore, and to recognize that not all that was woven was made of wool. There can be no denying the importance of wool and the production of woollen cloth as trade items in the twelfth and thirteenth centuries, but it cannot be assumed that the population as a whole was then dressed entirely in woollens as opposed to a varying proportion, according to economic means and the availability of materials, of garments made of wool, linen, leather and skins. Many if not most villages had their flax or hemp field for the production of linen and cord.[25] Again, most villages must have had a weaver to weave the thread into textiles for clothing, for it is doubtful at this period that even a majority of households would have had a loom.[26] Weavers, therefore, could have attained at least a semi-professional status, even if they made most of their living from relatively small, rural agricultural holdings.[27] In this context, enormous quantities of textiles may be expected to have been produced throughout the land which cannot be considered commercial and which had a local market; neither would they have been made of sufficiently high quality material to merit their going through the finishing processes of trade cloth. If they were linen, it is doubtful that they would have been dyed. Dyeing, anyway, was a process which entailed an additional capital outlay resulting in a product whose cost, one may suspect, lay beyond the financial means of most villagers.[28] The only other semi-professionals, therefore, whom one might expect to find at this sub-trade level of production were the fullers, engaged in shrinking the cloth, and the tailors, whose job it would have been to cut the woven material and to sew it into a garment. Weavers, fullers and tailors do not make a textile industry, we propose, because their work was not in itself dependent on trade beyond the local market. It is the profession of dyer, however, dependent as it is on previous stages of the manufacturing process, which in the combined presence of fullers in towns, signals the existence of a trade industry.[29]

The sources suggest that the history of textile manufacture and use during the twelfth and thirteenth centuries can be divided into six periods which correspond largely to twenty-five year intervals beginning *c.* 1150. From *c.* 1225, when more information is available, to the end of the century, the periods would appear to run generally from *c.* 1225 to 1254, *c.* 1255 to 1279 and *c.* 1280–1300.

In terms of occupational names, there is no evidence of a semi-rural production of trade textiles before *c.* 1225, but names do begin to occur with a degree of certainty *c.* 1175. One might think that prior to this date some social phenomenon excluded the textile professions from entering the property exchange record. More likely, however, for places outside Colchester and Sudbury, there was not enough activity going on to warrant someone dealing with textiles to carry an occupational name. He may have woven cloth, but, as far as his property was concerned, he would have been primarily an agriculturalist. Such a statement can only be made because names of other manufacturing and trade occupations do occur earlier in BLC: smiths and cooks from *c.* 1153, potters from *c.* 1154–1180, bakers from *c.* 1155–1160 and brewers and merchants from *c.* 1160.[30]

c. 1150–1200

The first textile occupation to appear in the BLC/EFF record, *c.* 1175, is that of hatter or hood maker. He is followed in 1197 by a weaver and *c.* 1198 and *c.* 1200 by two tailors.[31] During the same quarter century, other professions making their initial entry are millers (*c.* 1180), skinners (*c.* 1185), tanners (*c.* 1186), carpenters (1199), turners (*c.* 1200) and vintners (*c.* 1200). Clearly, the second half of the twelfth century sees the growth of largely rural specialization in manufacturing. The chronological appearance of these trades may well mirror their relative importance to the manor and the village rather than the town. Disregarding food production, first come the smiths and potters, then, at the same time as the early textile occupations, come the leather and wood workers.

The occupations of all the early textile tradesmen, except the single weaver, deal with the making of garments (headwear and clothing), suggesting that in the last quarter of the twelfth century textile activity in the region revolved more around the production of finished clothing than around the manufacture and sale of cloth. These occupations would seem to have been responding more to local need than to trade oriented commercial ones. There is little evidence for the source of their materials, although this too was likely of local, village manufacture. If the goods produced were marketed beyond the village or manor, there were those

styled as merchants (both free and unfree)[32] as go betweens, but it would still be more than a quarter of a century before the occupational name 'draper' appears in the record.

c. 1201–1224

The next period, from *c.* 1201 to *c.* 1224, is striking for the almost complete absence of references to the textile occupations in property conveyances.[33] Whatever affected them seems also to have taken its toll on the skinners, tanners and potters, for they too are absent,[34] while the number of conveyances issued remains nearly constant compared to the previous quarter century (Fig. 1).

There is no obvious explanation for this disappearance of the textile and other trades from the charter sources, although it must lie in the economic realm. The period coincides with the reign of King John and the minority of Henry III and corresponds to a time when the weavers of York and the weavers and fullers of Winchester were unable, due to poverty, to pay their annual farms to the king. Miller attributes that problem to competition from indigenous rural manufacturers, a solution which, judging from the absence of textile occupational names in the property exchange record, may not apply to the Essex scene.[35] The difficulty would appear, rather, to have pertained to town and country alike and might have derived, at least in part, from circumstances surrounding what Harvey has described as 'one of the three great inflationary periods of recorded English history.'[36] He argues that the severe inflation of 1180–1220 was due to an enormous increase of exports, and particularly of wool.[37] If he is right, and if it were not possible to increase wool production quickly enough to meet both domestic and export demand, there may have been less wool available at a competitive price from which gildsmen might produce cloth, hence their poverty.[38] On the other hand, it has always been argued that the result of the Assize of Cloth, promulgated by Richard I in 1196/7, was to favour urban cloth making and to discourage commercial weaving and dyeing in rural and semi-rural areas.[39] If there had been any commercial textile production in Essex outside Colchester, it must have been so fragile that the Assize severely curtailed, if not extinguished, its progress. While these points do not explain what kept other trades out of the property exchange record, there is no doubt that the crafts continued to function locally, as entries in the Domesday of St. Paul's confirm. It is implausible that rural Essex could have done without textiles, leather or pottery, or that the entire countryside should have been supplied by the production of Colchester and by imports from the border counties or from the Continent. What the sources indicate is a major slowdown of certain aspects of commercial manufacturing activity in both town and country during the first quarter of the thirteenth century.

c. 1225–1254

Compared to the silence of the early part of the century, it is remarkable that, starting *c.* 1225, there is a virtual flood of textile tradesmen into the record. All of the textile occupations are mentioned between *c.* 1225 and *c.* 1240. Foremost among these are the drapers, dyers, fullers, tailors and weavers, whose distribution suggests that a commercial industry in textile production had begun outside, but dependent upon, the urban centres of Colchester and Sudbury. Other areas of manufacture and trade would develop elsewhere later on, but none of them to the same degree during the course of the century.

This second quarter of the century experienced a short-term economic boom which began suddenly, was consolidated and subsided gradually in the following quarter. It was unparalleled in its extent until the county profited from longer term growth in the fifteenth century and it was from these origins that the fifteenth-century industry would grow. This activity was confined neither to rural and urban Essex, nor to textiles, nor even to England. There seems to have been general economic growth developing without restriction on both sides of the Channel. It is visible in nearly every monastic archive of the time from the prodigious number of conveyances recorded, for this was the last great period for monastic acquisition of land.[40] In Essex, the end of the period, from 1247 to 1256, represented 'the most dynamic phase of [market] development' prior to the mid-fourteenth century.[41] It was also a time when members of the increasingly entrepreneurial professions had surplus capital to invest. In a society whose economy depended largely on agriculture, it is not surprising that they invested heavily in landed property and in rents.[42]

What may have stimulated cloth production was a 33% rise in the wool price index between 1227 and 1232, one which continued to rise on the average throughout the rest of the century.[43] This price increase, coupled with the constant demand for wool from abroad, encouraged wool production and caused bold investors, lay and ecclesiastic alike, to raise sheep, and many purchased Essex marshlands on which to graze them.[44] The occasion led to the foundation of wool fairs at Coggeshall and St. Osyth.[45] It may have been due in part to this fair that Coggeshall would itself become a cloth manufacturing town.

In view of the apparent absence of commercial woollen cloth production outside Colchester prior to *c.* 1225, it is quite possible that if there were any trade in textiles at all it would have been in linens. The first draper to be mentioned in the record is a linen (*lynge*) draper. In terms of the profession, he is a wealthy man too, conveying a third of a virgate of land in Writtle in 1228. No more is heard of him or his trade on the rural scene until the early fourteenth century and it may be that the increasing spread of semi-rural woollen cloth production superseded linen and curtailed its commercial use *c.* 1230.[46] Certainly, the professions which appear in quick succession from *c.* 1225 belong

Table 2.

Chronological Occurrence of Textile Workers in BLC and EFF

1175–1199	1200–1224	1225–1249	1250–1274	1275–1300	TOTAL
		BLC references			
2	2	24	14	6	48
4%	4%	50%	29%	13%	100%
		EFF references			
1	0	20	10	11	42
2%	0%	48%	24%	26%	100%

largely to the woollen industry.

Weavers and tailors both return to the charter sources *c.* 1224 to be joined by fullers, followed by the linen draper in 1228 and by hood/hat and coif makers *c.* 1229 and 1230. The real change is apparent *c.* 1230–1232, when dyers, drapers and burel merchants occur, although not in the same regions. The naperer, whose occupation at this period may have been synonymous with the fuller's,[47] appears *c.* 1235, as also the stitcher, while the chalon merchants and a quilter are recorded *c.* 1240.[48] Thus, in a period of no more than fifteen years, all the professions return to, or enter, the record. No other period of equal length is so rich in range or number of occupations. In fact, as Table 2 shows, 50% of the individual tradesmen in BLC and 48% of those in EFF occur in the second quarter of the century.[49]

The barometer of the woollen cloth industry at this stage of its development is the topographical evidence of dyers and fullers. They are claimed from *c.* 1230 to *c.* 1280 by a total of five parishes: Sudbury, Halstead and Colchester in the north, and Chelmsford and Romford situated on the main road between London and Colchester to the south. Significantly, the three northern towns represent what complementary evidence shows to have been the major woollen cloth producing areas of the county in the thirteenth century. Activity at Chelmsford and, from *c.* 1270, at Romford, can be explained by their locations on the London Road.

Equally important is the fact that the drapers per se (to the exclusion of the burel and chalon merchants and the tailors who also engaged in mercantile activity) do not make their appearance in northern Essex until mid-century, more than a generation after the fullers, dyers and weavers. Instead, all but two of the drapers occurring *c.* 1230–1250 are associated with Barking, West Ham and Hornchurch on the Thames and with Lambourne, several parishes to the north, on the River Roding (which enters the Thames at Barking). Locations on the Thames near London suggest an involvement in maritime trade and, in view of the scanty evidence for the production of trade textiles in southern Essex at the time, that involvement may either have been in the importing of cloth[50] or in channeling it from more northerly points via the roads (improved by recent bridge building[51]) and navigable rivers of Essex to London, whence some of these trade goods may have been exported.[52]

Despite the active economic growth apparently responsible for the origins of a commercial cloth industry in north-central Essex in the second quarter of the century, that activity was not of itself sufficient to attract drapers to the area. The circumstances promote a modified version of Ch. Verlinden's theory that artisans working together, particularly in textile manufacture, provided the point of departure for the development of towns, to which mercants were subsequently attracted.[53] It would seem from the distribution of cloth merchants in Essex that these men established themselves in commercially appropriate sites along the routes over which cloth was carried and in cloth markets, rather than in centres of cloth manufacture, unless they happened to be one and the same place.[54] Equally significant is the consideration that not all commercial cloth production attracted drapers. They appear not to have been interested in tailored cloth (i.e. cloth already made into garments or cut into short lengths for the purpose), the manufacture of which may well have predominated in northern Essex in the second quarter of the thirteenth century.

c. 1255–1279

Much less can be said about the period of consolidation which commenced in the 1250s than about the enormous outpouring of economic activity which began to manifest itself in the 1220s. There appears to have been so much room for expansion before 1250 that all of the textile tradesmen had the opportunity to improve their status; it is then that most occupations are represented in the active roles of conveying and receiving property, even if they are not found doing so later. Many continued to improve their lot after mid-century, as their entry into, or increased proportion of, active property holding roles indicates.[55] Other important changes, however, are perceptible. Drapers appear in and around certain market towns in north and central Essex. Although the numbers of documents in BLC decreases for this quarter century by 40%, the real numbers of dyers, fullers, weavers and drapers remain equal to the previous period or increase. The number of dyers increases in EFF also, but the fullers remain absent and the weavers disappear from that source entirely in 1259 (see following table).

If the drapers played an entrepreneurial role in semi-rural Essex in the thirteenth century, and it is almost certain that they did, it was during this period that they asserted themselves to the detriment of the weavers and the fullers. Despite the growing number of the latter

Table 3.
Percentage Comparison of Chronological Occurrence from BLC (B) and EFF (F) by Occupation

OCCUPATIONS		Before 1225		1225–1249		1250–1274		1275–1300	
		B	F	B	F	B	F	B	F
BURELLERS	B = 1			100%					
	F = 1				100%				
CHALONER	B = 1			100%					
	F = 2						50%		50%
DRAPERS	B = 5			40%		40%		20%	
	F = 9				67%		22%		11%
DYERS	B = 4			25%		50%		25%	
	F = 3				33%		67%		
FULLERS	B = 9			44%		44%		12%	
	F = 1								100%
HATTERS	B = 6	17%		50%		17%		17%	
	F = 0								
NAPPER	B = 1			100%					
	F = 0								
QUILTER	B = 0								
	F = 1				100%				
STITCHER	B = 1			100%					
	F = 0								
TAILORS	B = 16	13%		63%		13%		13%	
	F = 16				44%		13%		44%
WEAVERS	B = 6			20%		60%		20%	
	F = 8		13%		63%		25%		

professions in BLC, their decline in or absence from EFF, and their weak profile as property holders, show that they were at the bottom of the economic scale among members of the textile trades. The explanation, one may postulate, is that they were not in control of their product. It is the drapers, or one of the other potential entrepreneurs (burel and chalon merchants and some tailors), or a combination thereof, who were. The dyers do somewhat better, but from the nature of their property holdings one can suspect that their opportunities for investment of surplus capital were limited.

Another point indicative of significant change in this period of consolidation is that while the number of drapers increases in the north, the number of tailors falls sharply. This decrease of tailors suggests that while in the previous quarter century much of the commercial cloth production may have been cut locally, during the third quarter less cloth of the type produced before *c.* 1260 was being manufactured, leaving less work for the tailors. These are signs that the burel cloth industry was in decline.[56] Similarly, the appearance of drapers is strongly indicative of a growing trade in a more desirable, uncut cloth. That cloth could have been the product of the growing textile manufacturing industry of the Stour Valley region.

c. 1280–1300

Many writers have identified a decline in England's cloth manufacturing trade in the late thirteenth century.[57] Woodger assigns its inception to 1270 and argues that English looms for manufacturing broadcloth could not compete with the heavier, faster, broad, horizontal Flemish example. Stephenson attributes it to 'the crash in fleece weights in the 1280s.'[58] Other arguments include the harm caused to urban industry by rural competition, the growing importation of Flemish cloth and the industry's failure to expand with the economy. The occurrence and distribution of occupational names provide no explanation for such a decline, but, contrary to Bridbury's doubts,[59] they give a very clear indication that there was one. It seems, though, to have affected the established production of cheaper cloths in Colchester and Halstead more than what appear to have been chalons and other draperies which were simultaneously being introduced to Coggeshall and to the Stour Valley. The first and most definitive signal of major economic change is that, while two drapers are active at Helions Bumpstead in the Stour region to the end of the century, the occupation otherwise disappears from the sources consulted between 1277 and 1280.[60] They are followed by the weavers in 1283, the dyers in 1284, the fullers in 1286, and the chalon merchants in 1290.[61] Significantly, only the tailors see the century out (to 1296). The fact that they make their largest grants and receive among their most important acquisitions in the 1290s suggests that some tailors (those appearing in the EFF at least) continued to derive substantial profits from their trade or from their position at the close of the century.

The decline in the number and geographical occurrence of the drapers is not to be taken as a sign that

the textile trade as a whole was flagging, but rather that traditional production was diminishing markedly. The disappearance of dyers, fullers and weavers within a five-year period following the drapers, compared to the survival, if in diminished numbers, of tailors, confirms this hypothesis and points to an enormous growth in imported cloth. The artisans dwindle, the drapers leave or increase their inventory of products and revert to the less specialized trade of the general merchant, while some tailors carry on making clothes as before, but from imported or high quality goods.[62] They may also have begun to fill the mercantile roles temporarily left vacant by the drapers. The change was obviously not irreversible, as cloth production returned to grow steadily in the fourteenth and fifteenth centuries.

This chronology emphasizes the variable nature of textile production and trade in Essex in the late twelfth and thirteenth centuries. The county at that time cannot be said to have been a major producer of cloth. As a consequence, textile activity responded quickly and directly to economic change as a whole. While there had always been, and would continue to be, rural production of textiles by villagers for their own use or to meet the needs of the manor, an active economy at home and abroad in the second quarter of the century led to the origin and firm establishment of a semi-rural, urban-dependent industry, particularly in the north, which would serve as a foundation for the extensive production of the fifteenth century. The apparent reduction in the manufacture of burel and cloths of equivalent quality during the last decades of the thirteenth century represents a short-term decline in the competitiveness of the county's product and reflects a more general malaise in the industry as a whole. Judging from the sources consulted, that malaise was not the result of 'rural competition'. In the first place the commercial industry which began *c.* 1225 was semi-rural and not rural. Secondly, it was largely dependent on Colchester, Sudbury and the Stour Valley. And thirdly, when markets were shrinking, semi-rural production was far more adversely affected than seems to have been the case on the urban scene. Only such new semi-rural centres of the later thirteenth century as Maldon and Coggeshall, like the Suffolk towns on the northern side of the River Stour, were able to manufacture a competitive product.

Location

Thirteen towns or parishes are frequently referred to as centres of the Essex cloth industry in the fourteenth and fifteenth centuries. They are Bocking, Braintree, Coggeshall, Colchester, Dedham, Dunmow, Halstead, Castle Hedingham, Kelvedon, Maldon, Shalford, Thaxted, and Witham.[63] Eight of these lie in the adjacent northern Hundreds of Hinckford (with five) and Lexden (with three), while two each lie in Witham and Dunmow Hundreds and one in Dengie Hundred. Our sources indicate that commercial textile activity was carried out, if not established, in six of them already in the thirteenth century; that is, in Coggeshall, Colchester, Dedham, Dunmow, Halstead, and Maldon. What is important about this continuity is not so much its association with specific parishes as with the north. Commercial textile production in medieval Essex was largely a northern affair. This is not to disregard the evidence for textile manufacture and trade elsewhere. The approximately 170 textile workers in BLC, EFF and the Control group are mentioned in connection with parishes spread variously around the county.[64] Many of these representations, however, are by burel and chalon merchants, drapers and tailors, men who used and sold cloth, but did not make it. An initial, major distinction is to be made, therefore, between places where cloth was produced, marketed or cut. Only occasionally do all three functions occur in the same place. From the start, regionalism and specialization are apparent in the industry.

That such regionalism should occur is hardly surprising. In the foundation and development of manufacturing and trading centres, much depends upon the availability of power, machinery, materials, a labour force, capital, transportation by road and navigable rivers, bridges and markets. The type of activity performed was closely correlated to what the environment had to offer. That environment resulted as much from historical circumstances as it did from topographical ones. By plotting the appearances of all textile workers on a county map, recognizable patterns dictated by historical topography become apparent. The regionalism of textile manufacture, finishing and trade in late twelfth- and thirteenth-century Essex will be discussed below in terms of: 1) Colchester and the "North-East Quarter," 2) the Sudbury-Halstead corridor, 3) the Haverhill-Sudbury-Halstead triangle, 4) Chelmsford and the London road, and 5) the "Western horseshoe" (Fig. 2).

1. Colchester and the "North-East Quarter"

A remarkable feature of the distribution of textile occupations over the Essex landscape is that, in the five Hundreds of Lexden, Tendring, Thurstable, Winstree and Witham,[65] which represent the entire territory of northeastern Essex and approximately 25% of the whole county, the rural parishes, in contrast to the town of Colchester, are with few exceptions devoid of merchants and craftsmen until the 1280s.[66] Even then, the only parishes in the sample to be affected are Coggeshall, Hatfield Peverel and Witham, which lie on the western confines of the five-Hundred group. This situation appears neither to be coincidental nor the result of lacunae in the sources. Rather, it points to factors as yet not fully understood, including Colchester's commercial influence over the territory, which resulted in the absence both of textile production and trade outside the town and of investment by tradesmen and merchants in the five Hundreds mentioned. These factors seemingly

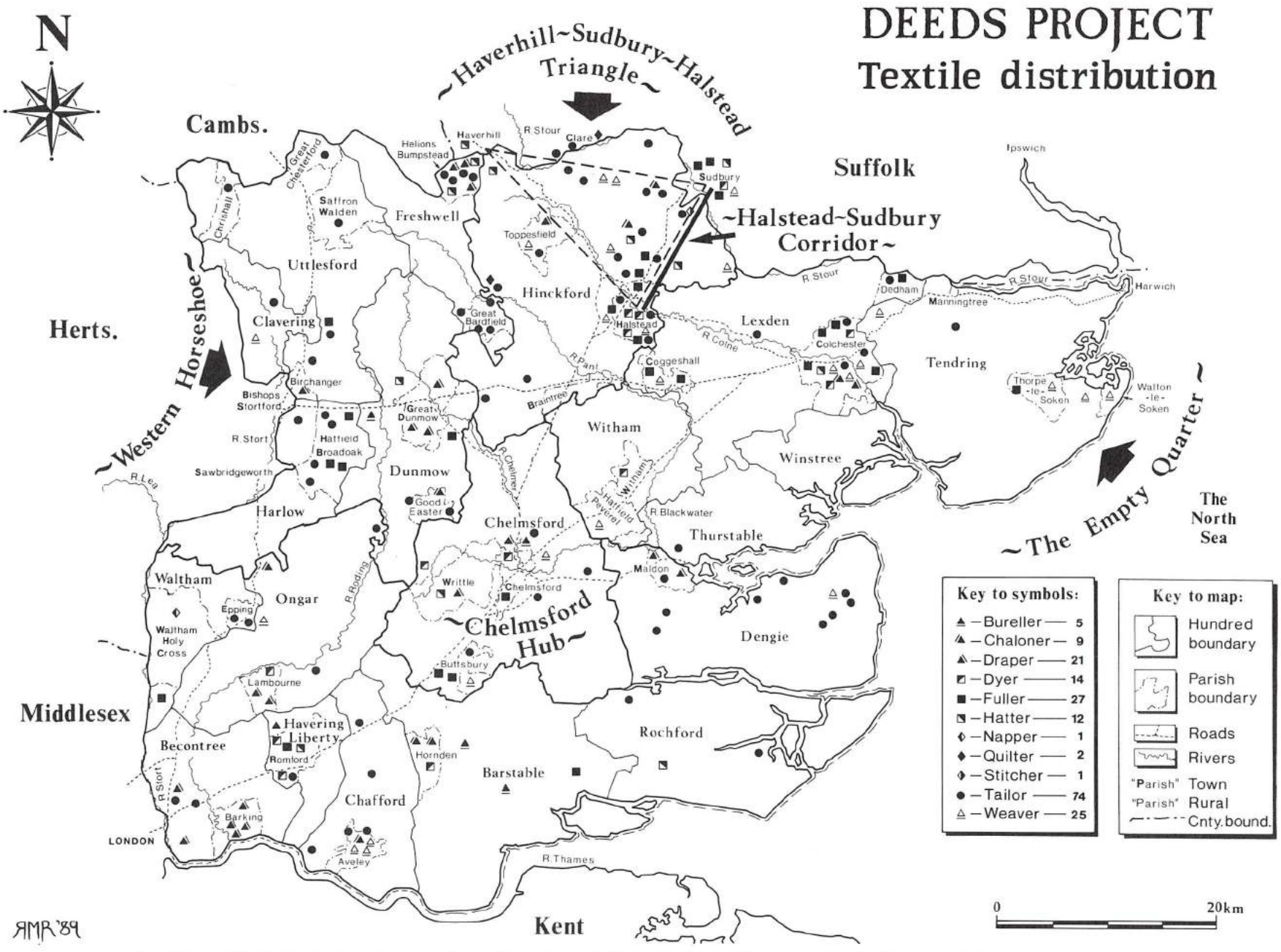

Fig. 2 Topographical distribution of textile occupational names in Essex *c.* 1180–1300 and regional divisions based thereon.

predate the sources studied. From a commercial viewpoint they may reflect efforts to encourage the investment of profits in the town itself, to control trade, and to facilitate the supervision of production for purposes of taxation.

None of the other Essex towns displays anything like this degree of commercial influence over its hinterland, both because as economic centres they were neither 'urban' nor old and established enough to do so and because, in comparison with Colchester, they had no hinterland to speak of. In fact, it seems quite clear that the industrial and market environment of much of the rest of the county grew up on the borders of, or in relation to, the "North-East Quarter," and as close as possible to the economic and administrative centre which Colchester represented. In other words, the economy of Chelmsford, Dengie (situated south of the Blackwater) and Hinckford Hundreds may be interpreted in terms of links with Colchester which were as strong if not stronger than those with London. It is in these three Hundreds, which represent the full length of the western and southern borders of the "North-East Quarter," that a very significant number of the textile occupations turn up. Tailors, for example, who appear in Colchester, but like the other trades are all but absent from the rest of the "North-East Quarter," occur in 25 parishes in the three Hundreds to the west and south of it. Noticeably few are located within range of London.

In this context the economic activity which developed outside the area of Colchester's influence does not appear to have resulted from an effort to escape 'the control of town industry by mercantile entrepreneurs,' nor from 'the incentive of mercantile entrepreneurs to organize and exploit country cloth-making.'[67] It may have been due, instead, to the desire of those who could get no closer than the western and southern frontiers of the "North-East Quarter" to participate in the advantages which Colchester offered as a mercantile centre, and perhaps also to investment by Colchester men in the land market outside that frontier (in view of the fact that they apparently did not invest inside the area except in the town of Colchester itself). If the entrepreneurs had sought to exploit the countryside, it is unlikely they would have gone so far afield unless possibly prevented by commercial considerations from doing otherwise. Colchester, we propose, would retain a strong commercial influence over the "North-East Quarter" as long as its economy could maintain it; and during that period economic activity beyond the frontier would depend far more on Colchester than Colchester would on it.

Other markets were established in the area by royal grant in the first half of the thirteenth century, at *Wlvesford* (Newland) in Witham in 1212,[68] at Harwich in 1222 and at Manningtree in 1238,[69] while a wool fair was granted at Coggeshall in 1250.[70] All of these places are on, or very close to, the outer confines of the "North-East Quarter," suggesting that when they were founded, it was with the understanding that they should lie as far as possible from Colchester. The foundation on its economic periphery of new markets notwithstanding, Colchester seems to have retained a strong influence over textile production in the area until the last decades of the thirteenth century. A fuller occurs in Coggeshall in 1286 and a dyer at Witham in 1294.[71] The dates correspond to the period of economic stagnation within some aspects of the industry, when Colchester may either have attempted to stimulate it by encouraging the production of more marketable cloth outside the township itself, or not have sought to oppose the development of a semi-rural industry when its own had little left to lose. Even so, the new manufacture represented especially by Coggeshall and Dedham was to be at arm's length, on the western and northern confines.

This example of urban economic influence over a vast hinterland is not unique. In fact, it is quite to be expected for major centres where 'the earliest laws regulating town life attempted to confine trade to the boroughs,'[72] so it could the more easily be controlled and taxed. Colchester is not known to have had a guild merchant. One may note in comparison, however, that in 1348 the jurisdiction of Lincoln's weavers' gild extended to a limit of twelve leagues,[73] and members of the gild could practice their trade both within the limits of the town and in the jurisdiction beyond.[74] At no point as the crow flies was Colchester more than eighteen miles from the outer edge of the 'North-East Quarter,' but, contrary to Lincoln's case, there is no indication that artisans carried on their trade outside the town.[75] Even Colchester's four dependent hamlets of Mile End, Greenstead, West Donyland and Lexden produced no sure evidence of textile workers in the Taxation of 1296, a situation which allowed Rickword to conclude that 'trade was confined to the town.'[76]

The circumstances which gave Colchester its economic dominance over the territory within the five Hundreds undoubtedly preceded the foundation of any other market or manufacturing centre in the county. It may be postulated that many of the latter grew up just outside the western and southwestern confines of the "North-East Quarter" precisely because that was the limit of Colchester's influence. Halstead, Braintree and Maldon lay in a semi-circle, directly on the boundary; Chelmsford and Writtle were only a few miles away. Halstead was particularly favoured because it lay halfway between Sudbury and Colchester; and Chelmsford/Writtle because they lay between those three sites and London. If Maldon and Witham, the oldest 'town' sites on either side of the boundary, derive their urban status from the early tenth century,[77] Colchester's claim must have been earlier still. It appears to have retained that claim until the thirteenth century, when economic change led to the acceptance of a series of new markets on the inner periphery and to the development or foundation of another series on the outside. Some of those sites were closely associated with the textile industry and may even have owed their

development to it.

2. The Sudbury-Halstead Corridor

We have argued that the commercial textile production of Essex in the thirteenth century was concentrated in Colchester and the north-central part of the county. North-central Essex is Hinckford Hundred. At that time, the only town in Hinckford Hundred was Halstead. The seven individuals representing textile occupations in the county before 1200 are associated with four parishes in Hinckford Hundred,[78] and with the adjacent parish of Great Bardfield in Freshwell Hundred. While none of these places would ever be distinguished as centres of production, together they suggest that whatever activity was taking place outside Colchester was going on in north-central Essex. Workers in our sources are found to be associated with fourteen contiguous, or nearly contiguous, parishes grouped on an axis between the Suffolk border to the north and Halstead to the south. This concentration will be referred to as the Sudbury-Halstead corridor.

Sudbury was an established Anglo-Saxon town in Suffolk and, like Colchester, long a centre of textile manufacture.[79] Unlike Colchester, however, it consciously or unconsciously stimulated industrial activity in the immediate vicinity, noticeably so on the opposite side of the River Stour in Essex.[80] As far as textile production was concerned, the complete absence of drapers in the corridor indicates that that activity was nevertheless dependent on markets elsewhere. Manufacture shows little evidence of extending into the "North-East Quarter," however, and it is this geographic limitation which already in the twelfth century seems to have encouraged the development of the new industrial centre in Halstead.

Halstead lay in a favourable position on the very fringe of the "North-East Quarter," on main roads leading east to Colchester and north-south between Haverhill, Sudbury and London, and on the River Colne which flowed through Colchester to the sea. This first-class situation on the main routes of transport and communication, coupled with the availability of water and the proximity of older industrial centres, made Halstead the obvious point of departure for the semi-rural, trade textile manufacture which would seem to have begun *c.* 1225. As a place of manufacture and trade, its origins could be earlier. Ordmer, who may be a potter, occurs there in 1154,[81] and Isabel daughter of Hubert the merchant *c.* 1180.[82] References to textile workers abound in Halstead from the beginning of the second quarter of the thirteenth century. The first is a weaver, to be followed *c.* 1230 by fullers, *c.* 1231 by a dyer, and from *c.* 1240 by tailors, whose job it would have been to turn the finished cloth into clothing.

There are many tailors in the corridor prior to *c.* 1260, engaged, we have argued, in cutting locally produced, cheap burel cloth. They turn up, in fact, in ten of the fourteen contiguous parishes providing textile occupations in the Hundred. There are, in addition, weavers in four, hatters and chalon merchants in two, and a stitcher and quilter in one each. Fullers and dyers only occur in Halstead and Sudbury, pointing strongly to the town-centred nature of those occuptions in the area. There are further topographical links between the two trades. In Sudbury, *c.* 1260–74, two fullers and a dyer hold separate tenements in the same field (Musardesfeld),[83] while *c.* 1231 the Hospitallers are quitclaimed rents and services from twelve tenements in Halstead, including those of a fuller, a dyer, a smith, a slater, a goldsmith, a tanner and a warden.[84] The fuller and dyer are mentioned together as though they may even have shared a tenement; a not unlikely possibility in view of their common need for water and for drying space. The evidence in both these examples implies that Sudbury and Halstead had designated industrial areas where their artisans would work.[85]

At first glance, the Sudbury-Halstead corridor would appear to have extended southward to Coggeshall, which parish produced a fuller and a weaver *c.* 1225. The origin of a commercial textile industry there may not, however, predate the last quarter of the thirteenth century, when Halstead's manufacture was already in decline. It is not by chance that Coggeshall would become a cloth town. Its situation within the "North-East Quarter," immediately juxtaposed to Halstead outside, suggests that when Colchester's influence over the area was compromised by the decline in the production of such cloths as burel and russet towards the end of the century, efforts may have been made to share in what by then was a mature, if fluctuating, industry in Hinckford Hundred by linking the two regions. Coggeshall, like Halstead, was well placed for the transport of goods, both via the River Blackwater to and from the sea and on the east-west route between Colchester and Bishops Stortford (Herts.). The wool fair, possibly established in Coggeshall under the influence of the Cistercians there, may also have been determined by the proximity of Halstead's weavers, dyers, fullers and tailors and by the fact that Halstead too was a market town.[86] The point to be emphasized though, is that Coggeshall's status as a market and manufacturing town was subject to the influence of Colchester and that it was not a spill-over from the Sudbury-Halstead corridor, of which only in subsequent centuries it would become an integral part.

3. The Haverhill-Sudbury-Halstead Triangle

A third region, the Haverhill-Sudbury-Halstead triangle, includes all of the area associated with the Sudbury-Halstead corridor, as well as of other parishes to the west in Hinckford Hundred and of Helions Bumpstead in Freshwell Hundred. The main ties for the region were the roads running between Halstead and Haverhill on the one hand and between Halstead and Sudbury on the other, and the River Stour. The river provided water power and served as a transportation route to the many parishes along the northern bank in Suffolk which became cloth centres between the twelfth

and the fifteenth centuries, especially Haverhill, Clare, Cavendish, Glemsford, Long Melford and Sudbury. Most textile manufacturing along the Stour Valley took place on the Suffolk side of the border, but at Haverhill and Sudbury especially, tradesmen lived, worked or invested in Essex.

The Stour industry promoted at least two kinds of specialized manufacture in the thirteenth century: hat (coif and hood) and chalon (blanket) making.[87] Seven of the eleven hatters in BLC and the Control group (they do not occur in EFF) turn up in the Haverhill-Sudbury-Halstead triangle, two in Helions Bumpstead, and one each in Steeple Bumpstead, Haverhill, Sudbury, Gestingthorpe and Pebmarsh. Ample evidence exists for the continuous manufacture of chalons in the region from *c.* 1235 into the fourteenth century.[88] From the subsequent development of so many textile manufacturing towns on the Suffolk side of the Stour, it seems likely that there, as in Essex, the industry originated in the thirteenth century and, in the case of Sudbury, well before.

A major distinction between the larger Suffolk sites of Haverhill and Sudbury, and Halstead in Essex, is that the former show greater evidence of entrepreneurial activity than the latter. Halstead provides references to more individuals in the textile trade than any other town or parish in the entire county except Colchester, but drapers are not included among them. Halstead's cloth, cut or unfinished, was very likely, therefore, sent out via the routes of the triangle to markets in Haverhill and Sudbury,[89] or to Colchester, or south via Chelmsford to London. A cloth market at Haverhill would explain the presence of three drapers in Helions Bumpstead in the second half of the thirteenth century, as would a chalon market at Sudbury explain the attraction of Geoffrey the chaloner to Bulmer. One might further suggest that since 22, or 38% of all the tailors listed for the county are associated with parishes in the triangle before 1260, some of the cloth which was woven there may have been made into clothing on the spot and sent to market as such, rather than as yardage. If this were the case, the cloth from which they were made must have been very mundane and, once tailored, would not have been of interest to the drapers; hence the absence of the latter from the Sudbury-Halstead corridor.

That Halstead produced low quality cloth which was tailored locally would explain much about the chronological disposition of the textile trade in the triangle. Halstead cloth never obtained the reputation of that known to have been produced in the following centuries along the River Stour. Eighty-three percent of the weavers, 80% of the fullers and 71% of the tailors who appear in Hinckford Hundred after 1222 do so before 1260. It is thus very possible that when the decline in the textile industry set in shortly thereafter, it affected primarily the production of low quality cloth, drastically reducing the output from Halstead. At the same time, what seems to have been the more marketable Stour Valley fabrics, such as chalons, remained in demand. It was also as industrial activity in Halstead declined that there were signs of it commencing or growing in Coggeshall and Maldon, whose cloth was exported through Ipswich by the end of the century.[90] The newly established production by Coggeshall and Maldon of more competitive draperies enabled them, like the manufacturing towns in the Stour Valley, to obtain a footing in the international market, while the older, traditional cloths of Halstead and Colchester were succumbing to the competition of imports from Flanders.

4. Chelmsford and the London Road

Those men bearing textile occupational names who turn up in the nine Hundreds comprising the southern half of Essex, from Chelmsford to the Thames, reflect a predominance in the finishing trades and in marketing rather than in actual production. The sources produce only seven weavers (three of whom occur in Aveley) and six fullers. There are, however, five dyers (all occurring from 1250 to 1284), nineteen tailors (nine of whom appear in parishes immediately south of the "North-East Quarter" in Chelmsford and Dengie Hundreds), a napper, nine drapers (75% of whom occur before 1250), four burel merchants and five chalon merchants.

The dates of all weavers and most burel merchants suggest that there was a limited production of the cheaper draperies until *c.* 1260. The rural occurrence of the chalon merchants points to chalon manufacture in the second half of the century. The relatively large number of drapers before 1250 in market towns and along major roads and water courses emphasizes their role as vendors of cloth or as purveyors thereof to London and the North Sea.

The central and obvious gathering point for goods coming from the north was Chelmsford, founded as a market town by the bishop of London in 1199.[91] He chose his site well, a hub in the centre of the county on the main road between London and Colchester, with other roads and bridges providing direct links to Halstead, Sudbury, Haverhill and Saffron Walden in the north, to another of his towns, Bishops Stortford (Herts.) to the west, and to Maldon in the east (also accessible by means of the River Chelmer which joins the Blackwater at Maldon). Chelmsford probably began to develop a role in the textile trade as the quantity of locally produced commercial cloth increased from *c.* 1225, when more of it was carried overland to London from the north. The occurrence of fullers and dyers in Chelmsford (one each) and in Havering/Romford (with a maximum of three fullers and two dyers)[92] suggests a degree of local textile manufacture in these places in the second half of the century. However, the very meagre showing of weavers supports the assumption that towns along the Colchester-London road were more important as finishing than as production centres.

5. The "Western Horseshoe"

The "Western Horseshoe" designates the region

lying north of Waltham and Ongar Hundreds, and west of Hinckford, Freshwell[93] and Chelmsford Hundreds. This area consists of the four Hundreds of Uttlesford, Clavering, Dunmow and Harlow and includes more places designated as medieval market towns than any other part of the county (at Saffron Walden, Newport, Thaxted, Berden, Great Dunmow, Hatfield Broad Oak, Pleshey and Harlow).[94] Signs of the textile trade are, however, prominent only in Great Dunmow and Hatfield Broad Oak. Significantly, both of these towns are situated on or near the major east-west route (Stainstreet) between Colchester and Bishop's Stortford, which also ran through Coggeshall and Braintree. Available dates provide no indication of textile activity in either place, as in the "Western Horseshoe" as a whole, before 1250. Dunmow's three drapers, and the exclusion of all other textile professions before 1302, points to trade rather than production. Hatfield Broad Oak supplies the record with four tailors (*c.* 1250–1280), three fullers (*c.* 1270-1280) and a single draper (*c.* 1270), but here as in points to the south, the emphasis may have been on processing rather than on manufacture.[95]

No dyers and only one weaver appear in the thirteenth-century sources consulted for the entire area. As a whole, the "Western Horseshoe" shows less evidence of the textile professions than any other part of the county except the coastal marshes. What there was would seem to have developed in the second half of the century along the routes over which goods would have been channelled out of the county: first westward by land and then south via the Rivers Roding and Stort to the Thames and London.

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A final consideration in this discussion of the geographical setting of textile occupational names is the possible role of the monasteries in encouraging manufacture and trade. On the route from Colchester to London, textile workers appear in the same places as monastic institutions at Cressing-Witham (Templars), Hatfield Peverel (Benedictines), Romford (Hospice of St. Nicholas and St. Bernard at Hornchurch) and Barking (Benedictine nuns); and from Colchester to Bishops Stortford, at Coggeshall (Cistercians), Dunmow (Augustinians) and Hatfield Broad Oak (Benedictines). Activity at Maldon may similarly have been supported by the Premonstratensian canons there. Most of these places correspond to the sites outside the Haverhill-Sudbury-Halstead triangle where concentrations of textile workers occur and where, we have suggested, trade and the finishing industries were promoted. Conclusions must remain guarded, however, as the names of the great majority of workers known to have been attached to these places are preserved in monastic sources. From lay sources, i.e. the EFF, the only corresponding locations are Barking, Coggeshall and Colchester.

Fabrics Produced

1. Woollens

The woollen cloths of Essex were not renowned for their quality. Historians have frequently referred to the burels and russets which became associated with Colchester in the first half of the thirteenth century.[96] Mention is also made of streits,[97] worsteds and whites.[98] With the exception of the worsteds, these cloths were generally fulled,[99] but are otherwise described as 'coarse,' of 'poor quality,' 'low-priced,' and 'medium-grade.' The quality of the product obviously derived from the quality of the wool, undoubtedly grown on the many sheep pastured on the Essex marshes.[100] This relatively short staple was appropriate for fulling,[101] which produced a warm, resistant cloth, quality notwithstanding.

Another type of cloth manufactured in Essex in the thirteenth century, but which has not been adequately addressed in the literature, is the chalon. Basing his conclusions on evidence provided by the Winchester Customs of *c.* 1275, Woodger has convincingly argued that two quite separate guilds of weavers worked in that town: the burel weavers or cloth-makers called 'telers' and the chalon-makers called 'tapeners.' He further points out that chalon looms were of two types, single and double; the former being used for making blankets and the latter for quilts 'which were of double fabric.'[101] Of considerable importance is his additional deduction that the burel or cloth-makers used the warp-weighted loom while chalon makers used the two-beam loom. This chalon loom was of simple construction, but had the advantage of being able to produce wider cloth than was possible with any other instrument. In its double form, two men seated beside one another could weave a fabric exceeding four yards in width. It was this technical ability which permitted the chalon makers to survive the depression which so adversely affected the tailor-cloth industry in the latter part of the thirteenth and early fourteenth centuries. The cloth makers suffered because their looms could not compete with the broad horizontal loom developed in Flanders in the thirteenth century, if not before.[103] This Flemish loom was not only faster than the warp-weighted single horizontal loom, but it also permitted a more even weave and hence a better cloth which, exported to England, could be sold for less than the domestic material.[104]

The types, occurrence and distribution of occupational names in our sources indicate that a similar distinction between groups of weavers and the products of their looms existed in Essex. The names include two 'telers' or burel weavers,[105] and what from their property holdings have been determined to be burel and chalon merchants. Those firmly associated with burels appear in the record from *c.* 1230 to 1259 and those with chalons from *c.* 1235 to 1290. There is insufficient information to tell to which part of the trade the other craftsmen designated as weavers belonged, or the fullers and the dyers, although the disappearance of all of these

occupations from the documents in the 1280s suggests that they may have been connected with the burel industry. Chalons, furthermore, were not usually dyed.

Far more indicative of the state of the burel industry, however, are the tailors. Burel is tailor's cloth, while chalons are not. We have already seen that between 1225 and 1260, 38% of all the tailors in the corpus appear in what has been designated the Haverhill-Sudbury-Halstead triangle.[106] This agglomeration points to active centres of tailor cloth production within the area and to the tailoring of that cloth on the spot prior to marketing. One may postulate from the complete absence of tailors among the occupational names of northern Essex between 1260 and 1283, and from their limited occurrence thereafter in the area to the end of the century, that the production of burel was severely interrupted after *c.* 1260. The situation clearly took its toll on the profession of tailoring.[107]

Evidence for a ready-made clothing industry in mid-thirteenth-century England is unprecedented, largely because scholars of textile production and trade have never considered the role played by the tailors. One can hardly imagine that a profession whose members outnumber all others in the trade and who are concentrated in the rural and semi-urban environment of north-central Essex would have received enough work from the local population to keep them all employed.[108] They can, we propose, only have been part of the textile industry which was also centred in that region. The supposition that they were turning burel into clothing for sale to individuals elsewhere is further promoted by the meagre occurrence of drapers in the triangle and their total absence from the central region referred to as the Sudbury-Halstead corridor.[109] Had cloth been produced for sale as such, rather than turned into clothing, one might have expected to find more drapers present. As a rule, where tailors occur, drapers are in short supply and vice versa.[110]

It may be argued that the precipitous decline of burel production *c.* 1260 was countered by a concurrent rise in the manufacture of chalons. There are no weavers described as tapeners, but there are six or seven chaloners, or chalon merchants, all flourishing in the second half of the century. One of them, Geoffrey, occurs opposite Sudbury in Bulmer at mid-century. Significantly, a Matilda the coster (i.e. stitcher) is active in Middleton, next to Sudbury, *c.* 1235.[111] Her profession belongs to the manufacture of quilted, or double, chalons.[112] A Richard the quilter (cuylter) appears in Norton (Finchingfield, Hinckford Hd.) in 1240 and the probably contemporary Robert the quilter at Clare (Suffolk) on the northern bank of the River Stour.[113] The association of Geoffrey and Matilda with the Sudbury area and of quilting with Finchingfield and with Clare in the thirteenth and early fourteenth centuries[114] suggests that the Stour Valley region produced chalons continuously from *c.* 1235 without the interruption experienced by the burel makers. Geoffrey's presence further points to Sudbury as a chalon market.

More compelling still is Woodger's identification of 'doubele werke that men clepeth tomannyshete' as the product of the double chalon loom,[115] for this is how the Domesday of Ipswich describes the cloths of Coggeshall, Colchester, Maldon and Sudbury which were shipped from its port *c.* 1300.[116] If the identification is correct, there can be little doubt that chalons had become a, if not the, major product of the cloth industry in Essex and the Stour Valley by the late thirteenth century. Similarly, the assumption could also be made that, whatever the status of the burel industry in Colchester, the chalon makers were busy weaving blanket cloth and double work for quilts, some of which would be sent to distant markets. Finally, it could be said that in Coggeshall and Maldon, where cloth making does not seem to have become a trade industry before the second half of the thirteenth century, the principal product was chalons. Chalon weaving may, in fact, have grown up there to the exclusion of burel weaving which, as we have argued in the case of Halstead, fell off sharply *c.* 1260. Blankets, which perhaps designated a specific product of the chalon loom,[117] were being produced in Maldon in 1395 and could represent a continuation of the thirteenth-century industry.[118]

Even if the identification of 'double werke' with the chalon loom were not correct, we are still able to ascertain from the occurrence of occupational names that Coggeshall and Maldon were relative newcomers in the second half of the thirteenth century to the commercial cloth industry; that they, together with Colchester and Sudbury, manufactured a product *c.* 1300 which was sufficiently in demand elsewhere to be shipped out of Ipswich when burel most likely was not; that chalons were being produced in the Stour Valley from *c.* 1235; that chaloners occur in the county well after burellers have largely disappeared from the record;[119] and that whatever cloth the four towns mentioned in the Ipswich Domesday wove for export from that port, it did not attract the tailors as burel did in Halstead. Generally speaking, the evidence available from the Essex charters would by itself support a thesis very similar to that proposed by Woodger.

2. Linen

Alternatives to wearing wool garments throughout much of England in the twelfth and thirteenth centuries must have included leather and skins and certainly linen. The uses to which leather and skins were put is beyond the scope of this study.[120] The production of linen, however, deserves particular attention as, prior to the twelfth and possibly even the thirteenth century, it may have been a more commonly manufactured fabric than has previously been recognized. The growing of flax and hemp in East Anglia was apparently so widespread and so much a part of village economy, that until the thirteenth century the linen made from it is seldom recognizable as a trade item.[121] Judging from what little information is available, it was considerably cheaper

than wool in the market place.[122] What is not easily determined is the relative accessibility of linen versus wool in the peasant economy and whether sufficient wool was available to the peasantry as a whole to permit them to wear woollen garments without having to purchase commercial wool or cloth.

Linen is produced from the fibres of flax and hemp. Flax is the finer of the two and better for cloth production than hemp, itself more suitable for the manufacture of rope and cord. Flax is also the more ancient, having been cultivated in England, according to H. Godwin, from the Neolithic period. Then, the seed was raised for food and as a source of oil, but with the first evidence of weaving in the Bronze Age the fibre was being used for cloth manufacture. Hemp is thought to have been introduced from the Continent by the Anglo-Saxons.[123] Pollen samples suggest that the growth of flax and hemp in East Anglia was highest between A.D. 800 and 1200, and archaeological and literary evidence confirms its widespread use before the Conquest.[124] The decreasing occurrence of pollen thereafter indicates a reduction in the cultivation of the plants, which may in turn reflect the gradual replacement of linen by increased quantities of woollen cloth.

A passage from the saga of the Norwegian King Sverri, has led one scholar to suggest that England was an exporter of flax and linen in the twelfth century.[125] In fact, the saga says no such thing[126] and, unlike the situation in Flanders, it is doubtful whether linen ever competed in this period as a trade item with wool.[127] Before England began producing woollen cloth in quantity for export in the twelfth century,[128] there can have been little textile trade to speak of other than in imported fabrics. By the fourteenth century, if not before, flax was actually being imported to Colchester from northern Europe.[129]

The Suffolk returns of the ecclesiastical tax of 1342 known as the *Inquisitiones Nonarum* show that flax and hemp were tithed in nearly 50% of the 274 parishes included in the record.[130] It has been calculated, furthermore, that the value attributed to what then must have been a very general crop represented about half the value of the entire tithe.[131] The widespread cultivation of these crops and the absence of acknowledged centres of linen production suggest that consumption was local and use domestic.[132] In view of the fact that by the mid-fourteenth century Suffolk was an established producer of woollen cloth, the entries in the *Inquisitiones Nonarum* further imply that the weaving of linen fabric and the wearing of linen garments must still have been very common.

The Essex entries in the same source are unfortunately too vague to permit identification of flax and hemp production. Place-names, however, suggest that these crops were not uncommon from an early period. A likely possibility is the parish of Hempstead (Freshwell Hd.). A less obvius, but probable, attribution is Impnells (*Hempenhille*) in Little Maplestead (formerly in Halstead, Hinckford Hd.) and perhaps Hempstalls's Farm in Wix (Tendring Hd.).[133] Because flax and hemp tended to be cultivated year after year in the same place, field names became associated with the crops and many of these still survive.[134] It has been suggested that such names date from the sixteenth century "when the cultivation of a certain amount of flax was made compulsory," but it is equally probable that the origins of some are far more ancient.[135] Careful research among charters, court rolls, manorial extents, tithing customs and early wills would certainly bring additional evidence to light.[136] In the Stoke by Clare cartulary, for example, appears an early to mid-thirteenth-century reference to a flax-ground (*linaria*) in the parish of Bures (Hinckford Hd.) situated on the Essex/Suffolk border.[137] Similarly, a "Linenmeadow" (Liningesmede) in Dedham (Lexden Hd.) is cited in the EFF in 1240;[138] and a "Flexmede" in Bergholt (Lexden Hd.) in the thirteenth century in the cartulary of St. John's, Colchester.[139]

No matter what the evidence for flax and hemp growing and linen production in the twelfth and thirteenth centuries, it will always be slight in comparison with what can be ascertained about the far more commercial manufacture of woollen cloth. Even archaeological remains are bound to provide researchers with a disproprotionate amount of wool and silk, not because these materials were more available at the time, but because animal fibres survive better in damp conditions than do vegetal ones.[140] The occurrence of occupational names is also slight because there was little specialization required in the preparation of linen prior to weaving, and no consistent distinction apparent between linen and wool weavers at this time.[141] The only occupation which stands out at all is that of linen draper. This profession is undocumented on the rural scene before the thirteenth century and, compared to the wool draper, is rare before the fourteenth.[142] The reason for such a lacuna in the sources can be attributed once again to the local production and consumption of the material.[143] This is not to say, however, that the volume of linen produced was not considerable. It may have represented a fair proportion of all textiles woven in rural areas, and have served as the principal clothing for those who did not possess sheep and for whom even the low quality woollen cloths woven in northern Essex were out of reach.[144]

The Fulling Mill

Evidence of fulling mills provides a meagre guide to the history of the woollen cloth industry in Essex in the thirteenth century. Of 31 mills know to have been operating in 28 different parishes prior to 1525, only those at Halstead (Hinckford Hd.) and Lawford (Tendring Hd.) are referred to in thirteenth-century records.[145] The Halstead mill occurs *c.* 1275,[146] and that at Lawford in 1287.[147] Others are known from the early fourteenth century, at Bocking (Hinckford Hd.) in 1303,

Coggeshall (Lexden Hd.) in 1305, Finchingfield (Hinckford Hd.) in 1300, Manningtree (Tendring Hd.) in 1309, and at Witham (Witham Hd.) in 1307 (yet no longer functioning by 1309[148]).[149] It is tempting to surmise that the mill transferred in 1290 by Robert the chaloner and his wife to William the miller (de Molyns) and Eleanor of Saint Pauls, London, in Good Easter (Dunmow Hd.) was used for fulling.[150]

The question of when mechanized fulling was introduced to Essex is complicated by the fact that the process may have been carried out in water mills before they were designated as, or specifically converted to, fulling mills.[151] Furthermore, the first reference to a mill's function might not occur in the sources until well after the structure had been built and work initiated. On the other hand, it can hardly be coincidental that references to fulling mills begin to occur in the last quarter of the thirteenth century and not before, and that such references appear more frequently thereafter. The possibility of an incomplete record notwithstanding, the introduction of mechanized fulling in the last quarter of the century would fit very well into the framework set out above.[152]

It is worthy of note that the earliest mention of a fulling mill in Essex yet to come to light is at Halstead and that, with the exception of a derelict one at Witham, all the rest occurring before 1315 are situated in Hinckford Hundred, the Stour Valley and Coggeshall. Halstead may have been the first of the formerly active burel-weaving centres which, under the pressure of cheap foreign imports, began to convert to what by then was becoming the more desirable production of chalons, and from foot to machine fulling. It may, in fact, have been the mill which enabled the Stour Valley producers and the newly founded late thirteenth-century industry at Coggeshall to survive the contemporary decline affecting the burel trade. The presence of mills in these places adds another dimension to our understanding of the "doubele warke that men clepeth tomannyshete" of Coggeshall, Maldon, Colchester and Sudbury. Bridbury claims that this kind of cloth "had to be fulled."[153]

That a distinction can be made at all between foot and machine fulling derives from what we have determined to be the low economic standing of those who appear in the sources bearing the occupational name fuller in the thirteenth century. The meaning of this designation clearly changes as the fullers join the ranks of the wealthy artisans and guilds in the fourteenth century, by which time it can only signify someone responsible for, or with a controlling interest in, the mill itself. Foot fullers do not become machine operators, except perhaps in the limited function of seeing the cloth through the fulling trough.[154] Rather, this labour intensive occupation disappears, to be replaced by a far more entrepreneurial one whose holder was able to amass sufficient wealth to gain financial interest in a mill.[155]

The one document which refers to both a fuller and to a fulling mill is, in fact, the first to mention a fulling mill in the county, at Halstead *c.* 1275. Nothing can be said about the economic status of the individual in question, Richard the fuller, because he appears in the inactive role of witness. The next fuller to occur in the north, at Coggeshall in 1286, is the last but one in the century from the corpus, yet the first of his profession to fill an active role, as recipient of a messuage by quitclaim.[156] Fullers turn up in the record as tenants of messuages and tenements from *c.* 1230, but their exclusion from the active roles of donor and recipient points to their tenancy of customary holdings. They may, in other words, have been underemployed agriculturalists who suppled a growing semi-rural textile manufacturing industry with unskilled, part-time labour.[157] The novelty of William the fuller acquiring new property in Coggeshall may point to an improved economic status based on a surplus of capital, acquired by some means other than being a simple labourer. These two examples, of Richard and William, could possibly represent the transitional stage from foot to machine fulling.[158] The evidence remains inconclusive, however, as we do not know whether foot and machine fulling co-existed in Halstead *c.* 1275, nor whether there was a mill at Coggeshall in 1287. It may also be that these late thirteenth-century fullers were still no more than employees of an entrepreneurial landlord who provided them with a tenement in exchange for their labour. Whatever the case, a major change in the form of increasing numbers of fulling mills was on the horizon in the last quarter of the century.

PART II

The Economic Standing of the Textile Professions

The use of conveyances for studying the textile trade depends almost entirely upon an individual tradesman's ability to hold specific types of property and, particularly, the relative frequency by which he was able to convey or receive it. The discussion of economic standing which follows is, therefore, based on an analysis of 1) the roles occupied by members of the textile professions as they appear in the available sources, 2) the types and quantities of properties they held, and 3) the rural or 'urban' (market/town) nature of the parishes in which they held them. Individuals documented as conveying or receiving property are assigned active roles; inactive ones are assigned to those occurring 1) as tenants of property transferred by a third party and of property adjacent thereto, 2) as agents acting for a third party, and 3) as witnesses to a transaction.

Prior to 1225 men bearing occupational names from the textile professions occur seven times in conveyances as witnesses and in four as tenants.[159] The witnesses include hatters and tailors while the tenants are tailors and weavers. The absence of the active roles of conveying and receiving among these early textile

workers suggests minimal ownership, and the lack both of surplus real estate available for conveyancing and of surplus goods in cash or in kind to be used for purchasing property. Their territorial association is rural rather than urban, thus one may suspect that they produced cloth and clothing for the local needs of vill or manor and that they witnessed conveyances in their capacity as unfree tenants.

Hatters join the ranks of tenants by *c.* 1225. At the same point, however, the tailors appear in the active roles. They are joined there by the drapers who now occur for the first time. The beginning of the second quarter of the thirteenth century thus reflects a distinct change: the merchant drapers and the tailors appear disposing of property. In the 1230s, burel merchants enter the scene transferring substantial amounts of property and a hatter a minimal amount, while the dryers, fullers, and a napper occur in what are unquestionably the lower ranks as tenants and witnesses. When the chaloners make their appearance in the 1240s they do so as conveyors, like the drapers and burellers before them. Concurrently, quilters occur as conveyors and recipients.[160] A weaver occurs as a recipient *c.* 1250; dyers first convey property in the 1260s, while a fuller becomes a recipient in the 1280s. A clear chronological progression is thus reflected for most occupations from inactive to active roles in the period stretching from the late twelfth to the end of the thirteenth century.[161] One may postulate that, on a relative scale, the date of entry into the active roles reflects access to an economic level which permitted property transfer.

Table 4.

Dates of First Appearance and of Entry into Active Roles

DATES OF FIRST APPEARANCE		DATES OF ENTRY INTO THE ACTIVE ROLES	
1150+	TAILORS	1225	TAILORS
1175	HATTERS	**1228**	**DRAPERS**
1197	WEAVERS	1230	BURELLERS
1228	**DRAPERS**	1230	HATTERS
1230	BURELLERS	1240	CHALONERS
1230	FULLERS	1240?	QUILTERS
1231	DYERS	1250	WEAVERS
1235	NAPPER	1260	DYERS
1235	STITCHER	1286	FULLERS
1240	CHALONERS		
1240	QUILTER		

The burellers, chaloners and drapers, who first appear in the second quarter of the century, are an exception in that they occur in active roles from the start. This is not to say that the roles of tenant and witness necessarily signify lower economic status, for those designated as textile merchants occupy them too. The point to be emphasized, rather, is that entry into the active roles is almost certainly a reflection of increasing economic means.[162] If this assumption is correct, one may chart the relative economic standing of members of the textile trade by comparing the ratios of active and inactive roles in a given profession with those in any other profession[163]

Assuming that the ability to convey or receive property is an indication of economic success, the above table shows the merchant professions (bureller, chaloner, and draper) at the top, and the merchants and tailors well in advance of the rest.[165] The degree of difference indicated under "Ratio Relative to Merchants" reflects the material selected for study. In real terms, we doubt that the gap between weavers and fullers could have been as great as the figures indicate.

These calculations represent differences between, not within, occupations. It is obvious that not all members of a profession, particularly those designated as textile merchants, held the same economic standing. A glance at the individuals performing active and inactive roles suggests internal distinctions. For example, none of the dyers and only two of the tailors acting as tenants and witnesses correspond to those acting as agents, conveyors or recipients. It would seem, therefore, that further differentation could be made between those of the same profession performing active versus passive roles, with the assumption that those in the former were rather entrepreneurs while those in the latter were simply craftsmen. Such distinction, however, is not easily ascertained. One cannot, for example, draw the further conclusion that those occurring in an urban context were better off than those in a rural one, for all of the dyers and half of the tailors in inactive roles only are associated with town parishes. Without having more information about individuals mentioned only in inactive roles, it is impossible to make a straightforward separation within the professions. Again taking the example of tailors and dyers, all that can be said at this stage is that some of the tailors must have been simple craftsmen and that some of the dyers may have been involved in the marketing of goods. This being the case,

Table 5.

Relative Activity Ratios of the Textile Professions

PROFESSION	TOTAL[164] INDIVIDUALS	ACTIVE ROLES	INACTIVE ROLES	MAXIMUM ACTIVITY RATIO	RATIO RELATIVE TO MERCHANTS
MERCHANTS	30	56	33	1.7	—
TAILORS	61	64	61	1.05	2
DYERS	12	6	17	.35	5
WEAVERS	29	6	25	.24	7
HATTERS	11	2	15	.13	13
FULLERS	27	1	34	.03	57

the merchant tailors would have a higher activity ratio, and the craftsmen dyers a lower one, than is indicated in Table 5 and implied by the column divisions of Tables 6 and 7 which follow.

A second approach to determining economic status and degrees of dependence among members of the different textile professions can be made through a survey of the property types which they held and by ascertaining whether those properties were situated in a rural or town environment. Of some 33 places in Essex identified as having urban status prior to the mid-fourteenth century, members of the textile professions are here represented in seventeen.[166] Three other towns, Clare, Haverhill and Sudbury, lie in Suffolk, on the northern border of Hinckford Hundred. In addition to these places, 73 rural parishes are mentioned. Of the nine occupations represented by more than two holdings, burellers and weavers are predominantly associated with rural parishes, dyers and fullers with towns, and chaloners, drapers, hatters and tailors with

Table 6.

Types and Rural/Town Locations of Properties held by the Textile Professions

Property Types	OCCUPATIONS									
	MERCHANT				INDUSTRIAL					
	BURELLER	CHALONER	DRAPER	TAILOR	DYER	FULLER	HATTER	WEAVER	TOTALS	PERCENT
	NUMBERS OF INDIVIDUALS									
	(4)	(7)	(19)	(61)	(12)	(27)	(11)	(29)	(170)	
GROUP 1: TOWN PROPERTIES										
Building			1T						1	.5
Hedge				1T					1	.5
Shop			1T						1	.5
GROUP 2: RURAL PROPERTIES										
Advowson	1			1					2	1.0
Grain	1								1	.5
Livestock & Poultry			4						3	1.4
Marsh				2					2	1.0
Meadow		2	2	7					11	5.3
Mill		1							1	.5
Pastur(ag)e		1		2					3	1.4
Way								1	1	.5
Woodland			1	6					7	3.4
GROUP 3: RURAL AND TOWN PROPERTIES										
Curtilage			1T	1/1T					3	1.4
Homage			1T/#T	#	#T	2#T	#	2#	1	.5
House				1/1T			1T	1	4	1.9
Land	1	6/2T	8/8T	37/9T	2/1T	4/1T	3	14/1T	97	47.0
Messuage		2/2T	2	12/2T	1/4T	1/6T	2	2/3T	39	18.8
Rent	1	1/1T	1/4T	3/#	2#*T	#T	#/#*T	#/#T	11	5.3
Service			1T/#T	1/#	#T	2#T	#	2#	2	1.0
Tenement			2/2T	2	2T	1/4T		1/2T	16	7.7
Works				1/1T					2	1.0
Total Types/Holdings	4/4	6/18	12/38	14/92	3/12	3/17	3/7	5/25	208	101.1
% Town Holdings	0	28	50	16	75	65	29	24		

Notes to entries and symbols in Table 6: Entries represent the total number of properties conveyed, received or held, not the number of conveyances from which the information is derived. 'T' = Town; '#' in the Homage, Rent, and Service rows indicates a due rather than a payment received; '*' in the Rent row indicates payment made for an unspecified property which is counted vertically, but not horizontally. The '/' separates rural from town holdings in group 3. Example: '#/#*T' under Hatter/Rent = one rural rent payment for a specified property and one rent payment for an unspecified town property. Livestock refers to horses and oxen.

both. Among the latter group, tailors especially have significant proportions of rural holdings. Location seems to have been dictated for some textile workers by the nature of their occupation, and for others by the nature of their investments.

Tables 6 and 7 distinguish twenty-one property types among the holdings of the textile professions.[167] These types can be divided into three groups according to whether they occur in the sources only in the context of 1) town or 2) rural parishes, or 3) of both. Group one includes buildings, shops and a hedge; group two includes advowsons, grain, livestock, marshes, meadows, mills, pastur(ag)e, ways and woodland; group three includes curtilages, homage, houses, land, messuages, rents, services, tenements and works.

With the exception of a rural way, held by a weaver, all other properties designated as specifically rural are held by burellers, chaloners, drapers and tailors. Similarly, the three types associated uniquely with town parishes are held only by drapers and a tailor. The remaining group of nine property types is tied to a wider range of professions in both rural and town contexts. Land, the most common type in this group, is simply described in the sources as *terra*, although arable is almost certainly implied.[168]

These distinctions are not meant as a definition of rural versus town property types, but while nearly all town parishes had agricultural lands, such properties as those listed as being solely rural never appear from the available data to have been held in town parishes by

Table 7.

Maximum Amounts of Properties Conveyed or Received and of Rents Paid

Property Types	OCCUPATIONS							
	MERCHANT				INDUSTRIAL			
	BURELLER	CHALONER	DRAPER	TAILOR	DYER	FULLER	HATTER	WEAVER
GROUP 1: TOWN PROPERTIES								
Building			1					
Hedge (perches)				27				
Shop			1					
GROUP 2: RURAL PROPERTIES								
Advowson	1			1				
Livestock & Poultry			4					
Marsh (acres)				40				
Meadow (acres)		1.62	6	16				
Mill		1						
Pastur(ag)e (acres)		1 pc		6				
Way								1
Woodland (acres)			1	5				
GROUP 3: RURAL AND TOWN PROPERTIES								
Curtilage			1	1				
Homage			1/#	#	#	#	#	#
House				1			1	1
Land (acres)	15	37	60	80	6	1	1 pc	4
Messuage		1	1	1	2	1	1	1
Rent (pence)	108	91	288	122	12#	?#	10#	30#
Service			1/#	#	#	#	#	#
Tenement			1	1	1	1		1
Works				6				

Notes to Table 7: '#' in the Homage, Rent and Service rows indicates a payment due rather than one received; 'pc' = 'piece,' indicating an unspecified measurement of land, probably of less than a quarter acre. Livestock refers to two horses and two oxen. It should be noted that the quantities of Land held by fullers and weavers are derived from conveyances and not from rentals, for the latter may have designated a different category of land holding.

members of the textile trade. One possible conclusion to be drawn from this situation is that the agricultural livelihood of some, if not many, of the manufacturing tradesmen in the textile industry was minimal, limited as it was to small quantities of properties contained in the 'rural and town' group and, as a consequence of their not having the means to acquire such essential agricultural lands as meadow, pasture and woodland, they were obliged to pursue a profession to earn the necessary income to survive.[169] A second tentative conclusion is that at least some of the town properties from group one and rural properties from group two were held as investments by the entrepreneurial professions, whose members alone had surplus capital available for such acquisitions.

The holdings of the manufacturing trades, that is the dyers, fullers, hatters and weavers, are generally limited to the properties pertaining to both town and country, except rents, which they pay rather than receive. Specifically, weavers hold a house, lands, messuages, tenements and a way. Fullers and dyers hold land, messuages and tenements, while hatters hold a house, land and messuages. All craft categories are shown doing homage and service. The similarities among these holdings are remarkable and, without further evidence, would permit little economic distinction between the four occupations. One must return to Table 5, contrasting the relative activity ratios of the textile professions, to find signs of economic discrepancy. There, dyers precede weavers in the active roles at the rate of 2 to 1, hatters at 3 to 1 and fullers at 12 to 1. These ratios are tenuous, but they suggest economic superiority on the part of dyers.[170]

The burellers, chaloners, drapers, and some tailors belong to an entirely different category. The tailors' portfolio includes fourteen of the twenty-one property types, the drapers hold twelve, the chaloners hold six and the burellers four. The one property common to all is rents. The ability of members of these professions to invest in rents appears to be the key in differentiating between those occupations which produced investment capital and those which did not. This consideration broadens the gap calculated in the activity table (Table 5) between tailors and dyers. Not only are dyers found dealing in 80% fewer property types than tailors, but rents are not among the three they do hold. There can be little doubt that those holding rents were the entrepreneurs who had surplus capital to invest. Their professions correspond exactly to those bearing the highest activity ratios. Another point common to this group is that its members alone hold from the properties designated as being purely rural, when it is doubtful that they were directly involved in agricultural exploitation. Furthermore, it may be noted that while drapers and tailors hold or convey property from all three groups, and burellers and chaloners from two ('rural' and 'rural and town'), members of the manufacturing trades hold only from the one, 'rural and town' group.

Further distinctions may be made concerning the entrepreneurial professions. If rents are common to them all, the drapers possess a considerably higher proportion not only of rents in town parishes, but also of properties there. More important still, only the drapers deal in such obviously commercial property as buildings and shops. All of the textile merchants show signs of having access to investment capital, but the drapers more than the others. Town rents and property values were high, yet the drapers regularly invested in them and, as a consequence, they enjoyed the additional economic advantage of possessing the more liquid assets represented by town holdings. The other members of the merchant professions did not invest as widely in town properties, probably because they could not so easily afford to; thus they opted instead to place their capital in cheaper, and what for them were more accessible, rural holdings.

Whereas the proportion of investment in town property may serve as a guide to relative economic standing among textile merchants, the more a member of the manufacturing trade is found confined to town or rural holdings from group three, the less well off he is likely to have been. The craftsmen were tenants paying cash rents. The properties they held, namely messuages, tenements and small plots of land, were not investments, but rather for their personal use. Seen in this light, the fullers are the most dependent on their trade in an urban context, while the hatters and weavers are similarly restricted in a rural one.

Given a sufficiently large sample, it should be possible to determine from the range of property types held to which of a number of economic levels an occupation belonged. Divisions among textile merchants are reflected in their capacity to hold properties in the following descending order: 1) urban commercial; 2) urban rents, 3) rural rents, and 4) rural holdings from group two. Differences among craftsmen hang from the rural or town location of their employment, and their ability to hold properties in the contrasting environment. Examples of craftsmen holding investment properties in Essex are rare, however, in the thirteenth century.[171]

Differences in property holding patterns serve as an exceedingly useful source of economic comparison among the textile professions. If one considers that the greater the variety of properties held in town and country, the higher the economic standing of the profession, then the drapers come at the top of the list followed by tailors (who hold more proeprty types, but fewer from the purely 'town' grouping), chaloners, and burellers. These are succeeded in turn by the manufacturing trades, holding in the 'rural and town' group alone, for whom varying economic status is more easily ascertained from 1) differences in quantities as opposed to types held, 2) rates of relative activity in the roles of conveying and receiving and 3) dates of entry into these roles. It is particularly significant that, among the textile craftsmen at least, the general economic distinctions calculated here are not unlike those

recognized by other scholars working from different sources.[172] While further comparative work is still needed to confirm the range of economic levels for the merchant and industrial professions given in Table 5, the results of this study show that an occupation can be identified from charter sources through the association of names with roles played and with types and quantities of properties held.

Occupational profiles

A. MERCHANTS

1. Drapers

The merchants are the barometers of trade. They appear in the sample from as early as *c.* 1160 in Sturmer, situated opposite the market town of Haverhill in Suffolk.[173] The absence of drapers before 1228 suggests that there was insufficient textile production or trade in Essex prior to that time to warrant a merchant's specialising in it and thus being considered a draper. Whatever textiles were traded, therefore, would have belonged to a broad repertory of goods dealt with by general merchants. By the beginning of the second quarter of the thirteenth century, the situation had clearly changed. Significantly, the period coincides precisely with other indications that textile production was for the first time becoming a viable commercial industry in the county.

From the start the draper appears as a man of means, transferring a third of a virgate of land. Four years later, in 1232, a draper in Barking receives rents totalling 24s (expressed in Table 7 as 288 pence), the largest cash transfer made by anyone in the textile trade appearing in the sample for the entire century. The first drapers to appear thus either brought their trade and their wealth from outside the county, or were already established merchants who become specialized as drapers. From the information at hand there is no indication that these drapers rose from the ranks of the manufacturing professions. If so, they would have had to have owned what they produced and controlled its sale. The manufacturing tradesmen, however, show little sign of upward mobility, apparently because they lacked the access to capital which drapers and other merchants derived from marketing.

Unlike the often rurally situated merchants who preceded them, the drapers are regularly found holding or transferring town land, specifically in Barking, Colchester, Great Dunmow, Hatfield Broad Oak, Maldon and Writtle. They are also actively associated with Birchanger, Helions Bumpstead, West Ham and Abridge in Lambourne. The first three of these rural parishes lie adjacent to towns, while Abridge was located at the site of a bridge across the River Roding.[174] Of 38 properties held by drapers, half were situated in town parishes and the other half in adjacent rural ones. The most commonly held property type in both rural and town parishes was land, presumably arable. No draper appears in a rural parish dealing with such undeniably rural property as meadow and woodland before 1250. This involvement only occurs once thereafter, however, suggesting that drapers had a far stronger preference for arable than for any other type of agricultural land. There is no evidence of drapers transferring rural property after 1260.

In the towns, drapers' holdings were largely synonymous with their trade, for here they are found conveying a building, a curtilage, a shop and a tenement. A far more common item of transfer in towns, however, was cash rents. There are four of these documented; typically, they derived from such holdings as tenements in the marketplace and suburban messuages.[175]

It has been noted above that, with the exception of two in Helions Bumpstead, drapers disappear from the record for nearly a generation from *c.* 1280.[176] A conveyance dated 1290 documents the transfer to Richard of Bergholt, *merchant*, of a tenement in Colchester.[177] Richard is referred to elsewhere *c.* 1275 as 'draper'. If the occupation of draper did dwindle after *c.* 1280 as the result of a slump in the English textile industry beginning in the 1270s, then the distinction in Richard's case between draper and merchant may reflect this change and may indicate a return to a more diversified business as trade in textiles decreased. In this manner, drapers would have left Essex in the thirteenth century as they came in, as general merchants. The kinds of cloth which they traded cannot be determined, unless they were those provided by burellers and chaloners, whose activity the drapers may have monitored.[178]

2. Chaloners

The largely rural property holdings of the chaloner indicate that his was a relatively prosperous occupation. Of fifteen properties transferred, chaloners grant twelve and receive three. They are shown to be tenants of three others. Chaloners appear from *c.* 1240 to 1290 in eight parishes, most being, or lying adjacent to, market towns.[179] Town dependence is not surprising as water seems to have been required in the manufacture of most chalons and the towns, as often the parishes themselves, were located on the Rivers Cam, Colne, Lee, Roding and Stour. Colchester, Halstead, London and Sudbury would certainly have provided foot fullers if not fulling mills. Fullers are not documented in the same neighbourhood as chaloners in Aveley, Bobbingworth, Horndon and Good Easter, although the transfer of a mill by a chaloner to a miller in Good Easter in 1290 allows some possibility that the mill was used for fulling.

The chaloners are found holding six property types: three each from the 'rural' and 'rural and town' groups. These include messuages, a mill, between 2 and 37 acres of land,[180] 1.6 acres of meadow, pasturage and 91 pence rent. The available sample of transfers, although small,

points to a visible increase in the size and range of holdings from the first appearance of the occupation to the end of the thirteenth century, that is from pasturage and a messuage *c.* 1240 to 30.5 acres of land (in two parts of 24.5 and 16 acres each), 91 pence and a mill in 1290. The evidence also indicates that from the start the chaloners invested in agricultural property. Sixty-one percent of all property types transferred is agricultural, including 44% arable land. Messuages and the mill account for 28% and the rent for only 11%.

One might conclude that in Essex trade in chalon cloth was introduced in the thirteenth century; that chaloners invested in rural parishes adjacent to industrial and market towns and that growing profits were placed in progressively larger amounts of rural property. In terms of the predominantly active roles in which they appear, the chaloners seem to be on an economic par with the drapers. It is the low percentage of rentals and of town properties held that nevertheless places them in a distinctly lower economic bracket.

3. Burellers

Only four burellers have been identified in the sample. Three occur between 1230 and 1250 in the parishes of Basildon, Broomfield, Burstead and Canfield, and the fourth, possibly as lates as *c.* 1280, in Havering. The profession is not visibly linked to the burel weavers, or telers, who are found to be tenants at Theydon Garnon (near Epping) in 1248 and Boreham (next to Broomfield) a decade leter. While the possibility of a Broomfield/Boreham link should not be disregarded, the topographical spread of burellers and telers in the central and southern parts of the county, far from the recognized textile manufacturing centres of Colchester and the Stour Valley region, emphasizes the dispersed nature of the Essex burel industry in the second quarter of the thirteenth century.

Burellers, like the drapers, convey substantial amounts of property from the moment of their initial appearance (15 acres of land and a rent of 108d). They too, therefore, can be seen as entering the profession from the ranks of a pre-established merchant class. Their capacity to invest in rents points to their status as entrepreneurs. Their propensity to hold rural property places them in a category similar to that of the chaloners and the tailors, while at the same time distinguishing them from the more urban nature of the drapers. Also like the tailors, although at a much earlier period, a bureller is once found dealing in advowson.

4. Tailors

This category includes those individuals bearing the names tailor (in its many forms), scissor and *parmentarius*, but does not include those designated as *sartrinarius* or *de sartrino*. The latter always appear in monastic contexts as the abbot's men and can be expected to have been fully employed within the monastery itself. There is some question as to whether a *parmentarius* was a tailor or a furrier. If the latter, it would be surprising for the profession to disappear from the record *c.* 1250, which it does. Unlike tailor/scissor, the term is not interchangeable, which implies a difference in services rendered. The economic profile of the *parmentarius* is not distinguished: out of eleven occurrences, eight appear as tenants (of a maximum of three acres of land), one as a witness and two as conveyors (of a maximum of 8.75 acres). They represent 6% of the tailors in the same and 28% of those in the Control group. Four of the nine from the Control group appear as tenants in the Domesday of St. Paul's.

Potential differences within the profession notwithstanding, tailors are the most frequently cited members of the textile trade: 61 of them are mentioned, from perhaps as early as the mid-twelfth century to the end of the thirteenth, in 56 parishes of which nine are towns.[181] The towns account for sixteen individuals. Occurrences outside Colchester in the "North-East Quarter" are few.[182] Their overall distribution in terms of numbers of individuals points to a concentration of tailoring in the Haverhill-Sudbury-Halstead triangle. It is there, we have argued, that a major centre of textile production grew up, seemingly in response to the as yet only partially understood economic status of Colchester and the "North-East Quarter." Due to the large number of tailors appearing in the rural parishes of the triangle prior to *c.* 1260, and their limited occurrence in Colchester, it has been suggested above that much of the cloth produced in the triangle was cut and sewn into clothing by them locally.[183]

Judging from the number of active roles they filled and from the range of property types and quantities they held, the tailors were of two types: 1) craftsmen occupied in transforming cloth into clothing and 2) entrepreneurs and merchants who reached an economic level comparable to that of the drapers.[184] The first category, we have suggested, lies in the fact that tailors occurring as tenants and witnesses are rarely the same as those found in the active roles. It is very likely that a distinction is also to be made between rural tailors and their town-based merchant counterparts. On the other hand, the profession as a whole enters the record in a largely rural context and of the sixteen names associated with town parishes, ten appear only as tenants and witnesses. Because they cannot satisfactorily be separated, the statistical evaluation of their economic status must for the moment remain somewhat less certain than for other groups. From the evidence at hand, it is easier to recognize who some of the merchant tailors must have been from the transactions in which they were involved than the craftsmen tailors in inactive roles.

The nature of their occupation provided tailors with ample opportunity to become involved in entrepreneurial activities. In the first place, it is possible that their largely rural distribution was dictated in part by the need to obtain cloth directly from the weavers, whose rural presence bears a somewhat similar percentage to their own (Table 6). The tailors may even

have employed weavers to produce the cloth they required, thus circumventing the need to purchase it as a finished product. If this were the case, some might then have carried it through the subsequent stages of processing and, after tailoring, have seen the finished product to the market place unchallenged by the other textile merchants, who dealt with yardage. It is, then, as merchant tailors that their access to profits lay.

Another characteristic of the tailor which singles him out from all other textile manufacturers and merchants is his role as agent.[185] Two tailors represent third parties in significant conveyances ranging from 80 acres of land and a rent of 320d in Colchester as early as 1235, to 60 acres of land and a rent of 240d in Middleton and Little Waltham in 1282. Their profession may have inspired, to a greater degree than any of the other textile tradesmen, a sense of trust. This reputation apparently encouraged conveyors of property to arrange for a tailor to act on their behalf or, possibly, to bear testimony to their conveyances. Some of the substantial conveyancing undertaken by tailors may, in fact, have been done as agents for unnamed parties, although there is no evidence of concealed representation upon which to base such an assumption.[186]

There can be little doubt that the tailors as a group were hardworking, capable of accruing reasonable profits, and bold investors. They first occur in the twelfth century as tenants and witnesses, but when one reappears among the conveyances c. 1225, it is to receive eight acres of land in Leyton. Two years later, the same tailor, Hugh, conveys 18.5 acres in that parish. In 1250, when a draper grants 60 acres in Lambourne, another tailor receives 80 acres in Stow. Tailors are the first in the trade to be found receiving arable land, meadow and woodland, and marsh. Altogether, they deal in fourteen of the twenty-one property types described in Tables 6 and 7: five rural ones, all those attributed to both town and country (except homage which they pay), but none of those commercial properties connected solely with towns. Notably, of the 92 properties they hold or transfer, only fifteen (16%) belong to town parishes. On three occasions, from 1254 to 1292, tailors convey rural rents ranging in value between 7d and 122d. Compared to the other merchant occupations, as well as the dyers, hatters and weavers, who held similar property types, tailors are responsible for 55% of the rural messuages mentioned, 50% of the advowsons, 49% of the rural arable, 64% of the meadow, 67% of the pasture, 100% of the marsh, 86% of the woodland, and 50% of all rural rents. In contrast, in town parishes, tailors hold no tenements, two (12%) messuages, and 39% of the lands conveyed. This evidence demonstrates that tailors, like burellers and chaloners and unlike drapers, invested by far the majority of their profits in rural properties. And investment or some form of money lending it must have been, for there is no indication that they were directly involved in agricultural exploitation. On the contrary, in cases in which the same tailors receive and then convey landed property, they seem regularly to have divested themselves of it within one to four years.[187] Of particular significance regarding property transfer and management is the example of Roger the tailor who, in 1276, received a messuage, 40 acres of land and 40 acres of marsh from Ralph Beneye in Steeple (Dengie Hd.). Roger must very shortly thereafter have conveyed the land and marsh to Hugh son of Otto, for, in the inquisition post mortem of the latter, taken in 1287, Roger is described as having been Hugh's landlord for those same parcels.[188]

The overwhelming majority of rural properties held by tailors and the complete absence of tenements in town parishes, points to a rural location of their industry. By far the majority of such places were town dependent, however, and much of the tailors' profits must have been made in the market towns, especially Chelmsford, Colchester, Halstead, Hatfield Broad Oak, Haverhill, Maldon and Sudbury.

In every area, with the passage of time, the tailor either appears moving into a growing portfolio of rural property types or significantly raising the quantities of property held or transferred during the course of the thirteenth century.[189] In terms of mean values, the size of arable transferred increased erratically from ten acres in the 1220s to 28 acres in the 1290s; meadow from 2 acres in the 1240s to 8 acres in the 1290s; and woodland from 2 to 4 acres between the 1240s and the 1290s. Rents increased tenfold from the 12d granted in 1254 to the 122d granted in 1292. Marshland is acquired once, in the 1270s, and pasture transferred on several occasions in the 1290s.

Some of the tailors competed with drapers in terms of the value of their assets. One such prosperous tailor, German, was active in Chelmsford and Dengie Hundreds in the mid-thirteenth century. He had been in the king's service, in recognition of which Henry III granted him in marriage Matilda, sister of the wife of Peter Pictaviensis.[190] Between 1248 and 1259 he appears as the recipient of 125 acres of land, 2 acres of meadow, 2 messuages and a tenement in Danbury, Dengie, Stow and Tillingham. Another tailor, Ambrose, acquired between 1248 and 1255 14 acres of land, 2 acres of meadow and 2 acres of woodland in Belchamp (Hinckford Hd.), and conveyed 57 acres of land, 5 acres of meadow, 6 acres of woodland, and a 12d rent in Belchamp and Saffron Walden (Uttlesford Hd.). The case of Roger the tailor in Steeple between 1276 and 1287 has already been described. In 1292, Richard of St. Albans granted a messuage, 33 acres of land, a piece of meadow, 2.7 acres each of pasture and woodland, and a rent of 122d in Foxearth (Hinckford Hd.).

The tailors represent the only occupational group to demonstrate continuity during the full course of the period under discussion. Their rate of conveyancing grows significantly from *c.* 1225 through the 1250s. This pattern is then reversed, marked by a steady decline from the 1260s through the 1280s. But in the final decade of the century their activity level rises again to that seen in the 1250s. This rallying occurs despite, and perhaps

even because of, the drop in their numbers following the decline from *c.* 1260 in the tailor-cloth industry. With fewer drapers and burellers on the scene, what textile trade remained could have provided a comfortable living for a tenacious group of merchant tailors who secured their fortunes by investing in the rural property market.

B. CRAFTSMEN

1. Dyers

In comparison with the merchant professions, quantities held or transferred by dyers are small. The occupation enters the record in a Halstead conveyance of *c.* 1231, followed by another at Colchester in 1235. On both occasions the dyers appear holding, or owing rent for, tenements.[191] A dyer is mentioned as neighbour to a Sudbury tenement *c.* 1267. They enter the conveyor/recipient roles in 1260 and 1272 respectively, in Lambourne and Chelmsford. Lambourne and also Roxwell (Chelmsford Hd.) are the only rural parishes associated with dyers;[192] after 1260, their occurrences are confined to the towns of Chelmsford, Halstead, Romford, Sudbury and Witham. The available data thus places the dyer largely in a town environment (with 75% town holdings), hardly surprising in view of the requirements of his trade and of such legislation as Richard I's Assize of Cloth which sought to restrict commercial dying to the towns.[193] He needed access to dyes and mordants in the marketplace, running water, a large covered space for drying the thread and cloth he dyed, and he had to be available to others engaged in textile production.[194]

It would not seem from the limited range of properties transferred to or by them (tenements, messuages and a maximum of 6 acres of land), that dyers engaged in merchant activity, not even the buying and selling of the yarn and cloth they dyed, as may have been the case elsewhere.[195] Rather, the likelihood is that goods for dyeing were brought to them and a fee paid for services rendered. The property types and quantites they held are not indicative of an occupation which produced sufficient income for more than modest investment. Moreover their property, especially the tenements and messuages, was very likely restricted to personal and professional use. Dyers do not enter the ranks of those who could afford to deal in rents, and their economic status shows no sign of real change even when they participate in the active roles from *c.* 1260. To their credit in the economic sphere, all but one of their occurrences in the active roles appear among the EFF, reserved for the recording of what the parties concerned considered to be significant transfers.[196]

In the final analysis, the generally low economic standing of the dyers may have resulted from the fact that, to the end of the thirteenth century at least, dyeing did not play a significant role in the production of cloth in Essex.[197] It has been argued that dyers elsewhere became wealthy entrepreneurs and members of the urban ruling class during this period.[198] Town dwellers the thirteenth-century Essex dyers must have been, but burghers of substance they most certainly were not.

2. Weavers

Twenty-nine probable weavers appear in the record under the names *telarius*, *teler*, *textor*, *tolle*, and *webbe(r)*.[199] They are second only to tailors among early members of the textile professions found holding property: in 1197, Siger the weaver is mentioned as tenant of an acre of land in Bures (Hinckford Hd.), which makes him also the earliest textile worker in the corpus to appear on the outer edge of the "North-East Quarter." Weavers are then absent from the corpus until *c.* 1222, when they are recorded in considerable numbers as tenants in the Domesday of St. Paul's. They continue largely in that role until their last appearance in 1283. Seven of them are associated with three towns (Colchester, Halstead and Sudbury) and the remaining 22 with 21 rural parishes. A third of all those located in rural parishes outside the "North-East Quarter" appear in Hinckford Hd. Their first town occurrence is in Sudbury in 1236. They occur only twice in active roles, *c.* 1250–60 in Clavering and in Colchester in 1272.

Weavers are found owing rents, homage, and service, and holding or conveying messuages, a house, tenements, arable land (including an assart), and a rural way. All but the last belong to the 'rural and town' group of property, which invariably identifies the manufacturing trades. Like the hatters, there is some indication of annual rents paid for rural versus urban properties: in 1254 John *webber* owed 30d for a tenement in Halstead, while in 1273 Alexander *tolle* owed 7d for an acre of land in Toppesfield. The rural one-acre plot seems not to have been an uncommon holding, although amounts of up to 15 acres are recorded in the Domesday of St. Paul's. The most a weaver receives by charter is four acres,[200] and the most he is seen divesting himself of is an urban messuage, at Colchester, sometime before 1272.[201] Judging from this example and from the Halstead rental, those situated in town parishes were better off then their rural counterparts, and than the urban based fullers. The sources give no indication that the weavers had the financial resources to invest in agricultural land, although it is certain from the Domesday of St. Paul's that many rural weavers were also agriculturalists.

Unless a great deal of cloth was being imported into Essex in the thirteenth century, there must have been many more weavers than the sources show in order to supply the considerably larger number of tailors with the cloth they needed. The most likely explanation for this paucity of weavers in the documents in proportion to tailors, especially in the active roles, is that they had not the financial resources to engage in property transfer; thus they appear by chance primarily as tenants and witnesses. It is in documents recording tenancy, such as the Domesday of St. Paul's, rather than in conveyances, that evidence is to be found for the widespread occurrence of rural weavers. It may be expected that

most parishes had at least one at any given time and that they served above all to meet the requirements of the local population. Only in Colchester and the Haverhill-Sudbury-Halstead Triangle do they appear in sufficient numbers to suggest that they were weaving for more distant markets.

The weavers give the distinct impression, from the type and size of their holdings in both town and country, of being employees.[202] During the course of the period under consideration, they remain modest tenants, giving little sign of achieving the capital growth necessary for property investment.

3. Hatters

The hatters include those described in the sources as *capellarius*, *caperun*, *coifer*, *hatter*, *hudeler*, and *kuffus*. The *coifer* and *kuffus* might represent manufacturers of a different sort of head apparel from that produced by the *caperun*, but the date and location of their appearance as well as what can be deduced about their holdings indicate similarities in economic standing.

These trades are not mentioned in the EFF and it is unlikely that their members ever reached the economic level of those from the other textile professions who are found filling active roles therein. Hatters are among the first textile workers to appear, documented at Pebmarsh (Hinckford Hd.) *c.* 1175, and continue until *c.* 1292 when they are associated with Havering and Writtle. Most occur in north-central Essex, particularly in the Haverhill-Sudbury-Halstead Triangle. This latter group provides evidence of property holding, but property types are nearly all rural and restricted to messuages, pieces of land and a house.[203] A cottage industry is implied, although the town was certainly attractive to the profession. A charter of *c.* 1230 from Helions Bumpstead is witnessed by the *kuffus*, Walter of Clare, who came from, and may still have been a resident of, the town of that name situated some eight miles downriver. Still further downriver at Sudbury, Bartholomew *capellarius* witnessed the transfer of a messuage *c.* 1267. The concentration (64%) of hatters in the north may be coincidental, but it also may point to a regional industry.

Whether town or country based, the trade shows no signs of economic improvement over time. It depicts rather a subsistence economy based on meagre profits. In view of their property profile, it is highly probable that hatters did not market their own goods, but were paid for piecework by merchants. The size of their holdings, the maximum rental paid, the fact that they do homage and service, and their low percentage of active roles, places them below the dyers and weavers in economic terms, but still above the fullers.

4. Fullers

If drapers are a measure of the textile trade as a whole, fullers do the same for the manufacture of woollen cloth. Their importance to commercial industry, however, is in inverse proportion to their economic position. They fill one active and 35 inactive roles. They occur as tenants of messuages and tenements either in Colchester, Dedham, Halstead, Sudbury or Thundersley from *c.* 1230 to 1267, and of land in four rural and one urban site between 1222 and 1277; on ten out of thirteen occasions they appear as witnesses to charters concerning towns. One is the recipient of a messuage in Coggeshall in 1286. Only in this penultimate role for the century does a fuller reach the level of the EFF. Their entire repertory of holdings registered in conveyances thus consisted of tenements and messuages, situated with the exception of Dedham and Thundersley in town parishes, and of up to one acre of land in rural ones.[204]

During the course of the thirteenth century, fullers appear in 74% of their occurrences in urban contexts, and this by dint of the fact that the textile finishing industry to which most of them must have been attached, was town centred. In 47% of their occurrences, they are associated in the same document with dyers, hatters, tailors and weavers, all of whom have been shown to have held higher economic status.[205] It may well be that fullers were the employees of these other professions and, because they never occur with drapers, that what they mainly were producing was tailor cloth.

Despite their occasional appearance on the rural scene, fullers appear generally to have been impecunious, landless urban tenants standing at the bottom of the textile industry's ladder.[206] Their low economic position strongly suggests that the occupation involved the unskilled activity of foot-fulling.[207] We have seen that there was a functioning fulling mill in Halstead *c.* 1275, and a derelict one in Witham *c.* 1309. If the mills replaced foot-fulling, or if the two techniques were carried on simultaneously even in the same place, some economic differentiation might be expected among fullers during the course of the century, but there is no sign of any. They do not appear to have played any part in the ownership or operation of the mills, and probably derived no economic advantage from them. In fact, the mills would, if anything, have put large numbers of foot fullers out of a job.

The reference in 1309 to the derelict fulling mill at Witham could be another sign of a slump in the manufacture of woollen textiles in the late thirteenth century. The evidence is not conclusive, though, as nearly the last fuller to be mentioned appears as the recipient of a messuage in Coggeshall. By the mid-fourteenth century, this town had become an important centre of cloth production involving weavers, dyers and fullers.[208] The presence recorded in EFF of a fuller there in 1286 may reflect the early stages of the industry and, perhaps, of the new class of mill fullers who were to become so prosperous in the fourteenth century.[209]

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APPENDIX 1

TEXTILE PROFESSIONS FROM BLC, EFF AND IPM GROUPED BY OCCUPATION AND ROLE LISTED BY PROPERTY AND YEAR

NOTES on Headings and Columns:

Occupation=Role: The "Napper", "Quilter" and "Stitcher" are excluded from all but the counts of individuals because they only occur once and cannot be included with any other group. Those listed under "Occupation=Patronymic" are similarly excluded. Numerals to the right of the "Occupation=Role" entries indicate for each group first the no. of different individuals, second the no. of references per person totalled, and third the no of roles. Actions listed under the role "Conveyor" include conveyances by quitclaim.

Year: Dates cited from the EFF are precise; those from the BLC are frequently approximate, calculated as accurately as possible to within five years of actual date.

Property: An entry of 'homage,' 'service,' or 'rent' under the occupational role heading "Tenant" indicates obligations owed by the individual named. If the value of a rental is known for a particular piece of property, both the rent and the property will be listed under a role "Tenant" heading, but will be counted as one property. Properties are not listed for witnesses. They are given for "Tailor=Agent" to indicate the scale and value of transactions entrusted to tailors. Otherwise, properties under the "Tailor=Agent" field are not included in counts or statistical calculations. Also excluded from counts are properties listed under role "Patronymic."

Quantity: Pounds, marks, shillings, halfpennies and farthings are represented as pence or hundredths thereof. Properties spread over several parishes are divided equally among those parishes unless otherwise specified. Amounts of less than one acre of land are rendered as hundredths of an acre.

Property Location: Italics indicate a market town (note especially the predominance of town locations for drapers, dyers and fullers). Witnesses to documents concerned with more than one parish are assigned to the parish with which they are most frequently associated elsewhere.

Last Name: Renditions of the occupational name are as they appear in the ms. of BLC and the printed calendars of the EFF and the IPM. Additional place-name attributions are given modern English forms.

Source: EFF = *Feet of Fines for Essex*, ed. R. E. C. Kirk, vols. 1–2, Colchester, 1899–1928; citations are to vol. no., page and entry no. BLC = British Library Cotton ms Nero E VI; folio citations are to the unpublished *prima camera* (fols. 1–288), while for fols. 289–467 they are to page and entry no. in M. Gervers, ed., *The Cartulary of the Knights of St. John of Jerusalem in England, Secunda Camera, Essex*, British Academy, 1982. IPM = *Calendar of Inquisitions Post Mortem*, vol. 2 (Edward I, years 1–19), ed. H. C. Maxwell Lyte, London, 1906; citations are to vol., page and entry no.

Counts: This list contains 83 (+7) individuals from 124 conveyances in 199 occurrences, filling 179 (+7) roles concerning 146 (+3) properties (nos. in brackets indicate the napper, quilter and stitcher, and patronymics). Properties are not included if their transfer was merely witnessed by a member of the textile professions.

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*			
				Burellers=Conveyor (1/2/3)						
1238	Advowson			Little Burstead	Geoffrey	Burrel	EFF	I	119	580
1230	Land	15	Acres	Little Burstead	Geoffrey	Burrel	EFF	I	86	278
1230	Rent	108	Pence	Little Burstead	Geoffrey	Burrel	EFF	I	86	278
				Burellers=Witness (1/1/1)						
1235				Broomfield	Stephen	Burrel	BLC		316	557
				Chaloners=Conveyor (3/4/11)						
1259	Land	18.50	Acres	Bobbingworth	Thomas	Chaloner	EFF	I	231	1370
1259	Land	18.50	Acres	Leyton	Thomas	Chaloner	EFF	I	231	1370
1290	Land	16	Acres	Good Easter	Robert	Challener	EFF	II	67	460
1290	Land	24.50	Acres	Good Easter	Robert	Challener	EFF	II	68	465
1259	Meadow	0.81	Acre	Bobbingworth	Thomas	Chaloner	EFF	I	231	1370
1259	Meadow	0.81	Acre	Leyton	Thomas	Chaloner	EFF	I	231	1370
1240	Messuage	0.12	Acre	Bulmer	Geoffrey	Chaluner	BLC		334	588
1290	Messuage	1		Good Easter	Robert	Challener	EFF	II	68	465
1290	Mill	1		Good Easter	Robert	Challener	EFF	II	68	465
1240	Pasturage			Bulmer	Geoffrey	Chaluner	BLC		334	588
1290	Rent	91	Pence	Good Easter	Robert	Challener	EFF	II	67	460
				Chaloners=Recipient (1/1/1)						
1259	Land	2	Acres	Gestingthorpe	Geoffrey	Chaloner of Bulmer	BLC		315	556
				Draper=Conveyor (5/5/10)						
1228	Land	0.33	Virgate	*Writtle*	Gervaise	Lyngedraper	EFF	I	79	216
1240	Land	0.50	Acre	West Ham	Simon	Draper	EFF	I	131	679
1240	Land	2.50	Acres	West Ham	Simon	Draper	EFF	I	131	679
1250	Land	60	Acres	Lambourne	Andrew	Draper	EFF	I	183	1050
1250	Meadow	6	Acres	Lambourne	Andrew	Draper	EFF	I	183	1050
1250	Messuage	1		Lambourne	Andrew	Draper	EFF	I	183	1050
1260	Poultry	2	Capons	Helions Bumpstead	Alan	Draper	BLC		282	496
1248	Rent	120	Pence	*Barking*	Reginald	Draper	EFF	I	168	941
1260	Rent	6.50	Pence	Helions Bumpstead	Alan	Draper	BLC		282	496
1250	Woodland	1	Acre	Lambourne	Andrew	Draper	EFF	I	183	1050

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*			
				Draper=Patronymic (1/1/1)						
1262				*Maldon*	Walter	Draper	EFF	I	249	1484
				Draper=Recipient (7/8/13)						
1275	Building	1		*Colchester*	Richard	Draperius of Colc.	BLC		154	248
1275	Curtilage	1		*Colchester*	Richard	Draperius of Colc.	BLC		154	248
1235	Land	3	Acres	Lambourne	Andrew	Draper	EFF	I	103	402
1248	Land	15	Acres	*Barking*	Nicholas	Draper	EFF	I	166	918
1248	Land	2	Acres	*Barking*	Nicholas	Draper	EFF	I	166	918
1260	Land	40	Acres	Birchanger	Geoffrey	Draper of Newmarket	EFF	I	236	1397
1278	Land	3.50	Acres	*Maldon*	Philip	Draper	EFF	II	17	84
1260	Messuage	1		Birchanger	Geoffrey	Draper of Newmarket	EFF	I	236	1397
1232	Rent	288	Pence	*Barking*	Reginald	Draper	EFF	I	93	317
1248	Rent	120	Pence	*Barking*	John	Draper	EFF	I	168	941
1275	Rent			*Colchester*	Richard	Draperius of Colc.	BLC		154	248
1235	Shop	1		*Barking*	Reginald	Draper	EFF	I	99	366
1275	Tenement	1		*Colchester*	Richard	Draperius of Colc.	BLC		154	248
				Draper=Tenant (3/3/3)						
1232	Land	7	Acres	*Barking*	Reginald	Draper	EFF	I	93	317
1240	Land			Great Dunmow	Gilbert	Drapier	BLC	FO.	211	
1260	Tenement	1		Helions Bumpstead	Alan	Draper	BLC		282	496
				Draper=Witness (3/4/4)						
1235				Broomfield	Richard	Draper	BLC		316	557
1255				Helions Bumpstead	Alan	Draper	BLC		277	486
1260				Toppesfield	Robert	Draper	BLC		14	22
1260				Helions Bumpstead	Alan	Draper	BLC		284	498
				Dyer=Conveyor (2/3/4)						
1260	Land	5	Acres	Lambourne	Edmund	Teinturer	EFF	I	239	1408
1280	Land	6	Acres	Roxwell	Thomas	Teyntur of Chelmsford	EFF	II	26	139
1260	Messuage	1		Lambourne	Edmund	Teinturer	EFF	I	239	1408
1248	Messuage	1		*Chelmsford*	Thomas	Dyer	EFF	II	39	232
				Dyer=Recipient (1/1/1)						
1272	Messuage	2		*Chelmsford*	Thomas	Dyer of Chelmsford	EFF	I	276	1629
				Dyer=Patronymic (1/1/1)						
1275	Boundary			*Halstead*	Roger	Tinctor	BLC		384	673
				Dyer=Tenant (3/3/3)						
1267	Messuage	1		*Sudbury*	Richard	Tinctor of Harling	BLC		325	573
1235	Rent	12	Pence	*Colchester*	Laurence	Dyer	EFF	I	107	455
1231	Tenement	1		*Halstead*	Robert	Deyer	BLC		350	618
				Dyer=Witness (1/1/1)						
1275				*Halstead*	Robert	Teynturer	BLC		382	669
				Fuller=Recipient (1/1/1)						
1286	Messuage	1		*Coggeshall*	William	Fulur of Coggeshall	EFF	II	54	353
				Fuller=Tenant (6/8/13)						
1231	Demesne			*Halstead*	Edmund	Filius Fullonis	BLC		347	610
1230	Homage			*Halstead*	Edmund	Filius Fullonis	BLC		376	659
1231	Homage			*Halstead*	Edmund	Filius Fullonis	BLC		347	610
1230	Messuage	1		*Halstead*	Edmund	Filius Fullonis	BLC		376	659
1239	Messuage	1		*Halstead*	William	Fullo	BLC		377	660
1231	Rent			*Halstead*	Edmund	Filius Fullonis	BLC		347	610
1231	Service			*Halstead*	Edmund	Filius Fullonis	BLC		347	610
1230	Service			*Halstead*	Edmund	Filius Fullonis	BLC		376	659
1231	Tenement	1		*Halstead*	Edmund	Fuller	BLC		350	618
1231	Tenement	1		*Halstead*	Simon	Fuller	BLC		350	618
1240	Tenement	1		Dedham	Robert	Fuller	EFF	I	137	727
1267	Tenement	1		*Sudbury*	Stephen	Fullo	BLC		325	573
1267	Tenement	1		*Sudbury*	Theobald	Fullo	BLC		325	573

Year	Property	Quantity	Units	Property Location	First Name	Last Name	Source			
				Fuller=Witness (6/6/6)						
1239				*Halstead*	Edmund	Fullo	BLC		352	621
1240				*Halstead*	William	Fullo	BLC		361	636
1252				Great Maplestead	William	Fullecoppe	BLC		66	102
1267				*Sudbury*	Theobald	Fullo	BLC		325	573
1267				*Sudbury*	Reginald	Fullo	BLC		326	574
1275				*Halstead*	Richard	Fullo	BLC		385	673
				Hatters=Conveyor (1/1/1)						
1230	Land	1	Piece	Gestingthorpe	William	Caperun	BLC		407	708
				Hatters=Tenant (2/2/4)						
1230	Homage			Steeple Bumpstead	William	Caperun	BLC		280	492
1230	Messuage	1		Steeple Bumpstead	William	Caperun	BLC		280	492
1230	Rent	4	Pence	Steeple Bumpstead	William	Caperun	BLC		280	492
1230	Rent	10	Pence	*Haverhill*	Richard	Coifer	BLC		260	459
1230	Service			Steeple Bumpstead	William	Caperun	BLC		280	492
				Hatters=Witness (5/5/5)						
1175				Pebmarsh	Brian	Caperun	BLC		166	266
1230				Gestingthorpe	William	Caperun	BLC		458	789
1235				Helions Bumpstead	Walter	Kuffus of Clare	BLC		293	514
1267				*Sudbury*	Bartholomew	Capellarius	BLC		326	574
1280				*Rayleigh*	John	Hudeler	BLC		338	595
				Napper=Witness (1/1/1)						
1235				*Waltham Holy Cross*	Maingod	Napor	BLC		227	396
				Quilter=Recipient (1/1/1)						
1240	Land	5	Acres	Finchingfield	Richard	Cuylter	EFF	I	134	717
				Stitcher=Tenant (1/1/1)						
1235	Croft	1		Middleton	Matilda	Custurer	BLC	FO.	103	
				Tailor=Agent (2/4/9)						
1235	Land	80	Acres	*Colchester*	Peter	Tailor	EFF	I	106	446
1282	Land	60	Acres	Middleton	Philip	Tayllur	EFF	II	35	193
1235	Manor	1		Bromley	Peter	Tailor	EFF	I	109	474
1282	Meadow	2	Acres	Little Waltham	Philip	Tayllur	EFF	II	35	193
1282	Messuage	1		Little Waltham	Philip	Tayllur	EFF	II	35	193
1235	Rent	320	Pence	*Colchester*	Peter	Tailor	EFF	I	107	455
1282	Rent	240	Pence	Little Waltham	Philip	Tayllur	EFF	II	35	193
1282	Rent	9600	Pence	Little Waltham	Philip	Tayllur	EFF	II	35	193
1282	Woodland	4	Acres	Little Waltham	Philip	Tayllur	EFF	II	35	193
				Tailor=Conveyor (9/11/24)						
1227	Land	4	Acres	Leyton	Hugh	Taillur	EFF	I	73	24
1235	Land	8.75	Acres	Purleigh	Matthew	Parmentar	EFF	I	101	381
1252	Land	14	Acres	Belchamp	Ambrose	Taylur	EFF	I	193	1105
1254	Land	30	Acres	Belchamp Walter	Ambrose	Tailor	EFF	I	204	1190
1254	Land	5	Acres	Good Easter	Bernard	Tailor	EFF	I	208	1226
1255	Land	13	Acres	*Saffron Walden*	Ambrose	Cissor	EFF	I	214	1271
1278	Land	3.50	Acres	*Maldon*	Edmund	Tayllur	EFF	II	17	84
1283	Land (Arable)	40	Acres	Steeple	Roger	Tailor	IPM	II	276	464
1292	Land	33.17	Acres	Foxearth	Roger	Tayllur of St. Albans	EFF	II	71	496
1283	Marsh	40	Acres	Steeple	Roger	Tailor	IPM	II	276	464
1252	Meadow	2	Acres	Belchamp	Ambrose	Taylur	EFF	I	193	1105
1254	Meadow	3	Acres	Belchamp Walter	Ambrose	Tailor	EFF	I	204	1190
1254	Meadow	0.50	Acre	Good Easter	Bernard	Tailor	EFF	I	208	1226
1292	Meadow	0.83	Acre	Foxearth	Roger	Tayllur of St. Albans	EFF	II	71	496
1254	Messuage	0.50		Good Easter	Bernard	Tailor	EFF	I	208	1226
1265	Messuage	1		*Brentwood*	Simon	Tailor of Northfleet	EFF	I	262	1557
1292	Messuage	0.33		Foxearth	Roger	Tayllur of St. Albans	EFF	II	71	496
1292	Pasture	2.67		Foxearth	Roger	Tayllur of St. Albans	EFF	II	71	496
1254	Rent	12	Pence	Belchamp Walter	Ambrose	Tailor	EFF	I	204	1190
1283	Rent	7	Pence	Ovington	Henry	Taylur of Ovington	BLC		87	136
1292	Rent	122.20	Pence	Foxearth	Roger	Tayllur of St. Albans	EFF	II	71	496
1252	Woodland	2	Acres	Belchamp	Ambrose	Taylur	EFF	I	193	1105
1254	Woodland	4	Acres	Belchamp Walter	Ambrose	Tailor	EFF	I	204	1190
1292	Woodland	2.67	Acres	Foxearth	Roger	Tayllur of St. Albans	EFF	II	71	496

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*			
				Tailor=Recipient (8/15/32)						
1291	Advowson			Beauchamp Roding	Adam	Taillur	EFF	II	70	489
1225	Land	4	Acres	Leyton	Hugh	Taillur	EFF	I	70	134
1226	Land	3	Acres	Ashen	John	Taillur	EFF	I	71	149
1227	Land	18.50	Acres	Leyton	Hugh	Taillur	EFF	I	73	18
1248	Land	10	Acres	Tillingham	German	Taylur	EFF	I	166	922
1248	Land	14	Acres	Belchamp	Ambrose	Tailor	EFF	I	171	965
1248	Land	5	Acres	Danbury	German	Tailor	EFF	I	175	1000
1248	Land	7.50	Acres	Tillingham	German	Tailor	EFF	I	176	1003
1248	Land	7.50	Acres	Dengie	German	Tailor	EFF	I	176	1003
1250	Land	80	Acres	Stow	German	Cissor	EFF	I	183	1054
1252	Land	10	Acres	Tillingham	German	Tailor	EFF	I	191	103
1252	Land	5	Acres	Dengie	German	Tailor	EFF	I	191	103
1276	Land	40	Acres	Steeple	Roger	Tayllur	EFF	II	10	53
1291	Land	60	Acres	Beauchamp Roding	Adam	Taillur	EFF	II	70	489
1292	Land	3	Acres	Walthamstow	Adam	Tayllur	EFF	II	76	549
1293	Land	22.50	Acres	St. Lawrence	Joyce	Tailor	EFF	II	75	541
1293	Land	22.50	Acres	Asheldham	Joyce	Tailor	EFF	II	75	541
1296	Land	0.75	Acre	Great Chesterford	Walter	Tailor of Guildford	EFF	II	82	604
1276	Marsh	40	Acres	Steeple	Roger	Tayllur	EFF	II	10	53
1248	Meadow	2	Acres	Belchamp	Ambrose	Tailor	EFF	I	171	965
1248	Meadow	2	Acres	Danbury	German	Tailor	EFF	I	175	1000
1291	Meadow	16	Acres	Beauchamp Roding	Adam	Taillur	EFF	II	70	489
1248	Messuage	1		Danbury	German	Tailor	EFF	I	175	1000
1250	Messuage	1		Stow	German	Cissor	EFF	I	183	1054
1276	Messuage	1		Steeple	Roger	Tayllur	EFF	II	10	53
1291	Messuage	1		Beauchamp Roding	Adam	Taillur	EFF	II	70	489
1293	Messuage	0.50		St. Lawrence	Joyce	Tailor	EFF	II	75	541
1293	Messuage	0.50		Asheldham	Joyce	Tailor	EFF	II	75	541
1291	Pasture	6	Acres	Beauchamp Roding	Adam	Taillur	EFF	II	70	489
1259	Service			Tillingham	German	Thaylur	EFF	I	231	1367
1248	Woodland	2	Acres	Belchamp	Ambrose	Tailor	EFF	I	171	965
1291	Woodland	5	Acres	Beauchamp Roding	Adam	Taillur	EFF	II	70	489
				Tailor=Tenant (5/5/7)						
1230	Homage			Bulmer	Robert	Cissor of Sudbury	BLC		186	310
1240	House	1		*Halstead*	Godfrey	Taillur	BLC		349	614
1230	Land			Bulmer	Robert	Cissor of Sudbury	BLC		186	310
1230	Land			Gestingthorpe	Richard	Cissor	BLC		408	710
1260	Land	1.50	Acres	*Halstead*	Peter	Cissor	BLC		379	663
1230	Rent			Bulmer	Robert	Cissor of Sudbury	BLC		186	310
1230	Service			Bulmer	Robert	Cissor of Sudbury	BLC		186	310
1240	Tenement	1		Dedham	Osbert	Cissor	EFF	I	137	727
				Tailor=Witness (12/15/15)						
1198				Great Saling	Ralph	Tailour	BLC		307	543
1200				Felstead	Geoffrey	Cissor	BLC		310	549
1225				Little Maplestead	Reginald	Tailur	BLC		98	155
1235				*Epping*	Walter	Taylur	BLC		318	562
1235				*Epping*	Martel	Taylur	BLC		318	562
1239				Helions Bumpstead	William	Taillator	BLC		285	502
1240				Rawreth	Adam	Taillator	BLC		214	370
1240				*Halstead*	Godfrey	Taillur	BLC		349	614
1240				*Halstead*	Nicholas	Cissor	BLC		361	636
1245				Wennington	Robert	Parmentarius	BLC	FO.	195	
1250				*Halstead*	Nicholas	Cissor	BLC		356	628
1265				Aveley	John	Tayillour	BLC	FO.	190v	
1290				Toppesfield	Adam	Scissor	BLC		19	31
1290				Toppesfield	Adam	Cissor	BLC		41	69
1294				Toppesfield	Adam	Taylur	BLC		17	27
				Weaver=Conveyor (1/1/1)						
1272	Messuage	1		*Colchester*	Thomas	Textor	BLC		155	249
				Weaver=Patronymic (2/2/2)						
1235				Aveley	Robert	Weaver	EFF	I	100	372
1235				Aveley	Ailward	Weaver	EFF	I	100	372

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*			
				Weaver=Tenant (8/8/13)						
1233	Assart			Buttsbury	Robert	Weaver	EFF	I	94	323
1248	Homage			Theydon Garnon	Richard	Teler	EFF	I	176	1008
1283	Homage			Hatfield Peverel	Brian	Textor	BLC		25	41
1259	House			Boreham	Sewall	Teler	EFF	I	229	1359
1197	Land	1	Acre	Bures	Siger	Weaver	EFF	I	12	28
1274	Land	1	Acre	Toppesfield	Alexander	Tolle	BLC		47	78
1254	Rent	30	Pence	*Halstead*	John	Webber	EFF	I	205	1198
1274	Rent	7	Pence	Toppesfield	Alexander	Tolle	BLC		47	78
1248	Service			Theydon Garnon	Richard	Teler	EFF	I	176	1008
1283	Service			Hatfield Peverel	Brian	Textor	BLC		25	41
1243	Tenement	1		*Halstead*	Ralph	Textor	EFF	I	145	764
1248	Tenement	1		Theydon Garnon	Richard	Teler	EFF	I	176	1008
1254	Tenement	1		*Halstead*	John	Webber	EFF	I	205	1198
1259	Way			Boreham	Sewell	Teler	EFF	I	229	1359
				Weaver=Witness (2/6/6)						
1245				Aveley	Philip	Textor	BLC	FO.	187v	
1272				*Colchester*	David	Textor	BLC		151	243
1272				*Colchester*	David	Textor	BLC		151	244
1274				*Colchester*	David	Textor	BLC		160	255
1277				*Colchester*	David	Textor	BLC		150	242
1277				*Colchester*	David	Textor of Colchester	BLC		153	246

APPENDIX 2

TEXTILE PROFESSIONS FROM THE CONTROL GROUP SELECTED BY OCCUPATION AND ROLE LISTED BY PROPERTY AND YEAR

NOTES on Headings and Columns are similar, where relevant, to those for Appendix 1, with the following additions:

Year: Dates correspond to those in the editions and notes whence they were taken. Most are approximations. Additional uncertainty is indicated by a question mark. Dates were not provided for most of the entries in 'COLC' and for many in 'DUNMOW', but there is no doubt that they belong to the thirteenth century. 'E' = 'early', 'M' = 'mid', followed by the century designated. The few entries belonging to the fourteenth century have been excluded from the calculations in the text. Minus (−) and plus (+) signs are used to indicate that a conveyance took place before or after the date shown.

Property Location: Italics indicate a market town. Bardfield and Coggeshall are not underlined because there is no indication that they held market or town status at the time the conveyances in which they are mentioned were issued. Of locations mentioned in the Liberty of Havering, only Romford receives that status of a market town; many of the people associated with Romford, however, are also found in conveyances concerning neighbouring Havering and Hornchurch.

Last Name: Renditions of the occupational name are as they are given in the editions and notes from which they were taken. 'S.' = 'son'.

Sources: BART = *Cartulary of St. Bartholomew's Hospital*, ed. Nellie J. M. Kerling, London, 1973 (page and entry no. cited). CHR = *Calendar of the Charter Rolls* (vol. and page no. cited). C1R = *Close Rolls* (vol. and page no. cited). COLC = *Cartularium Monasterii Sancti Johannis Baptiste de Colecestria*, ed. S. A. Moore, 2 vols., Roxburghe Club, 1987 (vol. and page no. cited). D/... and T/... = reference system of the Essex Record Office (County Hall, Chelmsford), including originals in that archive and transcripts or calendars of originals held elsewhere. DUNMOW = *The Cartulary of Little Dunmow Priory*, ed. Richard E. Levy, unpub. M.A. diss., University of Virginia, Charlottesville, Va., 1971 (page and entry no. cited). HORNCHURCH = *Hornchurch Priory, A Kalendar of Documents in the Possession of the Warden and Fellows of New College Oxford*, ed. H. F. Westlake, London, 1923 (entry no. cited). ST. PAUL'S = *The Domesday of St. Paul's of the Year 1222*, ed. William Hale Hale, Camden Society, vol. 69 (1858) (page no. cited). STOKE = *Stoke by Clare Cartulary (BL Cotton Appx. xxi)*, part 2, ed. C. Harper-Bill and R. Mortimer, Suffolk Records Society, Suffolk Charters, vol. 5 (1983) (part and entry no. cited).

Counts: The list contains 82 (+10) individuals from 107 (+3) conveyances (including as one the St. Paul's rental of 1222 with fifteen names) in 146 occurrences filling 155 (+12) roles concerning 89 (+6) properties (nos. in brackets indicate the quilter, patronymics and references in three early fourteenth-century conveyances).

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*
				Burellers=Agent (1/1/1)			
1231	(Wife's)			Great Burstead	Geoffrey	Burel	CIR I 587
				Burellers=Witness (3/3/3)			
1250				Basildon	Geoffrey	Burell	D/DHf T41/1
1250				Canfield	Adam	Burel	D/DBa T1/210
1280?				Havering	Peter	Burrell	Hornchurch 403
				Chaloners=Conveyor (1/1/1)			
	Rent	30	Pence	*Colchester*	John	Le Chaluner	COLC II 437

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*
				Chaloners=Recipient (1/1/2)			
1250	Land	6×1	Perches	*Horndon*	Reginald	Le Chaloner	D/DHt T313/2
1250	Messuage	1		*Horndon*	Reginald	Le Chaloner	D/DHt T313/2
				Chaloners=Tenant (2/2/3)			
1260	Land			Aveley	Simon	Le Chaloner	D/DL T1/13
1275	Land			*Horndon*	Thomas	Le Chaloner	D/DHt T313/3
1275	Messuage			*Horndon*	Thomas	Le Chaloner	D/DHt T313/3
				Chaloners=Witness (1/1/1)			
1285				*Horndon*	Thomas	Le Chaluner	D/DSq T1/2
				Drapers=Conveyor (5/7/14)			
1302	Eggs			*Great Dunmow*	Simon	Le Lyndrapir	Dunmow 599 793
1255	Grain			Helions Bumpstead	Richard	Le Draper	T/A432/20
1250?	Homage			*Great Dunmow*	Gilbert	Pannarius	Dunmow 111 109
1255	Horse	2		Helions Bumpstead	Richard	Le Draper	T/A432/20
1240?	Land	1.25	Acres	*Great Dunmow*	Gilbert	Le Draper	Dunmow 112 111
1250?	Land	1	Acre	*Great Dunmow*	Gilbert	Pannarius	Dunmow 111 109
1270	Land	Worth 100	Marks	Helions Bumpstead	Richard	Le Draper	T/A432/19
1280	Land	For House		*Barking*	Reginald	Le Draper of Barking	Bart 119 1238
1250?	Meadow	1	Acre	*Great Dunmow*	Gilbert	Pannarius	Dunmow 111 109
1302	Meat Dish			*Great Dunmow*	Simon	Le Lindrapir	Dunmow 594 792
1302	Meat Dish			*Great Dunmow*	Richard	Le Drapir	Dunmow 594 792
1255	Ox	2		Helions Bumpstead	Richard	Le Draper	T/A432/20
1250?	Service			*Great Dunmow*	Gilbert	Pannarius	Dunmow 111 109
1255	Utensils			Helions Bumpstead	Richard	Le Draper	T/A432/20
				Drapers=Patronymic (2/2/2)			
1250?				*Great Dunmow*	Gilbert	Pannarius	Dunmow 588 785
1318				*Barking*	Reginald	Le Draper of Barking	Bart 119 1239
				Drapers=Recipient (1/2/2)			
1270	Land	.50	Acre	Helions Bumpstead	Richard	Le Draper	T/A432/21
1270	Tenement	1		Helions Bumpstead	Richard	Le Draper	T/A432/10
				Drapers=Tenant (2/2/3)			
1240?	Homage			*Great Dunmow*	Gilbert	Le Draper	Dunmow 74 63
1240?	Service			*Great Dunmow*	Gilbert	Le Draper	Dunmow 74 63
1280	Tenement	1		*Barking*	Reginald	Le Draper of Barking	Bart 119 1238
				Drapers=Witness (7/14/15)			
1250				Hornchurch	Reginald	Le Draper	Hornchurch 323
1255				Helions Bumpstead	Alan	Le Draper	T/A432/6
1270				Helions Bumpstead	Richard	Le Draper	T/A432/22
1270				*Hatfield Broad Oak*	William	Draper	D/DBa T1/213
1272				Helions Bumpstead	Richard	Le Draper	T/A432/26
1273				Helions Bumpstead	John	Le Draper	T/A432/27
1275				Helions Bumpstead	Richard	Le Draper	T/A432/28
1275				Helions Bumpstead	Richard	Le Draper	T/A432/37
1286				Helions Bumpstead	John	Le Draper	T/A432/33
1291				Helions Bumpstead	John	Le Draper	T/A432/34
1291				Helions Bumpstead	John	Le Draper	T/A432/35
1292				Helions Bumpstead	Richard	Le Draper	T/A432/36
1296				Helions Bumpstead	Richard	Le Draper	T/A432/38
1297				*Great Dunmow*	William	Draperius	Dunmow 641 860
1297				*Great Dunmow*	Richard	Le Draper	Dunmow 641 860
				Dyers=Conveyor (1/1/1)			
1294	Land			Witham	Richard	Dyer	D/DPo T62
				Dyers=Tenant (2/2/5)			
	Homage			*Colchester*	Laurence	Tinctor	Colc II 467
	Messuage	1		*Colchester*	Elice	La Teinturere	Colc II 331
	Rent			*Colchester*	Laurence	Tinctor	Colc II 467
	Service			*Colchester*	Laurence	Tinctor	Colc II 467
	Tenement	1		*Colchester*	Laurence	Tinctor	Colc II 467

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*
				Dyers=Witness (3/5/8)			
1250				*Horndon*	Nicholas	Tinctor	D/DHt T313/2
1270				Havering	Geoffrey	Tinctor	Hornchurch 306
1270				Havering	Geoffrey	Tinctor	Hornchurch 504
1270				*Romford*	Geoffrey	Tinctor	Hornchurch 307
1270				*Romford*	Geoffrey	Tinctor	Hornchurch 305
1272				*Romford*	Geoffrey	Tinctor	Hornchurch 288
1272				*Romford*	Geoffrey	Tinctor	Hornchurch 291
1280?				*Romford*	Simon	Tinctor	Hornchurch 329
				Fullers=Patronymic (2/2/2)			
1280				*Hatfield Broad Oak*	Walter	Le Folur	D/DBa T1/154
1285				Buttsbury	Thomas	Fulloner	D/DCm 225/4
				Fullers=Tenant (9/9/9)			
	Land	1	Acre	Barnston	Alfstan	Fullo	Dunmow 124 131
	Land			*Colchester*	Arnold	Le Fulun	Colc II 331
	Land			Henham	John	Le Fulur	Dunmow 282 357
1222	Land	15	Acres	Thorp	Hemming	Fullo	St. Paul's 42
1277	Land	.50	Acre	Chingford	John	Le Folur	St. Paul's 107
	Messuage	1		*Colchester*	Stanardus	Fullo	Colc II 311
	Messuage	1		*Colchester*	Hugh	Le Fulun	Colc II 331
	Messuage	1		*Colchester*	Stephan	Le Fulun	Colc II 331
1260	Messuage	1		Thundersley	Robert	The Fuller	D/DL T1/22
				Fullers=Witness (6/7/7)			
1225				Coggeshall	William	Le Fullere	D/DU 564/1
1250				*Chelmsford*	Robert	Le Fuller	D/DCm Z25/19
1270				*Hatfield Broad Oak*	Richard	Le Fulun	D/DBa T1/98
1280				*Hatfield Broad Oak*	Roger	Le Folur	D/DBa T1/120
1280				*Hatfield Broad Oak*	Roger	Le Folur	D/DBa T1/174
1280?				*Romford*	John	Fuller	Hornchurch 329
1290+				Buttsbury	Robert	Le Folour	D/DCm Z25/8
				Hatters=Conveyor (1/1/1)			
1225	Land	1	Piece	Helions Bumpstead	W.	Capenum	T/A432/2
				Hatters=Tenant (3/3/3)			
	House	1		*Colchester*	William	Coife	Colc II 437
1251	Land			Tilty	Thomas	Caperun	CHR I 359
1270	Messuage	1		Helions Bumpstead	W.	Caperoys	T/A432/22
				Hatters=Witness (2/2/2)			
1292				Havering	Ralph	Le Hatter	Hornchurch 343
1292				*Writtle*	John	Capun	CHR II 412
				Quilters=Conveyor (1/1/1)			
E.13th	Rent	12	Pence	*Clare*	Robert	S. of Humphrey Le Q.	Stoke II 234
				Tailors=Conveyor (2/2/2)			
	Land			*Colchester*	Edricius	Parmentarius	Colc II 442
1302	Meat Dish			*Great Dunmow*	Robert	Cissor	Dunmow 594 792
				Tailors=Patronymic (4/5/5)			
1229–				Stoke	Richard	Cissor	Stoke II 645
1262				Hallingbury	Roger	[De Ros] Le Taillur	CHR II 44
1270			Havering	John	Tailor	Hornchurch 306	
1270				*Romford*	John	Tailor of Romford	Hornchurch 305
	Land	1	Acre	Finchingfield	Ralph	Le Taillur De Bard.	Dunmow 241 293
				Tailors=Recipient (4/5/7)			
1260	Dayworks	5		Aveley	John	Taylor	D/DL T1/13
1272	Dayworks	6		*Romford*	John	Tailor of Romford	Hornchurch 288
1280	Hedge	27	Perches	*Hatfield Broad Oak*	Thomas	Taillour	D/DBa T1/183
1240	Land			Hallingbury	Roger	De Ros	CHR I 255
1260	Land	1	Acre	Aveley	John	Taylor	D/DL T1/13
1272	Messuage	1		*Romford*	John	Tailor of Romford	Hornchurch 288
1233	Wife			West Ham	German	Scissor	C1R II 220

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*
				Tailors=Tenant (19/21/23)			
1222	Curtilage	1		Heybridge	John	Parmentarius	St. Paul's 58
1270	Curtilage	1		*Romford*	John	Tailor of Romford	Hornchurch 307
1250	Grove	1		Wakes Colne	Silvester	Tailor	D/DU 646/48
1260	House	1		Buttsbury	William	Tailor	D/DCm Z25/7
	Land	3	Acres	Chrishall	Simon	Taylour	Dunmow 635 854
	Land	3	Acres	Chrishall	John	Taylour	Dunmow 635 854
	Land		Assart	Easter	Pagan	Parmenter	Dunmow 536 729
	Land	.75	Acre	Henham	Ralph	Le Tallur	Dunmow 290 369
	Land			*Colchester*	Robert	Taillur	Colc II 332
M.12th	Land			Bradfield	Maurice	Parmentarius	Stoke II 460
1180?	Land			Bradfield	Arnulf	Parmentarius	Stoke II 556
1222	Land	.50	Acre	Barling	William	S. of Wm. Parment.	St. Paul's 65
1222	Land	4	Acres	Sandon	Walter	Taillur	St. Paul's 14
1222	Land	1	Acre	Tillingham	Adam	Parmentarius	St. Paul's 60
1222	Land	3	Acres	Wickam St. Paul's	Geoffrey	Parmentarius	St. Paul's 36
1250	Land	1	Acre	Clavering	William	Parmentar	D/DP T1 2077
1260	Land			*Hatfield Broad Oak*	William	Taillour	D/DBa T1/211
1270	Land			*Hatfield Broad Oak*	William	Taillour	D/DBa T1/218
M.12th	Messuage	1		Bardfield	Maurice	Parmentarius	Stoke II 460
1190?	Messuage	1		Bardfield	William	Tailarius	Stoke II 557
1222	Messuage	1		Heybridge	John	Parmentarius	St. Paul's 58
1250	Messuage	1		Clavering	William	Parmentar	D/DP T1/2077
	Tenement	1		Elsenham	Simon	Le Taillur	Colc II 375
				Tailors=Witness (12/22/22)			
				Bardfield	Ralph	Tailur	Colc I 240
13th				*Hatfield Broad Oak*	Robert	Scissor	Bart 139 1516
M.13th				*Clare*	Robert	Cissor	Stoke II 592
1250				Clavering	William	Le Parmenter	D/DP T1/2078
1250				Clavering	William	Le Parmenter	D/DP T1/2079
1255				Helions Bumpstead	Hamun	Le Taillure	T/A432/8
1255				Helions Bumpstead	Bernard	Taylor	T/A432/9
1255				*Halstead*	Nicholas	The Tailor	D/DCw T37 6
1260				*Hatfield Broad Oak*	William	Taillour	D/DBa T1/167
1270				Aveley	John	Taylor	D/DL T1/26
1270				*Hatfield Broad Oak*	Geoffrey	Taillour	D/DBa T1/135
1270				*Hatfield Broad Oak*	William	Taillour	D/DBa T1/145
1270				*Hatfield Broad Oak*	William	Taillour	D/DBa T1/94
1280				Aveley	John	Le Taillur	D/DL T1/18
1280				Aveley	John	Le Tailour	D/DL T1/39
1280				*Hatfield Broad Oak*	Thomas	Taillour	D/DBa T1/162
1285				Aveley	John	Le Tayllur	Bart 121 1257
1290				Aveley	John	Le Taylur	D/DL T1/7
1290				Aveley	John	Le Taylur	D/DL T1/23
1290				Aveley	John	Le Taylur	D/DL T1/36
1294				Upminster	John	Le Taylur of Aveley	D/DL T1/4
1296				Helions Bumpstead	Geoffrey	Le Taylur	T/A432/38
				Weavers=Conveyor? (1/1/1)			
1302	Meat Dish			*Great Dunmow*	Richard	Le Welbe	Dunmow 594 792
				Weavers=Patronymic (3/3/3)			
1222				Belchamp St. Paul's	Leufric	Textor	St. Paul's 30
1222				Thorp	Adam	Textor	St. Paul's 42
1222				Wickham St. Paul's	Ralph	Textor	St. Paul's 36
				Weavers=Recipient (1/5/5)			
1250	Land	1	Acre	Clavering	Stephen	The Weaver	D/DP T1/2077
1250	Land	1	Acre	Clavering	Stephen	The Weaver	D/DP T1/2079
1260	Land	4	Acres	Clavering	Stephen	The Weaver	D/DP T1/2076
1250	Messuage	1		Clavering	Stephen	The Weaver	D/DP T1/2077
1250	Messuage	1		Clavering	Stephen	Le Webbe	D/DP T1/2078

Year	*Property*	*Quantity*	*Units*	*Property Location*	*First Name*	*Last Name*	*Source*
				Weavers=Tenant (9/9/11)			
1222	Land	1	Acre	Ardleigh	Margaret	Textrix	St. Paul's 26
1222	Land	2	Acres	Belchamp St. Paul's	Sawalus	Textor	St. Paul's 28
1222	Land	15	Acres	Kirby	Edward	Textor	St. Paul's 45
1222	Land	1.5	Acres	Navestock	Henry	Telarius	St. Paul's 80
1222	Land	4	Acres	Tillingham	Siward	Textor	St. Paul's 61
1222	Land	2.5	Acres	Walton	Randolph	Textor	St. Paul's 50
1222	Land	5	Acres	Walton	Randolph	Textor 'Akerman'	St. Paul's 52
1236	Land	.75	Acre	*Sudbury*	Richard	Textor	Stoke II 492
1260	Land			Wennington	Robert	Teytor [?Tex/Teyntor]	D/DL T1/12
	Messuage	1		*Colchester*	Adam	Textor	Colc II 444
1236	Messuage	1		*Sudbury*	Richard	Textor	Stoke II 492
				Weavers=Witness (2/2/2)			
1225				Coggeshall	Richard	Le Webbe	D/DU 564/1
1280					John	The Weaver	D/DCw T37 8

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Notes

1. The date of this document can be set between 19 Edward I (1290–91), when a decision was made to amend the Old Domesday of 2 John (1200–01), and the time it was written down in the early fourteenth century (*Black Book of the Admiralty*, Appendix pt. 2, ed. Sir Travers Twiss, vol. 2, *Rolls Series* no. 55, London, 1873, pp. lxx, lxxxiii, 19, 186–7, 196–7).
2. Nigel Heard, *Wool, East Anglia's Golden Fleece*, Lavenham (Suffolk), 1970, p. 43.
3. Edward Miller, 'The fortunes of the English textile industry during the thirteenth century,' *Economic History Review*, 2nd ser., 18 (1965), pp. 64–82 (p. 78).
4. E. M. Carus-Wilson, "An Industrial Revolution in the Thirteenth Century," *Economic History Review*, vol. 11 (1941), rpt. in her *Medieval Merchant Venturers: collected studies*, 2nd. ed., London, 1967, pp. 183–210; see also, R. H. Britnell, *Growth and Decline in Colchester, 1300–1525*, Cambridge, 1986. p. 14.
5. A. R. Bridbury, *Medieval English Clothmaking, an economic survey*, London, 1982, p. 27.
6. Miller, 1965, p. 73.
7. Cf. Miller, 1965, p. 66.
8. E. M. Carus-Wilson, 'The English cloth industry in the late twelfth and early thirteenth centuries,' *Economic History Review*, 14 (1944), pp. 32–50, rpt. in her *Medieval Merchant Venturers, Collected Studies*, 2nd ed., London, 1967, pp. 211–38 (p. 238).
9. Carus-Wilson,, 1967, p. 238; see also Gladys A. Thornton, *A History of Clare, Suffolk*, Cambridge, 1930, p. vii.
10. Miller, 1965, p. 67. A century later, for 1327, he identifies textile occupational names in forty rural and semi-rural places in Suffolk, including such significant cloth-making towns of the fifteenth century as Long Melford, Lavenham, Clare and Kersey.
11. Paul D. A. Harvey has suggested that a survey of occupational names would help clarify what little is known about rural cloth-making in the twelfth century ('The English trade in wool and cloth, 1150–1250: some problems and suggestions,' *Produzione, commercio e consumo die panni di lana*, Atti della seconda settimana di studio 10–16 aprile, 1970, Istituto internazionale di storia economica F. Datini, Florence, 1976, pp. 369–375 [esp. p. 375]).
12. Carus-Wilson, 1967, p. 238.

13. What is known about the textile industry has depended on the availability of source materials and their analysis by historians. Bridbury (1982, pp. 7–8) has pointed out, for example, that although Leicester appears pre-eminent as a cloth-making town, its production was in fact only average. Impressions of the town's importance have derived more from the quality of its records than from the actual extent of its economic activity.
14. British Library Cotton MS Nero E VI, fols. 289–467, ed. by M. Gervers, *The Cartulary of The Knights of St. John of Jerusalem in England, Secunda Camera, Essex*, British Academy, 1982. Further references to the ms. will be cited as 'BLC', followed in the case of the published *secunda camera* by page and entry number in the above work, and by folio number for the unpublished *prima camera*.
15. R. E. C. Kirk, ed., *Feet of Fines for Essex*, vols. 1–2, Colchester: Essex Archaeological Society, 1899–1928.
16. *Calendar of Inquisitions Post Mortem and Other Analogous Documents Preserved in the Public Record Office*, vols. 1–2 (Henry III and 1–19 Edward I), ed. H. C. Maxwell Lyte, London: H.M.S.O., 1904–06.
17. From 1253, and in some cases from 1235, the tenants of ancient demense held the privilege of 'little writ of right close', which enabled them to pursue actions, including Final Concords dealing with property transfer, in their manorial courts (*The Victoria History of the County of Essex* (hereafter *VCH Essex*), vol. 7 [1978], p. 1, and vol. 8 [1983], p. 178; see also Sir F. Pollock and F. W. Maitland, *The History of English Law Before the time of Edward I*, 2nd ed., vol. 1, 1898 [rpt. Cambridge, 1968], pp. 383–88). This demesne included some 30 manors spread over sixteen Hundreds and amounted to more than 150 hides (See *VCH Essex*, vol. 1 [1903], pp. 428–36 and map facing p. 426). Unfortunately very few of the manorial court rolls on which such concords may have been enrolled have survived from the thirteenth century.
18. P. H. Reaney confirms that forms of the name 'burrel' may refer either to the profession of bureller or to dress or complexion (*A Dictionary of British Surnames*, 2nd ed., London, 1976). The dates, roles and properties associated with persons bearing this name in our sources allow us to affirm with some confidence that it is indeed an occupational name.
19. The name 'hose' also occurs in the sources, but there is insufficient evidence to conclude that it refers to the occupation of hosier and it has thus not been included.
20. This calcuation is based on the 20 non-witnesses in BLC out of 969 entries (1:49) compared to the 43 in EFF out of 2,720 entries (1:63). Figures are not available for similar comparisons with the Control group.
21. Other places include Aveley (p. 45, 54) which occurs twice in BLC, once in EFF and eight times in the Control group (referring to two people, one of whom occurs in EFF); Barking (p. 39, 46), thrice in EFF and twice in the Control (once referring to an individual in EFF); Helions Bumpstead (p. 45, 58), thrice in BLC, eighteen times in the Control (referring to seven people, including one from BLC); Buttsbury (Appendices), once in EFF, thrice in the Control; Chelmsford (p. 39, 43, 46, 57) and Easter (p. 49), twice in EFF and once in the Control.
22. The number of parishes in Essex by 1300 has been determined by W. R. Powell in "The making of Essex Parishes," *The Essex Review*, no. 245, vol. 62 (January 1953), pp. 6–17, and *ibid.*, no. 245, vol. 62 (April 1953), pp. 32–41. The records in BLC refer to 142 parishes, or 36% of the total; those in EFF to 372, or 93%.
23. See Gustav Fransson, *Middle English surnames of occupation 1100–1350; with an excursus on toponymical surnames*, Lund Studies in English, vol. 3, Lund, 1935, pp. 29, 39. Cf. C. N. L. Brooke and M. M. Postan, eds., *Carte Nativorum, a Peterborough Abbey cartulary of the fourteenth century*, Publications of the Northampton Record Society, vol. 20 (1960), p. xxvii, where reference is made to occupational names used as surnames even in the late thirteenth century.
24. See Part 2, pp. 52–3.
25. See pp. 47–81 for a discussion of linen.
26. It has been argued from archaeological evidence that while the vertical, warp-weighted loom was common to most Anglo-Saxon households, the horizontal loom which succeeded it in the course of the eleventh century certainly was not. The frequent discovery, nevertheless, of spindle whorls has led archaeologists to conclude that thread was spun at home in England in the high middle ages, and that it was taken out to be woven (Helen Clarke, *The Archaeology of Medieval England*, London, 1984, pp. 132–34; David M. Wilson, ed., *The Archaeology of Anglo-Saxon England*, Cambridge, 1976 (rpt. 1986), pp. 270–74).
27. In the Domesday of St. Paul's, Randolph *textor* appears once in 1222 as a tenant in Walton (Tendring Hd.) holding 2.5 acres, and once as an 'akerman' holding 5 acres. Simultaneously, Edward *textor* holds 15 acres in the adjacent parish of Kirby (William Hale Hale, ed., *The Domesday of St. Paul's of the Year 1222*, Camden Society, vol. 69 (1858), pp. 45, 50, 52). There can be little doubt that these men derived their living both from weaving and from agriculture.
28. Commercial dyestuffs appear largely to have been imported into England during the middle ages, the indigenous nature of woad notwithstanding (see Louis Francis Salzman, *English Industries of the Middle Ages*, new ed., London, 1923 [rpt. 1964], p. 208); Carus-Wilson, 1967, pp. 216–22. Archaeological evidence provides little sign of indigenous dyeing in the Anglo-Saxon period (Wilson, 1976, p. 272).
29. We have no evidence of fullers and dyers occurring at the same time and place outside towns or important market centres in the thirteenth century, although such a combination of industrial activity might still occur in a monastic or manorial environment.
30. BLC, p. 205, no. 353; p. 188, no. 315; p. 160, no. 256; p. 240, no. 418; p. 238, no. 414. The sources in the Control group were not checked for professions other than textiles.
31. The name 'parmentarius', which we have included among the tailors, occurs in the Control group in documents attributed generally to the mid- and late-twelfth century (see Appendix 2: *"Tailors=Tenant")*.
32. On the status of rural 'merchants' elsewhere, see Brooke and Postan, 1960, p. xxix, n. 2.
33. The presence, particularly in rural areas, of fullers, tailors and especially weavers, is nevertheless attested in 1222 in the Domesday of St. Paul's (see Appendix 2).
34. Smiths are effectively absent from BLC and EFF in the first quarter of the century; only two individuals with the occupational name 'smith' appear, and only one of these occurs after 1202 (John, smith, in EFF, vol. 1, p. 56, no. 60, dated 1219). In addition, millers are absent from BLC in the first quarter of the century, although they are well represented in EFF.
35. Miller, 1965, p. 69 and n. 3.
36. P. D. A. Harvey, 'The English inflation of 1180–1220,' *Past and Present*, 61(1973), pp. 3–30 (p. 30).
37. Harvey, 1973, p. 27, but cf. the cautionary remarks expressed by E. Miller and J. Hatcher, *Medieval England: Rural Society and Economic Change, 1086–1348*, London, 1985 (1978), pp. 67–68.
38. The increase in prices from around the turn of the thirteenth century may also have encouraged the rural population to rely more on home produced textiles than on a commercial, trade equivalent. Martin Stephenson has determined that sheep flocks on the Winchester estates declined somewhat from c. 1208–16, but then rose sharply to a mid-century high ("Wool yields in the medieval economy," *Economic History Review*, 2nd series, vol. 41 [1988], pp. 368–91 [esp. p. 757]). A similar decline may have affected the sheep population of Essex, leading to increased wool prices.
39. William Cunningham, *The Growth of English Industry and Commerce*, 5th ed., Cambridge, 1915, p. 192; Miller, 1965, pp. 66, 76; Bridbury, 1982, p. 5.
40. R. W. Southern, *Western Society and the Church in the Middle Ages*, Penguin, 1970, p. 267.
41. R. H. Britnell, 'Essex markets before 1350,' *Essex Archaeology and History*, vol. 13 (1981), pp. 15–21 (p. 17).
42. See Part 2, pp. 52–6.

43. T. H. Lloyd, *The Movement of Wool Prices in Mediaeval England, Economic History Review*, supplement no. 6, 1973, p. 45.
44. The Hospitallers were major investors in the marshlands of southeast Essex in the thirteenth century; see British Library, Cotton MS Nero E VI, *prima camera*, fols. 103–107 and 185–204, to be published by the author in a forthcoming volume of the British Academy's Records of Social and Economic History series. See also Cunningham, 1915, vol. 1, p. 628; *Victoria County History, Essex* (hereafter *VCH Essex*), vol. 2, p. 381; Bridbury, 1982, p. 4. For the fourteenth century see Britnell, 1986, pp. 18, 45. See also p. 46 and n. [100].
45. Britnell, 1986, p. 45.
46. For a linen draper in the early fourteenth century, see Appendix 2: *"Drapers=Conveyor."*
47. E. M. Carus-Wilson, 1967, p. 231.
48. The quilter in the Control group has been attributed the date "early thirteenth century;" we would propose a date in the second quarter of the century.
49. A chronological comparison with the Control group is unfeasible because of the uncertainty, or lack, of dating among the entries selected for the occurrence of textile workers (25% are undated), and of the mixed nature of the sources used.
50. E. M. Carus-Wilson, 'The woollen industry,' in M. M. Postan and Edward Miller (eds.), *The Cambridge Economic History of Europe*, vol. 2 (2nd. ed.), Cambridge, 1987, pp. 667–68; Miller, 1965, pp. 74–76.
51. Hilda Grieve, *The Sleepers and the Shadows; Chelmsford: a town, its people and its past*, vol. 1: *The Medeival & Tudor Story*, Chelmsford, 1988, pp. 3–5; *VCH Essex*, vol. 6, p. 59 (concerning Bowbridge over the River Lea on the London Road).
52. Carus-Wilson sees twelfth- and thirteenth-century Colchester as a supplier of cloth to London for export (1967, pp. 197–8).
53. Charles Verlinden, 'Marchands ou tisserands? A propos des origines urbaines,' *Annales Economies, Sociétés, Civilisations*, 27(1972), pp. 396–406 (p. 406); see also T. H. Lloyd, *The English Wool Trade in the Middle Ages*, Cambridge, 1977, p. 4.
54. See pp. 44–7.
55. Entry into the active roles is discussed below in Part 2.
56. See p. 46–7.
57. E. Lipson, *The History of the Woollen and Worsted Industries*, London, 1921 (1965), pp. 10–11; Miller, 1965, pp. 70–71, 77; Andrew Woodger, 'The Eclipse of the Burel Weaver: Some Technological Developments in the Thirteenth Century,' *Textile History*, vol. 12 (1981), p. 59 and n. 2; R. van Uytven, 'The Fulling Mill: Dynamic of the Revolution in industrial Attitudes,' *Acta Historiae Neerlandica*, 5 (1971), pp. 1–14 (esp. p. 2); Miller and Hatcher, 1985, p. 83.
58. M. J. Stephenson, "Wool yields in the medieval economy," *Economic History Review*, 2nd series, vol. 41 (1988), pp. 368–91 (p. 376).
59. Bridbury, 1982, p. 9. Carus-Wilson argued that urban decline in the industry was not only countered, but caused, by rural expansion (1967, pp. 208–09).
60. Richard of Bergholt, described as a draper of Colchester *c.* 1275 (Gervers, 1982, p. 154, no. 248), occurs as late as 1290, when he is referred to more generally as 'merchant' (Gervers, 1982, p. 152, no. 245). Richard and William, drapers, witness a charter from Great Dunmow in 1297 (Appendix 2).
61. The Control group includes a Richard dyer at Witham in 1294 and a Robert le folour at Buttsbury *c.* 1290.
62. If the numbers of drapers dwindle it is presumably because they found little profit in dealing with the cheap imports, which may have been handled by general merchants and/or by tailors.
63. Britnell, 1986, p. 45, 79, 85; Carus-Wilson, 1987, pp. 679–80, 684; Heard, 1970, pp. 54, 68; Lipson, 1921 (1965), p. 230; Eileen Power, *Medieval People*, 1924 (Methuen, 1966), p. 154; *VCH Essex*, vol. 2, London, 1907, p. 381. In an unpublished ms. L. R. Poos cites in addition activity in Writtle (1401), Hatfield Broad Oak (1384; see also p. 45–6, no. 158, and Chelmsford (1467/8). He further lists 28 parishes where fulling mills are known to have existed from the late thirteenth to the sixteenth century.
64. The total number of individuals from all sources is uncertain due to similarities in some names. At least eight, and possibly as many as fifteen of those appearing in BLC/EFF also occur in the Control group.
65. The area is situated between the River Stour along the Suffolk border to the north and the River Blackwater to the south, the North Sea to the east and south-east and Chelmsford and Hinckford Hundreds to the west. There is no evidence that this five-Hundred grouping had its origin in early administrative organization (see Helen M. Cam, "Early Groups of Hundreds," in her *Liberties and Communities in Medieval England*, London, 1963, pp. 91–106.
66. The exceptions include a weaver and a fuller at Coggeshall *c.* 1225, four weavers and a fuller documented by the Domesday of St. Paul's in Tendring Hd. in 1222, a tailor in Thurstable Hd. the same year, a tailor and a fuller at Dedham in 1240, and a tailor at Wakes Colne *c.* 1250 (?). Coggeshall and Dedham were to develop into important cloth-making centres (see p. 34, 38, 40–1 and pp. 43–9).
67. Miller, 1965, pp. 74, 77.
68. BLC, p. 6, no. 10. The market in Witham was ancient, dating at least to the foundation of a *burh* there by Edward the Elder, purportedly in 912 (M. R. Petchey, 'The archaeology of medieval Essex towns', in *Archaeology in Essex to AD 1500*, ed. D. G. Buckley, Council for British Archaeology Research Report 34, London, 1980, pp. 113–117 [p. 113]; M. W. Beresford and H. P. R. Finberg, *English Medieval Boroughs, a hand-list*, Totowa, N. J., 1973, p. 111).
69. Beresford and Finberg, 1973, pp. 109–110.
70. There was a wool fair too at St. Osyth by 1310: Britnell, 1986, p. 45 and n. 48. Britnell also cites the foundation of a market at Elmstead, the only new market to be created within an eight mile radius of Colchester in the thirteenth century (Britnell, 1986, pp. 12–13, from *Cal. Chart. Rolls*, vol. 1, p. 429).
71. EFF, vol. 2, p. 54, no. 353, and Essex Record Office (E.R.O.), D/DPo T62.
72. Bridbury, 1982, p. 27. See also Carus-Wilson, 1967, p. 207.
73. The league had a maximum length of about three miles.
74. Bridbury, 1982, p. 31.
75. Entries in the *Colchester Cartulary*, for example, show no evidence whatsoever of textile workers outside the town in the thirteenth century. On the contrary, their tenements are clearly described as lying within, or just outside, the walls of the town itself (S. A. Moore, ed., *Cartularium Monasterii Sancti Johannis Baptiste de Colecestria*, vol. 2, Roxburghe Club, 1897, pp. 311, 331).
76. George Rickword, 'Taxations of Colchester, A.D. 1296 and 1301,' *Transactions of the Essex Archaeological Society*, 9 (1903), pp. 126–155 (p. 133). Rickword suggests as much for the taxation of 1301 also, although the organization of the rolls makes it more difficult to distinguiish between the inhabitants of the town and of the outlying hamlets.
77. Beresford and Finberg, 1973, pp. 109, 111; M. R. Petchey, 1980, p. 113.
78. The parishes are Bures, Pebmarsh, Salinges and Toppesfield.
79. *The Victoria History of the County of Suffolk*, vol. 1, ed. William Page, London 1911 (rpt. 1975), p. 426 (Domesday ref. to burgesses and a market at Sudbury); Heard, 1970, p.26; Britnell, 1986, p. 22. For the later middle ages, see J. Thirsk, "Industries in the Countryside," in *Essays in the Economic and Social History of Tudor and Stewart England in Honour of R. H. Tawney*, ed. F. J. Fisher, Cambridge, 1961, pp. 70–88 (p. 75).
80. Sudbury's connections with the adjacent Essex parish of Henny and the more centrally located parish of Hedingham in Hinckford Hd. are apparent from the Domesday survey (H. C. Darby, *The Domesday Geography of Eastern England*, Cambridge, 1952, p. 253).
81. BLC, p. 164, no. 262.

82. BLC, p. 40, no. 67. Hubert's status cannot have been very elevated, however, as Isabel was a bondwoman.
83. BLC, p. 325, no. 573.
84. BLC, p. 350, no. 618.
85. Similar evidence is available for Colchester (*Colchester Cartulary*, vol. 2, 1897, p. 331) and possibly for Havering/Romford (H. F. Westlake, ed., *Hornchurch Priory, A Kalendar of Documents in the Possession of the Warden and Fellows of New College Oxford*, London, 1923 [hereafter: *Hornchurch*], no. 329), where fullers and dyers are associated. Although they may not have led to the establishment of industrial areas, freehold messuages seem to have been available for artisans at points west of Colchester in the early fourteenth century (R. H. Britnell, 1986, p. 12; and Britnell, 'Burghal characteristics of market towns in medieval England,' *Durham University Journal*, new ser., 42 [1981], pp. 147–49).
86. Halstead had a market by 1250 (Wendy Walker, *Essex Markets and Fairs*, Essex Record Office publ. no. 83, Chelmsford, 1981, pp. 6–7; see also EFF, vol. 1, p. 205, no. 1198).
87. Higher quality dyed cloths called bluett and persetum are documented as having been acquired at Clare in 1284 (J. E. Thorold Rogers, *A History of Agriculture and Prices in England*, vol. 1 (1259–1400), Oxford, 1866, pp. 576–77).
88. See pp. 46–7.
89. The Sudbury market was ancient, dating from before Domesday (Beresford and Finberg, 1973, p. 167). A marketplace is referred to at Haverhill in the second quarter of the twelfth century (evidence from the Castle Acre cartulary provided in a personal communication from C. Harper-Bill).
90. See p. 34.
91. Petchey, 1980, p. 116; Grieve, 1988, pp. 7–18.
92. Our sources provide one fuller and two dyers; the additional fullers are indicated by Marjorie McIntosh (*Autonomy and community: the royal manor of Havering 1200–1500*, Cambridge, 1986, p. 286), who claims to have used "all surviving Havering records" to compile her figures. She lists a maximum of twelve textile workers for the period 1250–99 (three weavers, three fullers, one or two dyers, one or two tailors, a chaloner and a draper), the highest number recorded for any half century from 1200 to 1499. This concentration may have been due to the foundation of a market at Romford in 1247 (*ibid.*, p. 40), but if so the activity was relatively short lived. What was produced is thought to have been consumed locally (*ibid.*, p. 155).
93. Freshwell is grouped here with Hinckford Hd. as in only two of its parishes do textile occupational names occur: at Helions Bumpstead and Great Bardfield. We have suggested above that Helions Bumpstead belongs to the Haverhill-Sudbury-Halstead triangle; only tailors are associated with Great Bardfield, all of them apparently occurring in the twelfth century (Appendix 2: *"Tailors=Tenant/Witness"*).
94. Petchey, 1980, p. 114, fig. 44; Beresford and Finberg, 1973, pp. 108–109.
95. See below, n. 158.
96. Bridbury, 1982, pp. 106–7; Britnell, 1986, pp. 56, 58, 60–62; Carus-Wilson, 1944, p. 33; Miller, 1965, p. 70.
97. Britnell, 1986, p. 60; Salzman, 1923, pp. 201, 242.
98. Heard, 1970, pp. 15, 76.
99. Bridbury, 1982, p. 22; Britnell, 1986, pp. 60–62; Heard, 1970, pp. 15, 76.
100. On sheep farming on the Essex marshes, see J. H. Round in *VCH Essex*, vol. 1 (1903), pp. 369–74; Britnell, 1986, pp. 18, 45; H. C. Darby, *The Domesday Geography of England*, Cambridge, 1952, pp. 241–45, 257–58; Heard, 1970, p. 38; pp. 38 & n. 44.
101. Eileen Power, *The Wool Trade in English Medieval History*, Oxford, 1941, p. 21.
102. Woodger, 1981, pp. 65–66.
103. Ch. Verlinden sees an important development of the Flemish loom taking place *c.* 1080 (Verlinden, 1972, p. 400).
104. Woodger, 1981, pp. 59–76.
105. Cf. also Henry 'telarius' (Appendix 2: *"Weavers=Tenant"*).
106. Above, p. 45.
107. Unemployment leading to poverty may have caused Peter the tailor, son of Nicholas of Halstead, to commit larceny, for which he was sentenced by chief justice Hugh Bigod at Chelmsford in 1259/60 and hanged (BLC, p. 379, no. 663).
108. It might be argued that because of the general need for clothing among all ranks of society the services of the tailor, like the shoemaker and the cobbler, would be in high demand. In the EFF/BLC sample used here, however, there are nearly five times as many tailors as shoemakers and cobblers (figures for industries other than textiles are not available from the sources searched for the Control group). Furthermore, it should not be overlooked that most garments worn by the peasantry would in all probability have been straight-cut, a process which does not necessarily require a tailor's expertise.
109. The one exception is Robert the draper, who witnesses a charter pertaining to Toppesfield *c.* 1260–74 (BLC, p. 14, no. 22).
110. Only in Helions Bumpstead in the second half of the thirteenth century do they occur together fairly consistently.
111. BL Cotton MS Nero E VI, fo. 103.
112. Woodger, 1981, p. 66.
113. EFF, vol. 1, p. 134, no. 717; C. Harper-Bill and R. Mortimer, eds., *Stoke by Clare Cartulary (BL Cotton Appx. xxi)*, pt. 2, Suffolk Records Society, Suffolk Charters, vol., 5 (1983), no. 234.
114. Thornton, 1930, p. 172.
115. Woodger, 1981, p. 67.
116. See p. 34, n. 1.
117. Blanket and chalon were distinguished as cloth types at least as early as 1303, when they are listed as coverings in sequence: 'de uno blaunketo, tribus cuverlys, duobus chalone et uno canevaz pretii xl s.' (W. H. Hale and H. T. Ellacombe, eds., *Account of the executors of Richard Bishop of London, 1303 and of the executors of Thomas Bishop of Exeter, 1310*, Camden Society, n.s., 10 (1874), p. 57).
118. Salzman, 1923, p. 242; his reference is the 'Enr. Ward. Accts., 4, m.3.' Blanket was also being produced in Colchester in 1376 (Britnell, 1986, p. 54).
119. Only a Peter burell occurs after *c.* 1250, at Havering *c.* 1280? (Appendix 2: *"Burellers=Witness"*).
120. The professions of skinner and tanner, like those of weaver and tailor, begin to appear in the record in the last decades of the twelfth century. The DEEDS database contains about one-third as many references to members of the leather trade from *c.* 1185 to *c.* 1300 as to textile workers.
121. Rogers, p. 568. Rogers notes when listing prices for hemp and flax, that he had only found one occurrence of a flax sale (in 1305) compared with 24 for hemp (vol. 2 [1259–1400], Oxford, 1866, p. 398). This paucity of recorded flax sales suggests widespread cultivation for domestic purposes and points to the domestic manufacture of linen.
122. Rogers (vol. 1, 1866, pp. 572–79) calculates that the average price of linen from the late thirteenth to the mid-fourteenth century was 4d an ell, the cheapest being 2d. Compared to the cheapest woollen cloth at 8d–11d a yard for burels and russets (*Calendar of the Liberate Rolls*, vol. 1 [1226–401], pp. 159, 215, 319, and vol. 4 [1251–60], p. 280. In the last example, the price of just over 10 1/2d an ell for 518 ells included carriage from Colchester to London [I am grateful to E. Miller for these references]) and 1s a yard (for blanket, undyed), and assuming a similar quantity of material, linen would have been from half to five-sixths cheaper than wool. Rogers considers even 4d the ell to be expensive, although it "did not by any means put its use out of reach of the mass of the people" (p. 573). A modest woman's shift required 2½ ells of linen (p. 572); while 1¾ yards of wool were sufficient for a servant's garment (pp. 578–79). According to Miller and Hatcher (1985, p. 163), a "simple smock" made of russet costing 1s to 1s 6d a yard could be worth up to four months earnings. The calculation seems high unless other living expenses for the period are taken into consideration. On woollen cloth production costs see T. H. Lloyd, "Some Costs of Cloth Manufacturing in

Thirteenth-Century England," *Textile History*, 1 (1968–70), pp. 33–36 (p. 34).

123. Sir Harry Godwin, *History of the British Flora, A factual Basis for Phytogeography*, 2nd ed., Cambridge, 1975, pp. 167, 243, 478; Harry Godwin, "The Ancient Cultivation of Hemp," *Antiquity*, vol. 41 (1967), pp. 42–9 (p. 46). See also Nesta Evans, *The East Anglian Linen Industry, Rural Industry and Local Economy, 1500–1850*, Aldershot, 1985, pp. 12, 14; Heard, 1970, p. 18.
124. Godwin, 1967, p. 46; Wilson, 1986, pp. 270–74.
125. Power, 1941, p. 59.
126. The passage reads, in translation, "We desire to thank the Englishmen who have come here, bringing wheat and honey, flour and cloth. We desire also to thank *those* [my italics] who have brought here linen or flax, wax or cauldrons" (*The Saga of King Sverri of Norway*, trans. J. Sephton, London, 1899, p. 129. See also Gustav Indrebo, ed., *Sverris saga etter Cod. AM 327 4°*, Kristiania, 1920 [rpt. Oslo, 1981], p. 110, para. 104). Power's citation is "We desire to thank the *Englishmen* [my italics] who have brought hither *linen* and *flax*, wax and cauldrons."
127. On linen and wool in Flanders at this period, see M. Postan, "The Trade of Medieval Europe: the North," ch. 4 in M. Postan and Edward Miller, eds., *The Cambridge Economic History of Europe*, vol. 2 (2nd ed.), Cambridge, 1987, pp. 175–76.
128. Carus-Wilson, 1944, pp. 32–4; Carus-Wilson, 1987, pp. 627–28; Evans, 1985, p. 41; Harvey, 1973, pp. 27–8; Miller, 1965, p. 68.
129. Britnell, 1986, pp. 64, 174.
130. W. R. Gowers, "The Cultivation of Flax and Hemp in Suffolk in the 14th Century, as shown in the Inquisitiones Nonarum (1342)," *East Anglian; or, Notes and Queries*, vol. 5 (1893/4), pp. 180–83, 200–202; Evans, 1985, pp. 43–4; Godwin, 1967, pp. 42–9.
131. Gowers, 1893/4, p. 181.
132. Miller and Hatcher, 1985, p. 88; Gowers, 1893/4, p. 202.
133. The association of these names with hemp is not without doubt. P. H. Reaney (*The Place-Names of Essex*, English Place-Name Society, ed. A. Mawer and F. M. Stenton, vol. 12 [1935], hereafter *EPN*) supports the attribution for Hempstead, but provides other alternatives (p. 511) which are preferred by E. Ekwall (*The Concise Oxford Dictionary of English Place-Names*, 4th ed., Oxford, 1960, p. 233). Reaney (p. 446) does not pronounce on Impnells, but the thirteenth-century form *Hempenhille* is strongly suggestive of a derivation from the Old English for hemp: 'henep' (Reaney, p. 511 and Ekwall, pp. 233–34). For Hempstall, see Reaney, p. 357.
134. W. C. Waller, "List of Essex Field Names," *Essex Archaeological Society, Transactions*, n.s., vol. 5 (1895), p. 158; vol. 7 (1900), pp. 75, 301; vol. 8 (1903), p. 93 and vol. 9 (1906), pp. 79, 80, 82, 164. See also Evans, 1985, p. 18; J. Field, *English Field Names*, Newton Abbot, 1977, p. 126.
135. *VCH Essex*, vol. 2 (1907), p. 422 and note H.
136. Fines were often levied by manorial lords against those who polluted running water by retting hemp (Evans, 1985, p. 45). See also Miller and Hatcher, 1985, pp. 115, 137.
137. *Stoke by Clare Cartulary*, pt. 2 (1983), p. 265, no. 394.
138. EFF, vol. 1, p. 137, no. 727.
139. *Colchester Cartulary*, vol. 1, 1897, pp. 291, 411.
140. F. Pritchard, "Textiles from Recent Excavations in the City of London," *Textilsymposium Neumünster archäologische Textilfunde* (1981), Neumünster, 1982, pp. 193–208 (p. 193); H. Clarke, *The Archaeology of Medieval England*, London, 1984, p. 136.
141. Salzman, 1923, p. 239; Wilson, 1976, p. 271.
142. Linen markets are documented at Norwich in 1272 (Salzman, 1923, p. 239), as at Kersey (nr. Hadleigh, Suffolk) in 1398/9 (Britnell, 1986, p. 82).
143. Evans, 1985, pp. 2, 27–8, 41; H. D. Traill and J. S. Mann, eds., *Social England, A Record of the Progress of the People*, illustrated ed., vol. 1, London, 1901, pp. 657–58.
144. Miller and Hatcher, 1985, pp. 159, 163.
145. The list of thirty-one mills derives from an as yet unpublished manuscript by L. R. Poos.
146. BLC, p. 385, no. 673.
147. P.R.O. C133.47.8, as cited by Britnell, 1986, p. 14 and n. 37.
148. BLC, p. 52, no. 83.
149. Britnell, 1986, p. 14 and n. 37.
150. EFF, vol. 2, p. 68, no. 45.
151. On the double use of, or conversion of, grinding mills for fulling, see *VCH Essex*, vol. 2, 1907, pp. 381, 385; Britnell, 1986, p. 76.
152. It has been argued that the water powered fulling mill may have been introduced to England by the Templars in the twelfth century (Carus-Wilson, 1967, pp. 189–90). The supposition is based in part on the association of a mill in the Templar survey of 1185 (B. A. Lees, ed., *Records of the Templars in England in the Twelfth Century: the Inquest of 1185*, London: British Academy, 1935, pp. lxxix, 5) with that of a derelict fulling mill mentioned in an extent of Templar holdings at Witham in 1309 (BLC, p. 52, no. 83). While it is possible that the mill(s) in question occupied the same site, it is most unlikely in view of what is known about the developing rural textile industry in Essex that the mill standing in Witham in 1185 was used for fulling. Had it been a manorial mill, would it have taken the urban, semi-urban and even rural lay textile industry a century and more to catch up? More recently, van Uytven (1971, p. 1) has suggested that the fulling mill had been introduced to the woollen industry of France, Northern Italy and England by "the end of the tenth and in the eleventh century."
153. Bridbury, 1982, p. 22; but see also Woodger (1981, p. 69), who indicates that not all chalons were fulled.
154. Carus-Wilson, 1967, p. 188.
155. In the thirteenth century, the capital needed to build a fulling mill would most probably have come from a lay or ecclesiastical landlord, a town corporation, or the king (Carus-Wilson, 1967, pp. 192, 196–201; Carus-Wilson, 1987, pp. 670–71; Heard, 1970, p. 76). The amount of profit available to the fuller would have depended on individual arrangement with the landlord.
156. EFF, vol. 2, p. 54, no. 353.
157. This explanation might suit the case of Ordgar the fuller, who does customary service for the Abbey of Holy Trinity, Caen, at Felstead (Hinckford Hd.) in 1223/4 (Marjorie Chibnall, *Charters and Custumals of the Abbey of Holy Trinity Caen*, London, The British Academy, 1982, p. 97). His appearance in Hinckford Hd., but outside the Haverhill-Sudbury-Halstead triangle, further suggests that his fulling was not associated with the new semi-rural industry, but rather with the rural economy of the manor from which he came. See also the contemporary fuller, Hemming, at Thorp in Tendring Hd. (Appendix 2: *"Fullers=Tenant"*). For a discussion of industry as an outgrowth of underemployment in an agricultural area, see J. Thirsk, 1961, pp. 70, 76, 84–88.
158. The fullers who begin to appear in Hatfield Broad Oak (Harlow Hd., designated above as part of the "Western Horseshoe") *c.* 1270 may similarly belong to the new industry which would grow in the fourteenth century (see *VCH Essex*, vol. 8 [1983], p. 175 and above n. [63]). It is probable that any textile manufacturing in Hatfield Broad Oak was stimulated by the nearby centres of Bishops Stortford and Sawbridgeworth in Herts., and by its location between the Rivers Stort and Roding which flow into the Thames. The town never appears, however, to have become an important centre of textile production, probably in part because the town centre did not lie directly on Stainstreet, the major commercial route running between Colchester and Bishops Stortford (see *VCH Essex*, vol. 8, p. 159).
159. References to the many weavers, tailors and a fuller in the Domesday of St. Paul's are excluded as the source provides evidence of no role but tenant.
160. The charter in which Robert the quilter conveys 12d rent in Clare (Suffolk) has been attributed to the early thirteenth century (*Stoke by Clare Cartulary*, pt. 2, no. 234). In view of what is otherwise known about the industry, a date in the second quarter of the century would seem more appropriate.
161. Because the napper, and stitcher do not occur in active roles, these occupations are excluded from Table 4.
162. Use of the charter as evidence in the process of conveyancing spread from freehold to copyhold land during the course of the

thirteenth century, thus drawing a growing number of people from the lower classes into the property exchange record. It may well be, therefore, that the appearance of such occupations as weaver and fuller in the active roles has more to do with improved record keeping than with the improved economic and social standing of members of these professions. The distinction is not of great importance in the present discussion as the result in distinguishing relative economic status among members of the textile trade as a whole remains the same.

163. Under Profession, 'Merchants' include burellers, chaloners, and drapers; 'Hatters' include coif, hat and hood makers. The occupations of napper, quilter and stitcher, which occur infrequently in the sources and which cannot be grouped with any certainty with another occupation, are not included. Active Roles represent the total number of properties conveyed and or received, rather than the number of transactions recorded for a given profession. Active Roles divided by Inactive Roles produce the Maximum Activity Ratio. The Merchants' ratio of 1.7, divided by the ratio of any other profession, produces the Ratio Relative to Merchants (calculated to the nearest tenth).
164. The proportion of professions in the BLC/EFF sample and in the randomly picked Control group is very similar: merchants 19 vs. 15; tailors 32 each; dyers 7 vs. 6; weavers 13 vs. 16; hatters 6 vs. 5; fullers 10 vs. 17.
165. Burellers and chaloners have been combined with drapers in this calculation because their numbers are relatively small while their roles, and the property types and quantities they held are recognizably similar to those of the drapers.
166. Towns associated in the sample with textile workers are: Barking, Brentwood, Chelmsford, Coggeshall, Colchester, Great Dunmow, Epping, Halstead, Hatfield Broad Oak, Horndon, Maldon, Rayleigh, Romford, Saffron Walden, Waltham Holy Cross, Witham and Writtle (those in Bardfield appear before burghal status was granted). R. H. Britnell (1981, p. 17) accounts for the foundation of 78 markets in the county by this period, but Beresford and Finberg (1973, p. 36 and n. 32) claim that only fifteen had burghal status. Petchey (1980, p. 114, fig. 44) lists 24 towns and 43 rural markets. According to Morant there were 25 market towns, including Colchester, in the middle of the eighteenth century (P. Morant, *The History and Antiquities of the County of Essex*, London, 1768 [rpt. in East Ardsley, Wakefield, 1978], vol. 1, p. xvii). Excluding rural markets, the towns listed by these authorities are largely similar and together provide a total of 33 different places.
167. The napper, stitcher and quilters have been left out of these charts because the napper only occurs as a witness and the two others are associated respectively with only one and two pieces of property each.
168. Uncertainty over the town, suburban or rural location of *terra* makes it difficult to determine what constituted a maximum holding within the confines of a town. A piece of land with a house on it in Colchester is described as being 34 feet wide (BLC, p. 151, no. 243). A messuage in Halstead went with 1.5 acres (BLC, p. 378, no. 663), but a two-acre holding in Waltham Holy Cross was almost certainly arable (BLC, p. 227, no. 396). Within the sources selected 23 pieces of land (as opposed to meadow, pasture etc.) are transferred in town parishes. Eighteen of these are of 3.5 acres or less, and the rest between seven and fifteen acres. It is probable that the latter at least were located in the rural parts of the parishes concerned.
169. Rural weavers and fullers clearly derived a greater proportion of their livelihood from agriculture than did their urban counterparts. The Domesday of St. Paul's shows Randolph *textor* 'akerman' holding 5 acres in Walton, Edward *textor* holding 15 acres in Kirby and Hemmo *fullo* holding 15 acres in Thorp (Appendix 2). The most held by a town weaver is 3 roods (.75 acre), while fullers are nowhere shown holding urban '*terra.*'
170. On the generally superior status of dyers over the other manufacturing trades, see Carus-Wilson, 1987, pp. 645–46; Carus-Wilson, 1967, pp. 223–25, 236–37; and Heard, 1970, p. 65.
171. In one case, Thomas, dyer of Chelmsford, conveys six acres of land in Roxwell. Because of the size of the plot, and because it lay two parishes distant from his place of work, it might have been held as investment property. Such considerations support the belief that the dyers were the most prosperous of the manufacturing tradesmen.
172. Bridbury, 1982, pp. 5–6; Carus-Wilson, 1987, pp. 645–46; Carus-Wilson, 1967, pp. 223–25, 233–37; Heard, 1970, p. 65; Miller, 1965, pp. 68, 73; Salzman, 1923, pp. 196, 199, 226–27.
173. BLC, p. 190, no. 320.
174. This bridge, while promoting trade, attracted drapers and, on one occasion, a dyer.
175. BLC, p. 155, no. 249.
176. Part I, p. 40.
177. BLC, p. 152, no. 245.
178. The continuous presence of drapers John and Richard at Bumpstead Helion in the second half of the thirteenth century points to the growing success of the Stour Valley textile industry and of Haverhill as a market.
179. Chaloners hold properties in Colchester and Horndon, and in Bobbingworth adjacent to Chipping Ongar, Bulmer to Sudbury, Good Easter to Pleshey and Gestingthorpe (equidistant between Sudbury and Halstead) to Castle Hedingham. Another place Leyton, is situated on the River Lee, separated from the Thames and London by the parish of West Ham, and the last at Aveley (Chafford Hd.) on the Thames.
180. In 1259, Thomas the chaloner conveys 37 acres of land in Bobbingworth and Leyton. Because there is no indication of how the acres were distributed between these two parishes, half the amount has been attributed to each in the data file (see Appendix 1).
181. The towns in which tailors are cited are Brentwood, Clare (Suffolk), Colchester, Epping, Halstead, Hatfield Broad Oak, Maldon, Romford and Saffron Walden. They occur as tenants in one or more of the Bardfields in the twelfth century, probably well before Great Bardfield obtained urban status.
182. One of the three associated with Colchester, called Peter, acts also as an agent for a transaction in Bromley (Tendring Hundred), but is not himself engaged in a tenurial role. The others, widely dispersed in the "North-East Quarter," all occur as tenants: John at Heybridge in 1222; Osbert at Dedham *c.* 1240; and Silvester at Wakes Colne *c.* 1250.
183. Part 1, pp. 39, 40, 44–7. In contrast, Britnell (1986, p. 13) indicates that Colchester russet was tailored elsewhere in England.
184. Two royal tailors are included in our lists: Roger de Ros and German. It is also within the realm of possibility that some members of this second group may have been tailors by surname only and who belonged to families whose economic status enabled them to control such things as advowsons.
185. The only other person to appear as an agent is Geoffrey the bureller, acting on behalf of his wife (*Close Rolls [1227–1231]*, London, 1902, p. 578).
186. In comparison, the use of agents to help build estates on behalf of a religious house occurs in Essex in the thirteenth century. See Gervers, 1982, pp. xl–xliv.
187. EFF, vol. 1: p. 70, no. 134/p. 73, no. 18 and p. 73, no. 24, p. 171, no. 965 and p. 193, no. 1105.
188. EFF, vol. 2, p. 10, no. 53, and *Calendar of Inquisitions Post Mortem*, vol. 2 (Edward I, years 1–19), ed. H. C. Maxwell Lyte, London, 1906, pp. 276–77, no. 464.
189. The increase in property types held may to some extent also be a reflection of the growing number of written instruments recording conveyances which were being produced, and of course of their survival; cf. Edward Miller, *The Abbey and Bishopric of Ely*, Cambridge, 1951, p. 150.
190. *CIR*, vol. 2, p. 220.
191. For the extent of a dyer's tenement in Colchester in the fourteenth century, see Britnell, 1986, p. 11.
192. Lambourne also witnesses the presence of drapers from 1235 to 1250. The appearance of these otherwise town-centred occupations in the rural scene points to the special situation of

Lambourne, due at least to the fact that it was the site of a bridge across the River Roding at Abridge.

193. Roger of Hovedon, *Chronica*, vol. 4, ed. William Stubbs, Rolls Series: London, 1871, pp. 33–4 (cited by Carus-Wilson, 1967, pp. 227–28). See also p. 34, 38.
194. Carus-Wilson, 1987, p. 627.
195. Carus-Wilson, 1967, p. 227.
196. This propensity may be due more to the desire for the greater security provided by royal enrolment than to the real value of the transfer. In comparison, the burellers present an even higher appearance ratio of 100% in the active roles in the royal records, while the tailors occur at 88%, the chaloners at 60% and the drapers at 47%. The other professions occur only once in the EFF, or not at all, rendering calculations unfeasible.
197. Heard (1970, p. 90), reports that much Essex cloth was exported for finishing in the Low Countries. The statement is, however, uncorroborated.
198. Carus-Wilson, 1986, pp. 221–23, 227–28; Heard, 1970, p. 76.
199. The occupational name *theleonarius*, translated by R. E. G. Kirk (EFF, vol. 1, p. 64) as 'Tollman,' may also refer to a weaver; see Ronald E. Latham, ed., *Revised Medieval Latin Word-List from British and Irish Sources*, British Academy, 1983 (1965), under *tel/a* and *telo*. The three persons (one man and two women) bearing the name *tele* at Dedham in 1240, and mentioned as tenants in the same document as Robert the fuller and Osbert the tailor, may also have been weavers (of burel).
200. See Appendix 2. Also, in 1235, an Arnewey, *son* of Robert the weaver, quitclaims two parcels of land in Aveley of 3 and 4 acres each. Whether Robert held the same, however, cannot be determined (EFF, vol. 1, p. 100, no. 372).
201. The annual rental of this same messuage by 1272 was 36d (BLC, p. 155, no. 249).
202. Cf. Carus-Wilson, 1967, pp. 233–37; Miller, 1965, p. 68.
203. Richard *coifer* owed 10d rent in the town parish of Haverhill (Suffolk). The nature of the property is not specified, but it would seem from the context to imply a tenement. Of six tenants mentioned in the document, Richard paid the lowest rent. A locksmith paid 14d and a brewer 20d (BLC, p. 260, no. 459). In further comparison, William *caperun*, domiciled two parishes south of Haverhill in the rural parish of Steeple Bumpstead, paid 4d rent for his messuage. The evidence is slim, but if the tenants' total rents are described, and if a relative equality can be posited between the *coifer* and the *caperun*, then one might propose that a townsman in the trade paid something like two and a half times as much for his holding as did his rural counterpart. Such economic distinctions would surely have determined, in part, whether a hatter were to live in a town or close to one.
204. The one rural fuller to appear in the Domesday of St. Paul's (1222) is recorded as holding fifteen acres. Like the weaver from the same source who holds as much in a neighbouring parish, he clearly gained part of his livelihood, if only a small one, from agriculture (cf. McIntosh, 1986, p. 152).
205. With dyers: BLC, pp. 325 no. 573, 350 no. 618, 385 no. 673; *Colchester Cartulary*, vol. 2, p. 331; *Hornchurch Register*, no. 329; with hatters: BLC, p. 326 no. 574; with tailors: BLC, p. 361 no. 636, and EFF, vol. 1, p. 137 no. 727; with weavers: E.R.O. D/Du 564/1; *Domesday of St. Paul's*, p. 42. Hats could not be fulled by machine (Salzman, 1923, p. 223); according to Carus-Wilson (1967, p. 187), the fulling of hats and caps with hand-wielded clubs was still carried on in France in the eighteenth century. On the need for cooperation between fullers and dyers, see Carus-Wilson, 1987, p. 627.
206. On their questionable land-holding status, see Carus-Wilson, 1967, p. 236 and n. 3. As employees, see *ibid.*, pp. 233–38; Miller, 1965, p. 68.
207. On foot-fulling, see Carus-Wilson, 1987, p. 638; see also Pritchard, 1982, p. 199.
208. EFF, vol. 3, p. 57, no. 548; p. 112, no. 1090; p. 148, no. 1488; p. 187, no. 36; p. 210, no. 279.
209. See Britnell, 1986, p. 77. Rickwood (1903, p. 151) identified Gilbert Agote, "the richest of those connected with the woollen trade" in Colchester in 1301, as a fuller, but his economic status would indicate that he was anything but.

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An Essex Dunwich: the lost church at Little Holland Hall

by David Andrews and Howard Brooks

Summary

Development in the grounds of Little Holland Hall provided an opportunity to establish the complete ground plan of the church. Four building phases were identified, through none are securely dated. The older parts of the Hall were also recorded.

Introduction

Little Holland Hall is a red brick farmhouse which fronts on to the North Sea, about 200 yards from the existing sea wall (Fig. 1). The extensive farm buildings shown on old maps have today disappeared almost without trace. To the east of it, are two large adjoining ponds, identified by the Royal Commission on Historical Monuments (1922, 169) as millponds, and in the front garden the remains of a church (Plate 1). As such, it is one of the hall/church complexes characteristic of the Essex countryside. Little is known of its history beyond the fact that its proximity to the sea is said to have been the cause of the abandonment of the church and also the failure of the settlement. The site of the church was no longer evident and had all but disappeared from public consciousness when in 1987 Anglia Secure Homes secured consent to erect sheltered housing the grounds. With the financial support of Anglia Secure homes, Essex County Council's Archaeology Section carried out a watching brief as the works proceeded, made a record of the Hall itself, and exposed the foundations of the church, so preventing them from being damaged in the course of the works and making it possible to lay them out as a feature of the newly landscaped grounds.[1]

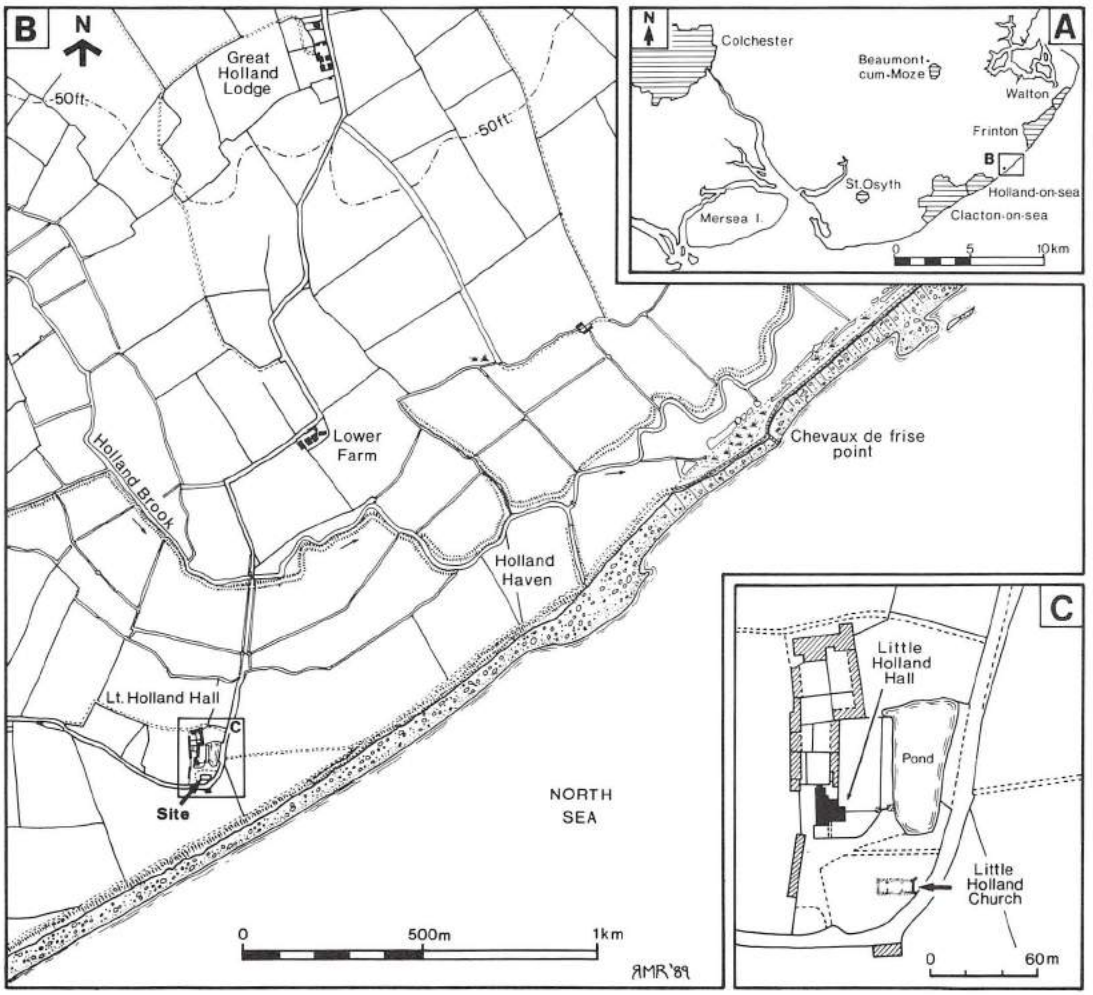

Fig. 1 Location map with inset plan of Hall and outbuildings based on 2nd edition OS maps, 1897.

Plate 1 View of the site of the church (foreground) and the Hall, subsequent to excavation and the construction of the sheltered housing.

Historical evidence

The manorial history may be briefly summarized.[2] In the late 10th and early 11th centuries, a unit of 5 hides at Holland had belonged to Ely and then to St Pauls, London (Reaney 1940). Domesday records two manors at Holland. That identified as Little Holland formed part of the extensive holdings of count Eustace of Boulogne. Fourteen inhabitants were listed, and it was valued at £4. From the Honour of Boulogne it passed to the earl of Guisnes, to the bishop of London, and then to the Batayle (or Betaile) and Talworth families. The latter held it from the very end of the 13th century until some time probably about the middle of the 15th century when it passed to the abbey of St Osyth, thereby coming into the possesson of the Crown at the Dissolution. It was then granted to the Arbalaster family, passing to the Drury family and then to the Darcys who held it for most of the 17th century. For much of the 18th and 19th centuries, it belonged to the Hills family of Colne park. By the end of the 19th century, development at Clacton and Frinton meant that the lordship of the manor was valuable for quarrying rights on the foreshore, and potential rents from bathing machines.[3]

In the later Middle Ages, probably by 1285, and until the Reformation, the church was appropriated to the abbey of St Osyth, which held lands in the parish.[4] The history of the church before that, and its dedication, are unknown. Its ruination occurred in the 17th century. Visitations in 1633 and 1639 reveal it to have been in a poor state of repair, though still upstanding.[5] The Parochial Visitation of 1650 stated that there was not "above Eight ffamelyes in the said parish, and they are scittuate neare Claxton Magna. Wee therefore conceive it Convenient to have the parish of Holland Parva annexed thereto . . ." (Smith nd, 316). It was presumably as a result of this decision that the church was dismantled. Thus, when the archdeacon visited in 1683, he was able to report that "The Church is adowne and has bin downe for about 24 yeares", and that the three bells were lying in St Thomas Darcy's yard (Pressey 1942-45, 150). A faculty granted in 1696 to move these bells to Great Clacton declared that the church had been "for at least these forty years demolished and the place almost eaten up by the seas, so that it is almost impossible to rebuild the same: And that the inhabitants of Little Holland do now repair to Much Clackton . . . to hear divine Services and enjoy all the other priviledges and conveniences of the said church".[6] These estimates have the ring of oral tradition passing into legend and myth, but if correct the church was demolished *c.* 1656-59. The visitations contain a little information on the appearance of the church, mentioning a buttress on the north side, a porch, a chancel door, and a steeple.

As Great Clacton church is only two to three miles from Little Holland church, it need not be concluded

that the decay of the church and the community were one and the same thing. The historical evidence, such as it is, does not give any early hint that Little Holland was doomed to failure. The lay subsidies of 1319-20[7] and 1327 (Ward 1983, 10) record 14 and 12 taxpayers respectively, and though the assessments were low, the recorded population was not conspicuously small compared to other places. In 1428, Little Holland was exempted from taxation because it had fewer than 10 inhabitants. The Hearth Tax returns of 1662, 1671 and 1673 record 9-10 households.[8] In the 19th century, the population generally numbered 70-80 people (VCH II, 351). Population estimates are always fraught with difficulty, depending on the multipliers used for the relatively small proportion of the population recorded in tax returns, but assuming one of 4-5 times, it could be suggested that the inhabitants were about the same as in the 19th century from Domesday until the 14th century, with a decline from the end of that century until the 17th century.

The apparent drop of population in 1428 may have been provoked not simply by the well known economic recession of the period. By this time, Little Holland was suffering from the ravages of the sea. In 1383, Sir Albred de Vere had granted the abbey of St Osyth the advowson of Elmstead partly to make up for the loss of land on the coast through erosion (Reaney 1933). Grieve (1959, 12) links this to a very severe storm in 1376-77. Newcourt (1710, II, 243, 333) commented on the confirmation in 1411 of the appropriation of Elmstead church to St Osyth that it was sought partly as compensation for lands at Little Holland which had been made unprofitable by inundation. Today, it is difficult to imagine the original topography of the environs of the Hall. To the north of it there flows the Holland Brook, and on the Ordnance Survey map of 1838 the land between is indicated as "Little Holland Marshes". A deed of 1848[9] lists the fields attached to the Hall, about half of which had names in *marsh*. The site would seem therefore to have been vulnerable to flooding not just from the sea to the south but also from the north. It is however from the south that loss of land must have taken place. Sea level along the east coast is rising by as much as 100 mm per century (Wilkinson 1988, 108). Holman cited Symonds *Collectanea* of *c.* 1640 as declaring it to be "so close to the sea that it looses (sic) daily."[10] According to White's Directory of 1863, more than 40 acres had been lost in the last 30 years. It is therefore simplest to regard loss of land through coastal erosion as the principal reason for what seems to have been economic decline at Little Holland. It would not have been unique in this: further down the coast, Milton, virtually all record of which has been swallowed up in the urban sprawl of Southend-on-Sea, was lost to the sea at the end of the Middle Ages. In 1327, it is known to have lost 20 acres of what was probably arable, and 120 acres of marsh (Nichols 1925). Morant (1768, I, 296) wrote of it that it had "a Church or Chapel of ease, of which the remains were visible not long ago at low-water mark".

The watching brief

A sporadic check was kept on the groundworks for the sheltered housing, but no clearly recognizable archaeological features were identified, and no artefacts beyond a few sherds of post-medieval pottery were found. This was particularly surprising in the case of a soakaway trench about 15 m long aligned north-south to the west of the church, in what must have been the churchyard. Here the natural sand was at a depth of 540 mm. Above it was what seemed to be an old topsoil, overlain by dumped gravel and then the existing topsoil. This suggests that ground level on this side of the Hall has been raised, perhaps in response to the threat of flooding. The absence of graves may be explained by a failure to recognize them in somewhat unfavourable conditions, or the decomposition of bone in an acid soil, but in the past graves have been found "to the south-east of the church, both under and on the far side of the Frinton Road B1032" (Walker 1973). It may be that the graveyard never became full enough for burial to be extended to the less favoured west and north sides of the church. Landscaping round the Hall included the dredging of the ponds. Nothing was found here that obviously indicated their origin or former use.

The excavation of the church

The site had been investigated before. In 1960, Mr K. Walker located the foundations by probing and cutting small holes, and calculated the size of the building (Walker 1973).[11] Subsequently, in 1969 and possibly again in the early 1970's, a local group dug trenches into the site. The results of this work were never made public, but it is clear from photographs taken by Mr Mike Corbishley[12] that foundations and human remains were exposed. Walker again visited the site and sketched three skeletons near the west end of the church. According to Mr Corbishley (pers. comm.) it appeared that the bones had been laid out for viewing, and were not *in situ*. Nevertheless, these skeletons had probably been dug out of the graveyard west of the church, or more likely (because of the lack of bones seen in the watching brief, see above) south of the west end of the building.

The 1969 trenches had not been filled, which contributed to the general unevenness of the site. The east end was heavily overgrown, and there was evident of recent bonfires over the west end of the church, with resulting disturbance of the walls. The only part of the church standing in 1988 was part of the east wall and the north-east buttress. A portion of the south-east buttress was found out of position, to the east of the east wall.

Stratigraphy was simple. The church foundations (see below) were cut directly into natural subsoil and were generally sealed by topsoil and turf, which in turn was sealed by a sandy layer, spoil from the 1969 excavations.

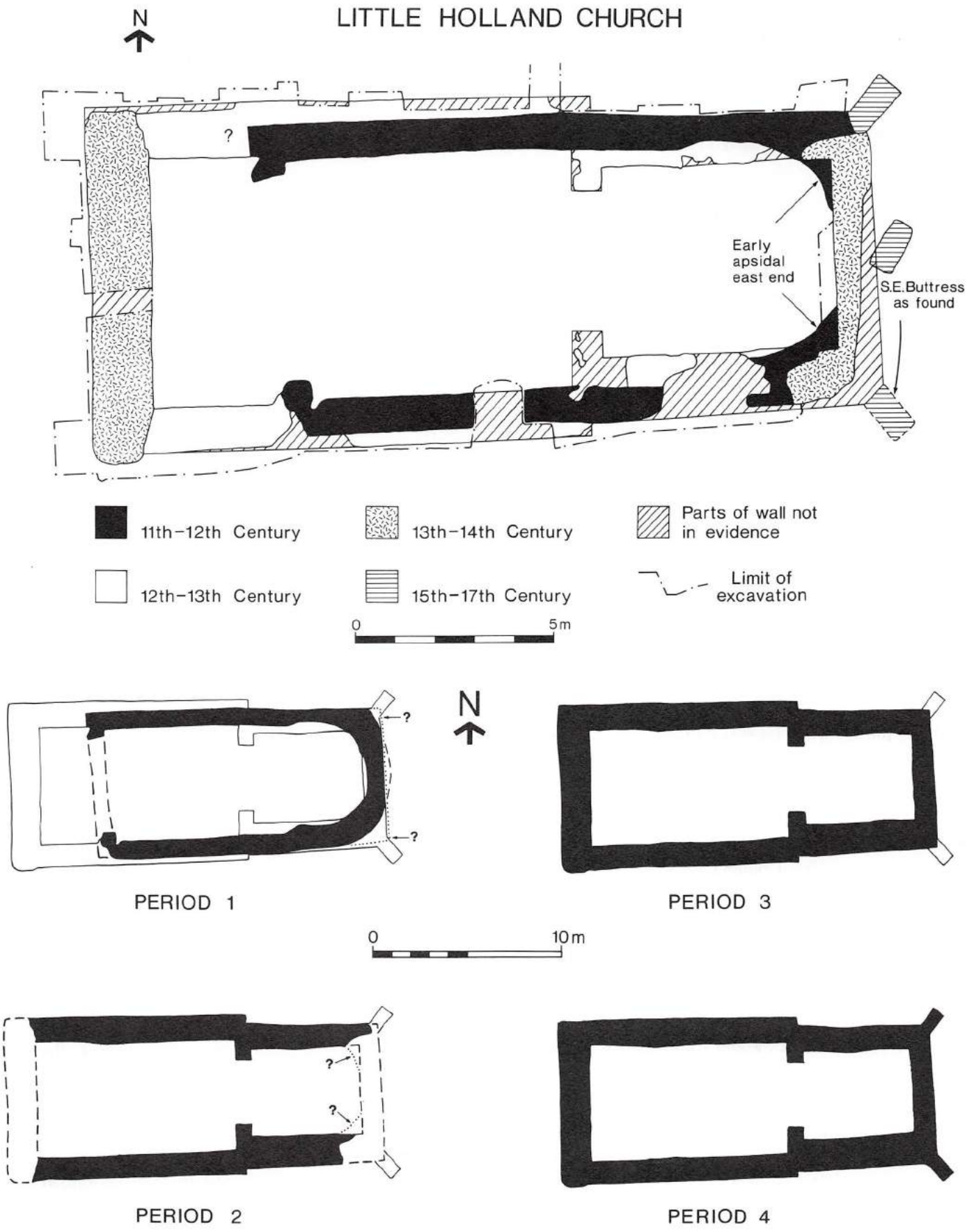

Fig. 2 Plan of church showing identified phases, and the development of its ground plan.

Plate 2 The foundations of the church, looking east. Scales 2 metres.

The church foundations have been interpreted as representing four building periods (Fig. 2). The criteria for this interpretation were the clear longitudinal joints visible in the north and south walls (showing where later work joined earlier), and also the difference in building materials employed in the different periods (Plate 2). It must be stressed that dating of the building phases is largely conjectural. There were no finds from appropriate contexts, and so the phasing relies on comparison with dated buildings and such excavated churches as Rivenhall, Essex (Rodwell and Rodwell 1986), Wharram Percy, N. Yorks (Bell and Beresford 1987), Cressing, Essex (Hope 1984), and West Bergholt, Essex (Turner 1984).

Pre-Church activity

One stratified sherd of Middle Iron Age pottery, one sherd of Samian, and fragments of Roman brick found loose on the site and built into the church walls, are the only evidence of pre-medieval activity. Despite current oral tradition, there was no evidence of Saxon or Viking activity.

Period I Early Medieval (11th-12 centuries)

The construction of the first church defines period 1. It was single-celled, with an aspidal east end. Only the foundations survived. They were built entirely of unmortared septaria blocks laid in clay. Internal dimensions were 44′ by 19′6″ (13.4 by 6.0 m) with foundations consistently 2′6″ (0.8 m) thick. The depth of the foundations (and level of the floors in this period) cannot be ascertained because of later robbing, but at the east end, there were three courses (approx 0.5 m deep) of masonry sealed by the period 4 wall. As can be seen from Fig. 2, there was a slight misalignment in the laying out of the apse, which failed to join up neatly with north and south walls. Although it would be an interesting idea to see this as a later apse added to an earlier building, there is insufficient evidence to support this conclusion.

Period 2 Medieval (c. 12th-13th centuries)

A major rebuilding of the church was undertaken at this time. The earlier church was lengthened to the west by about 4 m, and divided into nave and chancel, the apsidal east end being squared off. Rather than the earlier building being demolished, the new walls seem to have been "wrapped" around the old ones. As in period 1, all work was in unmortared septaria blocks.

Extra thicknesses of masonry were added to the outside of the nave walls, and to the inside of the walls at the east end to form the new chancel. Projections at the point where nave and chancel join must indicate the existence of a chancel arch. Both the east and the west walls of this period were destroyed by the period 3 rebuilds. Bearing this in mind, the period 2 church was 56′6″ (17.2 m) long, and 19′6″ (6 m) wide in the nave,

15′6″ (4.7 m) in the chancel. The walls were consistently 4′3″ (1.4 m) thick.

A group of undated cut features found inside the church could be associated with this period of rebuilding, some of them possibly representing scaffold holes. The eastward extension of the nave would probably have served to accommodate a belfry (see above), either at this or a later phase.

Period 3 Later medieval (c. 13th-14th centuries)

The complete rebuilding (including foundations) of both west and east walls was undertaken in this period. The new work was in mortared septaria with flint, lying on a mortar bed at the west end, but directly over period 1 walls at the east. The width of the new foundations matches the earlier period 2 walls closely, except that the east wall may have been slightly thicker (5′; 1.5 m).

Unlike earlier periods, some of the superstructure survives from this period, consisting of three courses of wall face (0.4 m) with a further 0.5 m of wall core above the top of the period 1 wall at the north-east corner (Plate 3).

Plate 3 The buttress at the north-east corner, showing later repairs. Horizontal scale in centimetres and decimetres.

Period 4 Late medieval to early modern (c. 15th to mid-17th centuries)

The diagonal buttresses at the corners of the chancel contained a large proportion of brick, and would therefore seem to be later additions to the original fabric. The top courses of the north-east buttress had been repaired in a fresher brick than in the body of the buttress, and it is likely that this is the repair called for in the visitation of 1633, and presumably completed before that of 1639 which makes no mention of it.

The only surviving floor levels must also belong to this period. Lying over the period 1 apse was an 0.35 m depth of foundation material supporting a single row of red bricks (dimensions: 230×105×50 mm) of 16th or 17th century appearance. Set into the east edge of this brick floor were several fragments of limewashed wall plaster, which was probably contemporary with (or else later than) the bricks. Both the plaster and paving could date from the time of the 1633 visitation, which noted that "Their chauncell wants pavinge and glazinge, and the walles thereof want pargettinge round about, and whitinge with inside".[5] Two square floor tiles were found in the excavation (see below) and must also be of 17th century date.

Demolition and abandonment (c. 1659 to 1988)

The date of demolition of the church has been discussed above. Several archaeological deposits bear witness to the demolition: the first is deposit of crushed mortar lying over the brick floor, most likely left behind by stone robbers; and the second a layer of septaria chips deposited at the east end, again presumably by stone robbers, subsequent to the removal of the brick floor.

Stone robbing following the demolition of the church reduced the walls to below ground level, with the exception of the northern part of the east wall. The 1951 Ordnance Survey map shows both buttresses on the east wall as still standing, but by 1972 the southern one had been pushed over to make way for a new fence (the whole of the position of this buttress now lies outside the property boundary).

Apart from stone robbing, other recent activities on the site include several excavations, and bonfires over the west end (see above).

The Finds

These were very few, consisting of a little pottery and other miscellaneous objects, and some building materials, all from contexts associated with recent diggings on the site of the church. The pottery was all post-medieval or modern, mostly the the latter, apart from a Middle Iron Age sherd and a sherd of probable Colchester samian (bowl form 31) datable to the second half of the 2nd century AD.

The building material is of more interest, for clues as to the appearance of the church. From its walls derived three pieces of Roman tile, and some pieces of stone and several fragments of brick. Apart from the septaria from which the foundations were made, three types of building stone were present. Most of the pieces were of Caen stone, but there were also single blocks in a stone resembling chalk but rather too sandy to be true chalk, and in a coarse shelly Jurassic limestone. Generally these pieces have only one or two dressed surfaces, but amongst the Caen stone there was a large block of roughly worked ashlar, and two pieces about 70 mm high with a chamfered face, clearly from a weathering course above a plinth or else a string course. None of the bricks were intact, but all were fairly thin (54 - 61 mm) and of Tudor type.

From the roof were several pieces of pegtile; and the floor, a possible flooring brick 125 mm wide and at least 33 mm thick, and two square tiles. These have sides 136 mm long, and were 22 mm thick. They are in a fine orangey fabric, are well made, and relatively little worn. They could date from the repaving which the 1633 visitation said should be carried out.

The hall

Superficially, the Hall presents a uniform appearance that belies its age and the numerous building phases that have contributed to its evolution. The building is in red brick, the projecting southern part of the west range having a parapet at roof level. Internally and externally, it has been totally refurbished, much of the work having probably taken place in the 19th century. Nor has the Hall been neglected in recent times, the roofs in particular having been replaced in this century. This is unfortunate, as behind the brickwork the west and south wings are timber-framed. Relatively little opening up took place during the conversion of the hall to a warden's residence and community centre, but there was sufficient to show that at the south-west corner there is a cross-wing with a stair turret behind it, and to the east an adjoining unit forming the south wing. This L-shaped building was enlarged first by a timber-framed extension on the north side of the stair turret, and then by the addition of a range in the angle of the 'L'. The construction of a kitchen block by Anglia Secure Homes will have made this agglomeration of buildings almost square in plan.

The sketch in Fig. 3 records those original timbers that were exposed during the refurbishment of the Hall. The cross-wing and stair turret are the oldest parts of the building and apparently contemporary. The cross-wing comprises a single room at the ground and first floors. A binding joist runs east-west across the structure. The common joists, charred by fire damage, are jointed into it with soffit tenons with diminished haunches. The joists are wide and flat (180 - 190 mm wide, 130 mm deep) and have chamfers with step stops. Whereas they simply rest on the girt of the south wall, they are jointed into the north one, much of the framing of which was visible. In this wall, a pegged horizontal timber 1.86 m above the ground cill suggests a door immediately to the east of the existing one into the room. At the first floor, the top plate is only 1.56 m above the floor, indicating that the room here was either originally open to the roof or ceiled in at collar level.

The stair tower, now the entrance lobby, is revealed as such by a joist on the east side of its floor set at right angles to the other joists, framing an aperture through which the stairs would have passed to the first floor. The

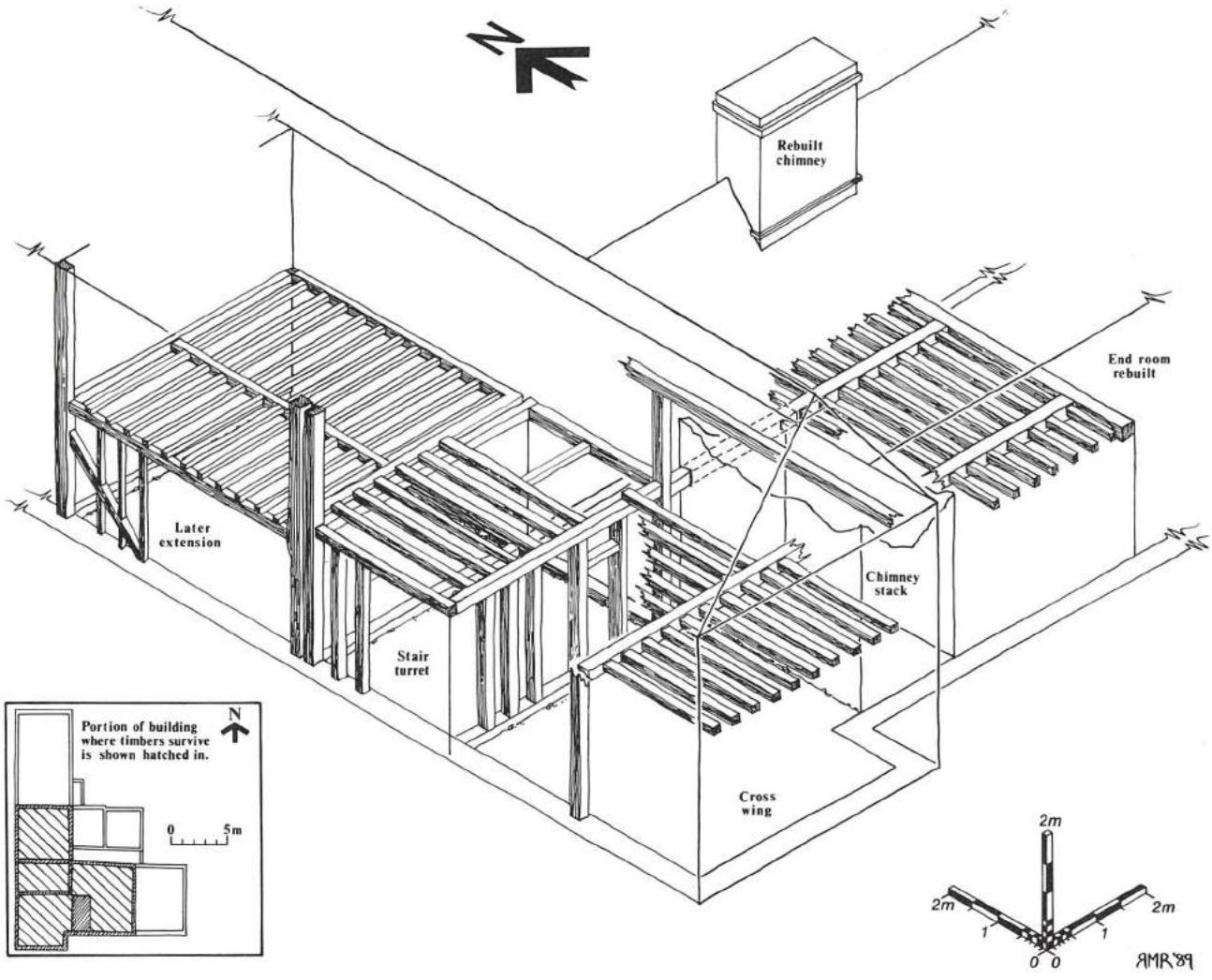

Fig. 3 Isometric drawing of the Hall, showing timbers revealed during restoration.

other joists run north-south, and are tenoned into the girt of the cross-wing but simply rest on the north wall of the stair tower. At the first floor, the wall between the cross-wing and the stair tower preserves the original wattle and daub: the laths are flush with the studs, set tightly together with gaps less than 10 mm between them, and horizontal laths nailed to the studs are lashed with twine to the vertical ones. The north plate of the stair tower still has the original rafter feet attached to it, showing that there was a hipped roof on this side of the building.

On the east side of the cross-wing, there is a large chimney stack about 3.5 m long by 2.0 m wide, built of well-made bricks measuring 50×110×230 mm. Since this stack had only, so far as it is possible to tell, a fireplace to serve the unit on the east side of the cross-wing, and since the first floor of this unit is framed with two massive bridging joists running east-west, the most northerly of which is built into the stack and apparently integral with it, it is clear that this unit and the stack are later than the cross-wing. The fireplace is large, 2.5 m wide but now partially blocked, with a huge timber lintel running the full length of the stack. The north side of the stack at the ground floor has been cut back and the brickwork is rough-faced, but the scar of a wall that projected northwards can be seen. Whether this indicates the former existence of brick buildings in this area is unclear. To the west of this scar, the side of the stack steps inward forming an angle that retains its original thin lime plaster, in which three horizontal slots at intervals of 12-13″ show that this was a cupboard.

Of the unit east of the cross-wing that forms the south range, only a single room is preserved, the room at the eastern end having been entirely rebuilt in the 19th century with plastered walls in imitation of wooden panelling. Features that confirm that this unit is later than the cross-wing include lamb's tongue chamfers with single notches on the bridging joists, and the proportions of the common joists, which are higher than they are wide (100 mm wide by 150 mm high). The common joists have soffit tenons. They are unusually short on the south side of the building, which could well have been jettied, though evidence for this is wanting.

On the north side of the north bridging joist, there is no chamfer, and it is probable that there was a partition here separating the room from an outshot. The north side of this would have been on a line with that of the stair turret. Today, this part of the wing has a catslide roof, and this arrangement seems to be original, for in the roof the top of the frame and original wattle and daub above the east wall of the room survive. A post and a brace were both housed to support purlins at a different level on each side, as would be the case for a catslide.

The extension made to the stair tower is almost square, with a side dimension of about 4.8 m. The floor of this is framed with a bridging joist running north-south with thin common joists (80 mm wide, 100 mm high) with soffit tenons. The walls have primary bracing, with brick nogging which seems original, the bricks resembling those of the stack in the south range.

There is little evidence to date these buildings. The use of soffit tenons in the cross-wing suggests it was built after 1500 (Hewett 1980, 281-2). The lamb's tongue chamfers, the character of the brickwork of the stack and its general design with the outshot and catslide roof, point to a 17th-century date for the construction of the south range. The primary bracing on the north side of the stair turret shows this to be the latest element in the timber-framed parts of the house, perhaps 18th century. The historical sources do not reveal who might have been responsible for these rebuilds. However, it could be argued that there might have been rebuilding when the manor passed out of the hands of St Osyth at the dissolution in 1539, in which case the Arbalaster or Drury families might have built the cross-wing, whilst the Darcys probably built the south range as they held the manor for much of the 17th century.

Discussion and conclusions

The earliest phase of the church at Little Holland as revealed by excavation was single-celled and apsidal, a new example to add to the relatively large group of such churches known in Essex (*cf.* Turner 1984). It is completely undated, but by analogy with other examples can be assigned to the 11th-12th centuries. It is much older than the first documentary references to it at the end of the 13th century.[13] Presumably it was originally a private chapel of the lord of the manor, and later achieved parochial status. Its proximity to the Hall certainly indicates this to have been the case, assuming this has not shifted position.

As always, the investigation of a church site takes us to the roots of the medieval settlement pattern, and reveals how little we know about it. In the past, it has been assumed that isolated churches like Little Holland mark the site of deserted medieval villages. Whilst it is clearly a memorial to a community that has all but disappeared, it is uncertain to what extent it was a village in the conventional sense of the term. The classic nucleated village clustered round church and green, and surrounded by open fields, is the exception in Essex. Instead, settlement seems either to have been always dispersed, or to have become so at such an early date that no evidence has been left of it in the landscape or the documents. At Little Holland, apart from the burials in the churchyard, no trace has been found of a settlement: not a sherd of pottery, not an archaeological feature, though it has to be admitted that with the exception of the church, the investigation was unsystematic and small scale. Had there been a nucleated village, the possibility has also to be considered that it lay to the south, and that its site has been consumed by the sea, as at Dunwich in Suffolk. Coastal erosion is certainly the factor that seems to have caused the decline of the settlement, reducing the area of farmland and no doubt also

affecting its seaward communications and viability as a landing place.

In their survey of Essex churches, the Rodwells (1977) wrote of Little Holland church, 'The whole area is now so disturbed that it may be regarded as archaeologically destroyed'. This is one statement we are happy to qualify. It is however unfortunate that no discoveries were made that has made it possible to set the church in the wider context of landscape and settlement history.

Acknowledgements

Thanks are due to Colin Andrews and Barry Everitt, the site agents, whose active help and interest were invaluable; to Dave Stenning for advice on the fabric of the Hall; to Kenneth Walker and Ray Powell for providing information on the history of the site and help with the historical sources; to Kenneth Walker and Mike Corbishley for supplying their own photographs of the church; to Nigel Brown and Colin Wallace for identifying the Iron Age and Roman pottery respectively; to Ian Betts of the DUA, Museum of London, for advice on the building stones; and to Jonathan Day, Simon Doneghan, Rachel Morse, Luke O'Sullivan, Cathy Watson, Chris Webb and Miles Willett for their assistance in exposing and laying out the church foundations.

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Notes

ERO = Essex Record Office

1. The excavation and laying out of the church was the work of Howard Brooks. David Andrews looked at the Hall whilst it was being refurbished. An archive on this work, together with the finds, is stored at the Colchester and Essex Museum.
2. For more details, see Morant (1766, vol. I, 477-8) and Holman's MSS notes (ERO T/P 195/8), on which this account is based. Kenneth Walker doubts whether Morant is correct in believing the manor to have belonged to St Osyth, as it seems not to be listed amongst its property at the dissolution.
3. ERO sale catalogues of 1892 (B4854) andf 1901 (B4841).
4. See *Feet of Fines for Essex*, vol. II, 1913-28, Colchester: Essex Archaeological Society, p. 45, for a vicar at Little Holland in 1285; and *Taxatio ecclesiastica Angliae et Walliae auctoritate Nicolai IV*, Record Commission, London, 1802, for St Osyth having property at Little Holland in 1291.
5. ERO D/ABV 1, p. 2, 6.
6. ERO TA/366.
7. ERO T/A 564.
8. *Inquisitions and assessments relating to Feudal Aids; with other analogous documents preserved in the Public Record Office, AD 1248-1431*, vol. II, London: HMSO, 1900, p. 190; and for the Hearth Tax, ERO Q/RTh 1, 5, 8.
9. ERO D/DB T716.
10. ERO T/P 195/8.
11. A sketch and photographs are held in the Essex Sites and Monuments Record (SMR).
12. Copies in SMR.
13. See Powell 1953 for lists giving the periods in which Essex churches are first recorded; and note 4 for the earliest references to a church at Little Holland.

Biobliography

Bell, R. D. and Beresford, M. W., 1987 — *Wharram. A study of settlement on the Yorkshire Wolds. Volume III. Wharram Percy: the church of St Martin*, Soc. Medieval Archaeol. Monograph **11**.

Grieve, H., 1959 — *The great tide. The story of the 1953 flood disaster in Essex*, Chelmsford: Essex Country Council.

Hewett, C. A., 1980 — *English historic carpentry*, Chichester: Phillimore.

Hope, J. H., 1984 — Excavations at All Saints Church, Cressing, Essex, 1979, in *Four Church Excavations in Essex*, Essex County Council Occasional Paper **4**, 1984, 28-42.

Morant, P., 1768 — *The History and Antiquities of the County of Essex*, London.

Newcourt, R., 1710 — *Repertorium ecclesiasticum parochiale londinense*, London.

Nichols, J. F., 1925 — New light on the history of Milton Hamlet, *Trans. Southend Antiquarian Hist. Soc.*, **1**, 172-81.

Powell, W. R., 1953 — The making of Essex parishes, *Essex Review*, **62**, 6-18, 32-41.

Pressey, W. J., 1942-45 — Visitations held in the archdeaconry of Colchester in 1683, *Trans. Essex Archaeol. Soc.*, n.s. **23**, 145-64.

RCHM. — *Royal Commission on Historical Monuments (England). Essex*, vol. III, 1922, London: HMSO.

Reaney, P. H., 1933 — Earthquake and inundation at St Osyth, *Trans. Essex Archaeol. Soc.*, n.s. **21**, 136-7.

Reaney, P. H., 1940 — Holland, Ely and St Pauls, *Trans. Essex Archaeol. Soc.*, n.s. **22**, 351-2.

Rodwell, W. J. and Rodwell, K. A., 1977 — *Historic churches — a wasting asset*, Counc. Brit. Archaeol. Res. Rep. **19**, 1977, 110.

Rodwell, W. J. and Rodwell, K. A., 1986 — *Rivenhall: Investigations of a villa, church, and village, 1950-1977* Chelmsford Archaeol. Trust Rep. **4** (Counc. Brit. Archaeol. Res. Rep., **55**) 1986, 123.

Smith, H. nd. — *The ecclesiastical history of Essex under the Long Parliament and Commonwealth*, Colchester: Benham.

Turner, R., 1984 — Excavations at St Mary's Church, West Bergholt, Essex, 1978, in *Four Church Excavations in Essex*, Essex County Council Occasional Paper **4**, 1984, 43-63.

VCH. — *The Victoria History of the County of Essex*, vol. II, ed. W. Page and J. H. Round, London: Constable, 1907.

Walker, K., 1973 — Little Holland church, *Essex Archaeology and History*, **5**, 234-35.

Ward, J. C., 1983 — *The medieval Essex community. The Lay Subsidy of 1327*, Essex Historical Documents 1, Essex Record Office Publications no. 88.

Wilkinson, T. J., 1988 — *Archaeology and environment in south-east Essex; rescue archaeology along the Grays by-pass, 1979/80*, East Anglian Archaeology, **42**.

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The hospital of St Leonard's at Newport

by David Andrews and Bernard Nurse

Summary

The redevelopment of the Carnation Nursery site provided an opportunity to check for any remains of St Leonard's Hospital, and to bring together what little is known about its history. Burials associated with the Hospital cemetery were found, but there was no clear evidence of any buildings. Moulded stones reused in boundary walls probably come from a chapel.

Introduction

The small town of Newport presents three archaeological mysteries: it is thought to be identifiable with *Wigingamere* where Edward the Elder founded a burh in 917 (Haslam 1985, 46); it had a castle, the location of which is unknown though it is thought to be somewhere near the Grammar School; and it had a medieval hospital about which little is known and of which all trace has vanished. The existence of the latter is commemorated by the so-called Leper Stone, a large boulder, a glacial erratic in origin, which stands on the verge on the east side of the former All (now B1383) or Cambridge road, just north of the town. Also known as the "Great Stone" or "Newport Big Stone", it is said that food and alms were placed on it for the lepers resident at the hospital. Better evidence for the Hospital is the survival in the adjacent wall along the road of a number of moulded stones. Until 1907, a building known as Hospital Farm stood close to the Leper Stone, and the field to the north of the farmhouse used to be indicated on Ordnance Survey maps with a cross and the caption "Site of hospital" (Fig. 1). Hospital Farm was demolished to make way for glasshouses where originally carnations, and more recently tomatoes and cucumbers, were grown. When in 1985 new glasshouses were built set back from the road and the old ones pulled down to make way for five houses, it was clearly important that the site should be investigated for any remains of the hospital. At the same time, the opportunity has been taken to reassess what little is known of the hospital's history.[1]

The documentary sources

The fullest account of St Leonard's Hospital to date is that by R. C. Fowler in volume 2 of the Victoria County History of Essex published in 1907 (p. 190-1). This description does not cover the period up to the dissolution in 1543, and when he wrote it, Fowler was unaware of the considerable quantity of relevant material in the archives of Westminster Abbey, including the early 13th century foundation charter which was known to Morant (1768, II, 585).

In the VCH, Fowler wrote that "The hospital of St Mary and St Leonard, Newport, appears to have been founded about the middle of the twelfth century", a statement upon which he later shed doubt when he learnt of the existence of the foundation charter (Fowler 1911). The mid-12th century date relied on the evidence of a small gift by Henry II of land to the value of 2 shillings to the infirm of Newport which is first recorded in the Pipe Rolls for 1156-1157, and which recurs almost annually in the Pipe Rolls until at least 1220.[2] The manor of Newport belonged to the Crown until 1243 when it was given to the earl of Cornwall (Denholm-Young 1947, 169). The payments can be seen as a charitable gesture by the lord of the manor. Whilst the amount concerned would hardly have maintained a hospital, it does have the character of an endowment that might have been made to an institution which had other resources, and raises the possibility that Fowler was initially correct in assigning the hospital to the mid-12th century. The foundation charter in the Westminster Abbey archives is undated, but is considered to have been drawn up in the reign of king John.[3] By this charter, Richard de Newport declares that he has founded the hospital in honour of St Mary and St Leonard, and has appointed a chaplain Peter as master. He grants lands and rents for the sustenance of the brethren, priests and laymen, and says that the brethren will have free election of masters at vacancies.

This charter is also transcribed in the 15th century cartulary of St Martin le Grand,[4] where it is preceded by the transcript of another charter dated 1218 by which Richard de Newporte confirmed the election by the brethren of a new master on the death of Peter (see also Fowler 1911, 269). It is clear therefore that the hospital was originally a lay foundation, and the VCH's assertion that "the hospital was of the patronage and jurisdiction of the dean of St Martin le Grand" needs modifying. Although there is no record of the grant of the hospital in their cartulary, the royal chapel of St Martin had been given the parish church of St Mary Newport by Henry I, and the church had been assigned to the dean in 1158. By the end of the 13th century, they were claiming the patronage of the hospital as well.

The involvement of St Martin le Grand in the choice of master created a continual source of disputes with the brethren which are described at great length in the cartulary from 1288 when "great discord had arisen". In 1344, the dispute reached the papacy and the

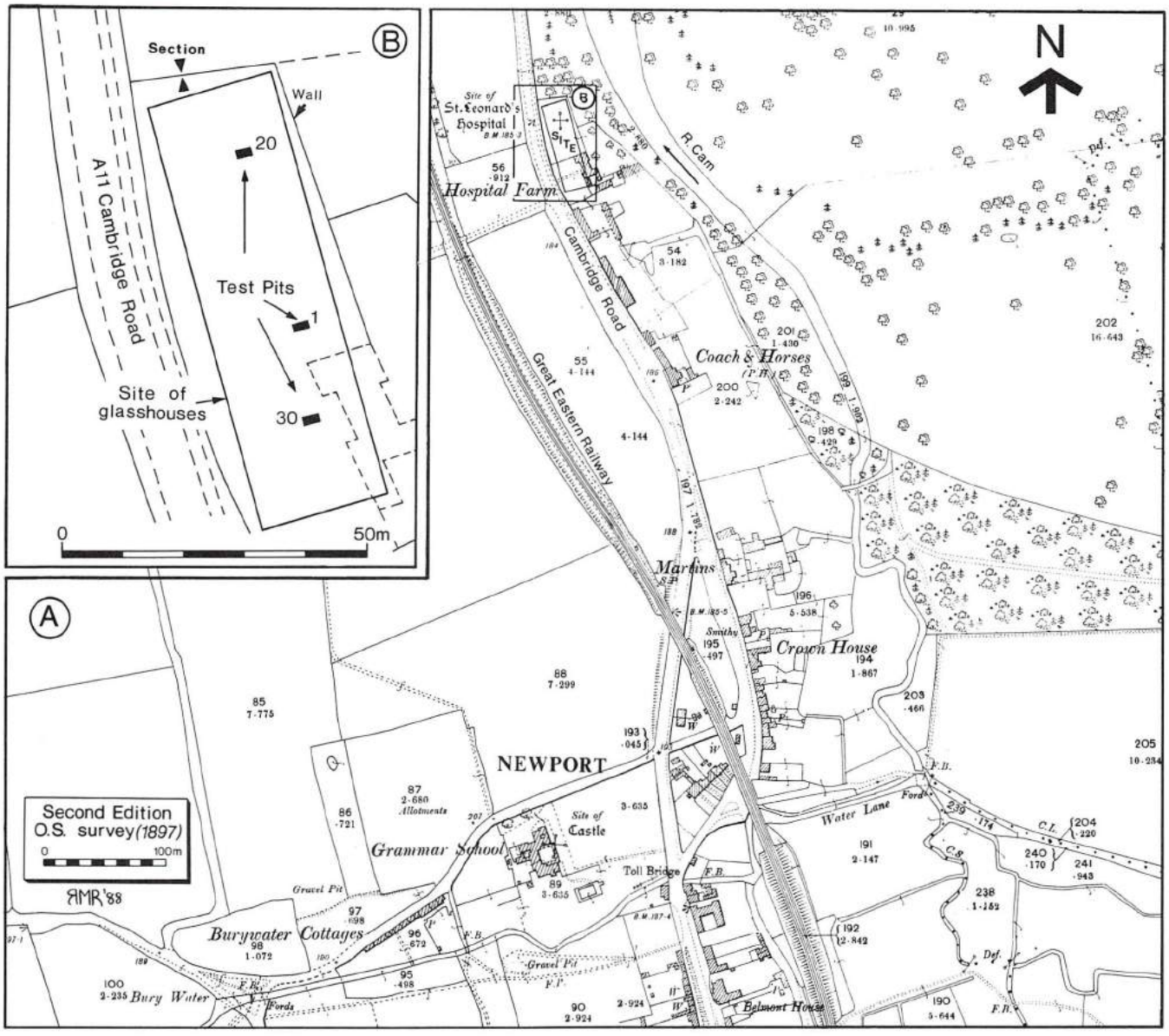

Fig. 1 Location plan (from the 2nd edition OS 25" map of 1897), with the area of the glasshouses showing the test pits insert at B.

Chancellor. Edward III eventually confirmed the choice of the brethren, one of their number, Simon of Debden, who acknowledged that "in consideration of the affection for them shown by past Deans and Chapters . . . and to make the end of the strife concerning the right of election . . . they bind themselves and their successors to give the said royal chapel every November at the feast of St Martin, 3lbs of wax".[5]

Unfortunately, none of these sources gives any idea of the activities of the hospital or the number or nature of its inmates. The foundation charter mentions the master, brethren, priests and laymen. A master and three priests are named in the dispute of the 1340s described above.

None of the known contemporary sources makes any reference to lepers in connection with the hospital. It is not until the 1860s that the suggestion is first published that it was for lepers (Sperling 1863; Clay 1909). Leprosy was widespread in the reign of king John and may have been a concern of Richard of Newport, but he does not say so. The only reference traced to a sufferer in Newport is to "Thomas le leper" who is recorded in an extent of the manor of Newport (1299) as one of the burgesses with property in the town.[6] The hospital is more likely to have been intended for the poor, sick and infirm generally.

The change from a hospital for the sick to a college for priests seems to have taken place in the 14th century. Robert, "son of the master of the hospital", held two acres of land in the neighbouring manor of Shortgrove in 1306 (Webb 1921, I, 432) which suggests a layman as master then. The spiritual aspect was always an important feature of medieval hospitals, and here this was strenthened by benefactions in the middle of the 14th century. Two grants of land in 1340 and 1346 were to maintain chaplains (VCH, II, 190); the grant by John

Quyntyn in 1346 was to help support a chaplain to celebrate divine service daily in the hospital for the faithful departed.

By the following century, the appointment of master appears to have been completely within the gift of the dean of St Martin's. In 1478, he authorised the exchange of John Bedford, master, with John Mannyngham, rector of Stanwyck in the diocese of Lincoln; and the vicar of Newport was ordered to induct the latter.[7] Just before the hospital's dissolution in 1543, the master was receiving the income of £11 10s 8d, and enough was left to support two fellows at £6 a year, but no more for charitable purposes. A chaplain was allotted 6s in the year 1542-1543 for celebrating in the hospital and 2s 7d was spent on wine, wax, bread and other necessities. The premises were sufficiently extensive at this time to require at 24s 5d to be spent on the repair of the houses, barns and stables at the college.[8] This reference to the college confirms the view that by this time the hospital no longer served its original purpose and the sick were no longer catered for.

Such a transformation of a medieval hospital from the original intention of the founder was a common occurrence. It has been attributed to the effect of the Black Death on the inmates and the reduction of a charity's income below a viable level because of the decrease in land values after the dramatic fall in population. Similar changes can be seen in the nearby hospitals of Cambridge (Rubin 1987).

The hospital derived most of its income from rents and the profits of the annual fair, which in 1542-1543 was demised to Henry Denham and held in the grounds. Denham also paid rent for houses, buildings, gardens, orchards, lands and grounds within the site, so the area would appear to have incorporated a farm before the dissolution. There is no documentary evidence for the location of these buildings, but they are likely to been near what was later known as Hospital Farm.

After the dissolution, the property passed through several hands with the ownership of the manor of Newport, but kept its separate identity. Even as late as 1753, the marriage settlement of the earl of Suffolk includes "all that hospitall or late hospitall called or known by the name of St Leonard's Hospital, Newport . . . containing 202 acres now or late in the occupation of Thomas Rickard".

Morant (1768) says "the hospital . . . seems to be an old building; probably the original fabric". It may have incorporated part of the former hospital and farm buildings. Pictures of the farmhouse before its demolition in 1907 (Fig. 2) show a plastered building with a tiled roof and a two storey cross-wing at each end, some or all of which could have been built in the late medieval period, before the dissolution of the hospital.

The excavations and watching brief

The area available for investigation had been previously occupied by the range of greenhouses known as "the tens" erected after 1907 and covering about 75 m by 35 m. Three trial trenches measuring 2 × 1 m were excavated over two weekends in places chosen at random amongst the remains of the partially demolished glasshouses (Fig. 1).

Fig. 2 Hospital Farm before it was demolished (from Harper 1904).

The natural was a yellow-brown silt containing some clay and pebbles with localized gravel patches, no doubt of alluvial origin as the river Cam is only about 100 m away. The glasshouses had occupied a terrace cut into the slope down from the road towards the river. The water table was encountered at a depth of 1 m in trench 30.

In the most northerly trench (20), a semi-circular band of flints and stones with a mortary deposit between them, enclosing a thin mortary layer, could represent the remains of some sort of structure. Immediately above this were some disarticulated sheep bones, in a layer containing modern building debris and flowerpots.

A brick drain was found in the middle trench (1) running west-east from the road towards the river. Finds from the fill of the cut excavated for it (see above) suggest that the drain dated from the end of the 17th century. The large quantities of building debris in the same fill, comprising pegtile, lime plaster with lath impressions, and window glass which looked 16th-17th century in date, indicate that the laying of the drain was part of a major programme of building works. There was also abundant building debris in the most southerly trench (30), which otherwise revealed no evidence of archaeological features.

These trial trenches constituted too small a proportion of the development area for any very reliable conclusions to be drawn from them, but they did indicate that the site had undergone considerable disturbance when the nursery was built. The ground level in the glasshouses was below that of the road to the west, and in the waste land to the north of the nursery, the ground level slopes down gradually from the roadside, making it clear that the glasshouses had been built onto a terrace cut in this slope. This terracing would removed any

deposits associated with the hospital, with the result that layers containing building debris associated with the farmhouse rest directly on the natural. Nevertheless, it might be expected that deeper cut features such as pits, postholes or wall foundations might have survived. Their absence, and the falure to recover any medieval pottery or other artefacts suggests that the hospital buildings were not located on the site of the glasshouses.

These conclusions concerning the accuracy of the inferences to be drawn from the test trenches and the site of the hospital were confirmed by the discovery of six human burials when the houses were built. Five of these were uncovered in the foundation trenches of the most northerly of the new houses. The sixth was found somewhat further south. The grave cuts were, not unusually, all but invisible. The burials were at a depth of only 500 mm, further evidence that the ground level had been reduced. The bones and their pathology have been reported on by Bari Hooper (1986). Although only six graves were noted, he estimated the number of individuals present to number between eight and fifteen. These are not the only burials to have been found in the area. Human bones had been found by a former gardener at Carnation Nurseries, Eddie Guile, and in 1907 when the farmhouse was demolished, the skeleton of a large man was discovered, and reburied in the churchyard by the vicar.[10]

As well as the burials, the foundations for the most northerly house cut through a compacted gravel foundation aligned east-west about 400 mm wide, and at a depth of 500 mm; and also a large pit, from which animal bone, oyster shell, and two sherds of medieval grey ware were recovered.

In the course of building the most northerly house, the east half of the northern boundary wall was demolished. Like the wall along the Cambridge road, which is butted by it, this wall is built, from bottom upwards, of stone, flint and brick. The stone comprises re-used ashlars and moulded blocks which must be from the hospital buildings. The wall had surprisingly deep foundations, and to investigate its structural history a test trench was excavated against its north side by machine and the section recorded (Fig. 3). The total depth of the foundation was 1.8 m below ground level on the north side. The wall was shown to be of several builds, probably three or four. This partly explains why it is so deeply founded because in the intervals between these builds the ground level had risen.

Small, mainly angular gravel in a yellow-brown clayey matrix (50), and a stiff yellow-brown silty clay (49) were considered to be natural. The overlying layer of rather similar slightly sandy silty clay (48) might also be originally a sub-soil deposit. It had been cut by the first phase of the wall (51), which was built of blocks of clunch above a coursed flint foundation bonded with a yellow brown mortar, and contained three sherds with slip-painted decoration, datable to the later 15th or 16th centuries (see below). It is thus quite possible that the wall was built during the last phases of the life of the

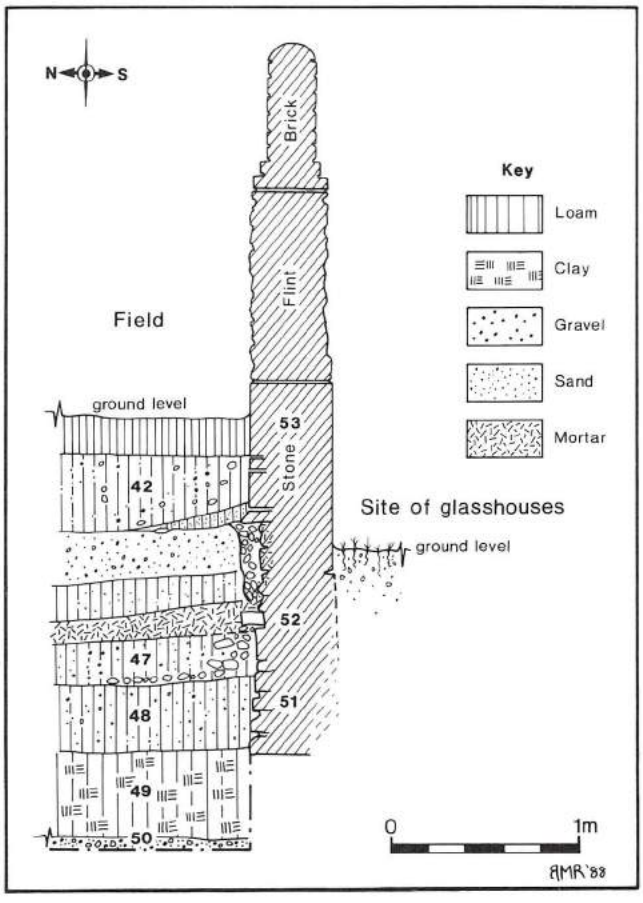

Fig. 3 Section through the northern boundary wall.

hospital, though on balance the availability of dressed stone for a boundary wall makes a post-1543 date seem most probable. Two rather poorly laid courses of brick and stone (52) bonded with a whitish mortar may represent the remains of a rebuild of this early wall, or simply be the bottom of the foundation of a major reconstruction in stone (53) set in a trench cut into layers which had apparently been dumped to raise the level. A slightly projecting chamfered brick on the north side separates the foundation from the wall superstructure, and indicates the position of the former ground level. This was further raised by the dumping of loose unconsolidated material (42). The upper part of the wall in flint and brick seems to represent another rebuild, dating probably from the 19th century.

The finds

Pottery (Fig. 4)

A classification for Essex pottery has been established by Cunningham (1985). The categories relevant here are:

Fabric 20, medieval sandy grey wares dating mainly from the 13th-14th centuries

Fabric 21, somewhat sandy red wares, datable to the 14th-16th centuries

Fabric 40, fine red earthenware with virtually no visible tempering, made from the 15th-19th centuries

Only two medieval sherds, in fabric 20, were recovered, from the pit found when the foundations of the most northerly house were dug. Three sherds in a fine orange fabric with slip-painted decoration,

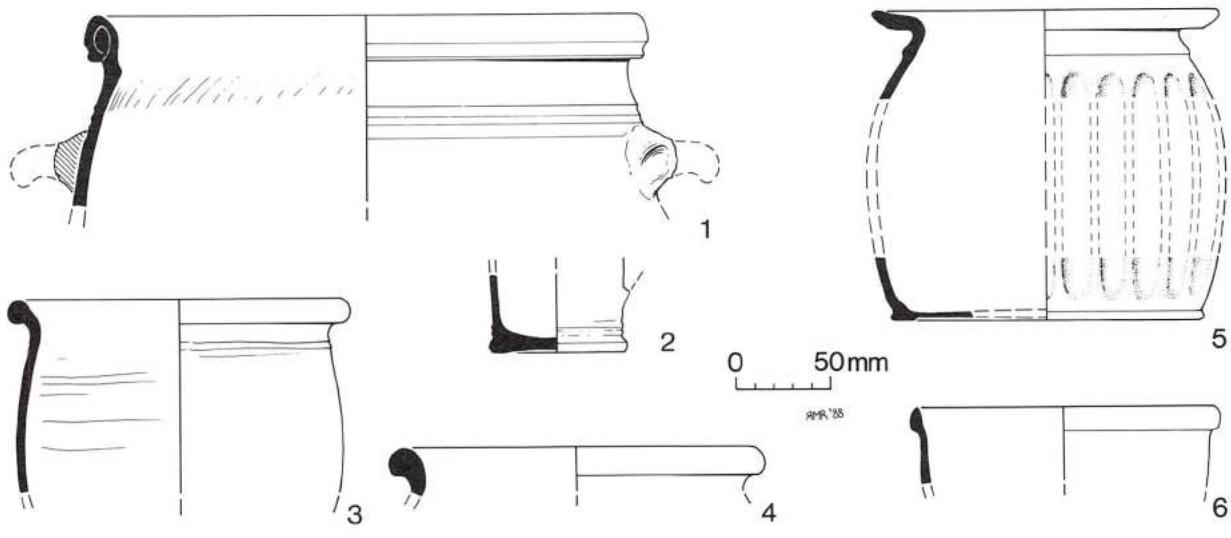

Fig. 4 Post-medieval pottery.

which is thickly applied such that it stands out in relief, were recovered from layer 48 in the trench dug against the north boundary wall. They are probably from the same vessel, a jug. Externally, they have a dark red slip and a patchy glaze. The fabric is very micaceous, and may be regarded as transitional between fabrics 21 and 40. As well as being thick, the slip contains visible quartz grains. Three other sherds, two with green glaze, and all residual in the contexts in which they occur, may be considered transitional or early fabric 40, being partially reduced and having a somewhat leathery appearance. They may be dated to the 16th century.

The rest of the pottery is unquestionably post-medieval, most of it glazed kitchenwares in fabric 40. A small group of pottery (24 sherds) was recovered from the fill of the cut for the drain in trench 1. It included an outward folded rim and other fragments from a large storage jar or cistern with an applied handle, a purplish slip, and internal and external glaze (no. 1), and eleven blackware sherds, including two mug bases, one of which is illustrated (no. 2). The jar or cistern rim resembles the products of the Stock kilns (Cunningham 1985, 83, 85). From other layers in the same trench and probably in fact from the fill of the same cut, as this was only recognized as little above the level of the natural, were recovered a rim and other pieces of a jar with an everted rim and dark yellow to brown internal glaze (no. 3); a rather similar rim (no. 4); and several pieces of a tin-glazed earthenware chamber pot (no. 5). For an approximate parallel to the latter, datable to the second half of the 17th century, see Amis 1968, 19, 23. Also illustrated (no. 6) is a jar rim in fabric 40 from trench 20.

Other finds (Fig. 5)

A fragmentary floor tile 26 mm thick in an orange fabric, with transparent glaze over a cream slip, could come from the hospital buildings, but might equally well be later. Otherwise the building materials were probably all associated with the farmhouse. The only artefacts of note were a tobacco tamper,[11] probably 17th century in date; and the top of a small mould-blown bottle with a flanged rim in pale blue glass, probably 18th-19th century in date.

The moulded stone (Fig. 6)

According to the Royal Commission (RCHM I, 1916, 201), the roadside wall contained "seven sections of half-octofoil responds of the 13th century, and two sections of circular column". Today, the circular columns are no longer evident, and there are a total of thirteen half-octofoil responds of two slightly differing types (nos. 1 and 2), as well as a quantity of ashlar blocks.

The north boundary wall also contained moulded stonework. When this was partially demolished, the less fragmentary and more significant pieces were kept. They are all in a soft limestone, clunch or similar. In the roadside wall, however, some of the ashlars are in oolitic limestone, probably Barnack. Most of the blocks bear traces of red ochre which was apparently applied in bands to accentuate the chiaroscuro effect of the mouldings. Traces of what seem to be dark grey colouring may also be original. This colouring was later covered over by coats of limewash.

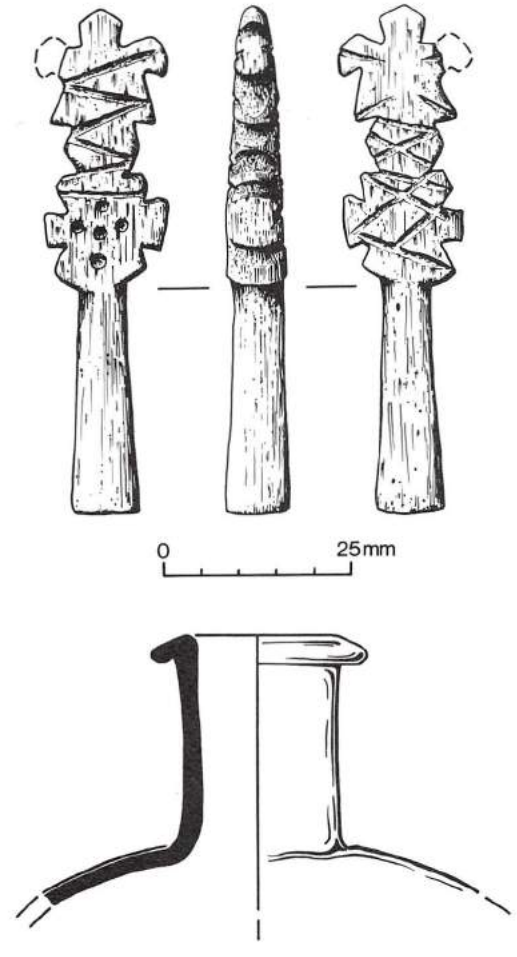

Fig. 5 Bone tobacco tamper (above); glass bottle (below).

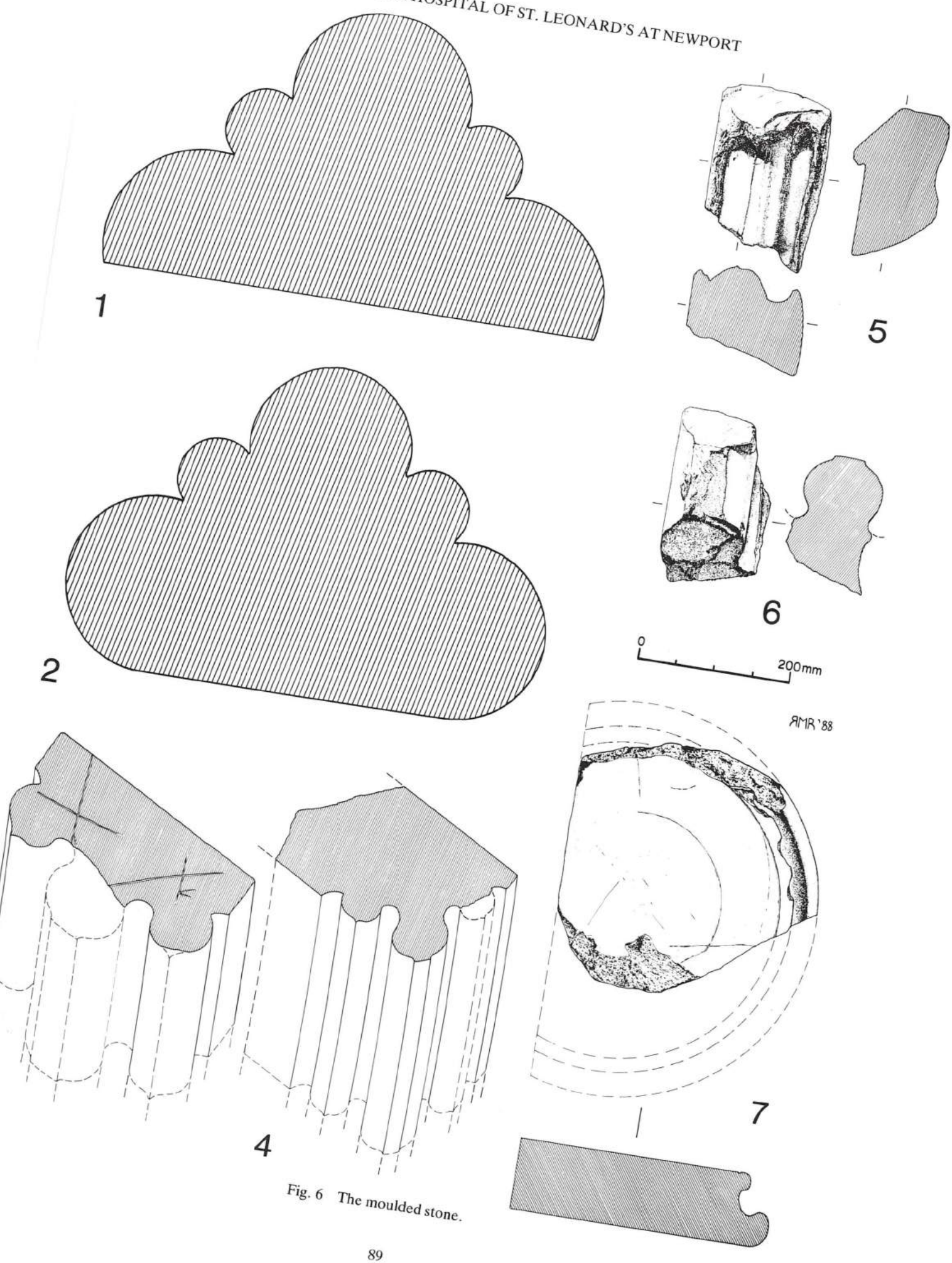

Fig. 6 The moulded stone.

Three stones, two of them identical, are from a moulded arch which could have surmounted the half-octofoil responds, as shown in the sketch in Fig. 7. No. 3 is from the soffit of an arch, a central moulding, no longer existent but possibly a roll with a fillet, being flanked by keeled rolls. The back of the block in intact, as is one horizontal surface, which bears two possible scribing marks. No. 4 is a reconstruction drawing based on two damaged but identical blocks. They can be reconstructed with block no. 3 to make an arch of two recessed orders about 2 feet wide, which is the width of the half-octofoil responds. Of five small fragments with rolls, one is probably from a block identical to no. 4, but the others are from different arches though in the same architectural style. Two (nos. 5 and 6) are illustrated, both having dressed oblique faces as if set at the springing or crown of an arch. No. 6 is rather crudely finished, as if it were set in an inconspicious position such as a corner. Apart from the blocks in the roadside wall, the only stone from below the springing of an arch is another respond (no. 7) drawn as a waterholding base, but possibly an abacus.

The similarity between these stones implies that they are contemporary and from the same building. The deeply cut mouldings, the rolls with keels and fillets, and in particular the water-holding base, indicate a date in the early 13th century. Indeed they tie in very well with the date of the foundation charter discussed above. They must have been used in the fabric of a religious building, presumably a chapel, which to judge from these pieces was a high quality. Of particular interest are the traces of red paint, a reminder that medieval church interiors were not as plain as they often appear today.

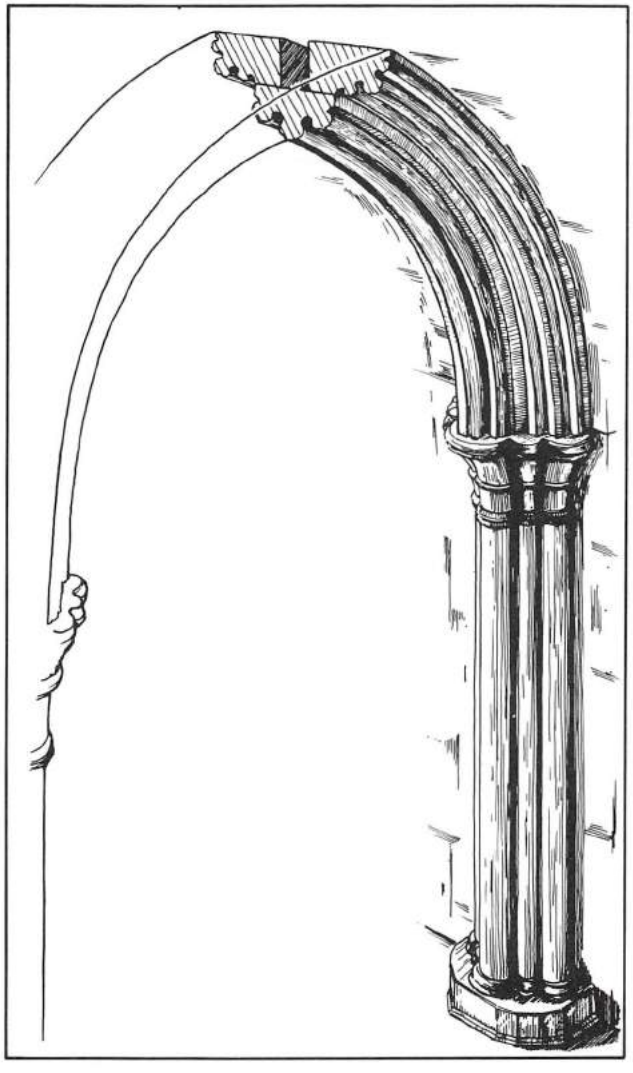

Fig. 7 Reconstructed arch based on the moulded stonework.

Discussion

The origins of the Newport hospital remain shadowy, but on balance, the known evidence suggests that it first came into existence in the mid-12th century, and was then re-founded in the early 13th, this event being undisputable and attested by the foundation charter.[12] Little archaeological evidence for the Hospital emerged from the trial trenches and watching brief. A number of burials were found, and it seems certain that the glasshouses were located on the site of its cemetery. The northern boundary was shown to be of considerable antiquity, but the fact that like the roadside wall it contains reused stone suggests that it dates from the after the dissolution of the Hospital in 1543. The moulded stonework from these walls would seem to come from a chapel and to date from the early 13th century. As such, it underscores the siginficance of the foundation charter, and shows that it was accompanied by the erection of costly buildings. Quite where the Hospital buildings were located is uncertain, but they are likely to have been close to Hospital Farm, which was demolished in 1907 and situated to the south of the glasshouses. The farmhouse may well have incorporated earlier buildings.

Acknowledgements

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Bibliography

Amis, P., 1968 — Some domestic vessels of southern Britain: a social and technical analysis, *Jnl of Ceramic History*, **2**.

Clay, R. M., 1909 — *The medieval hospitals of England*, London: Methuen.

Cunningham, C. M., 1985 — A typology for post-Roman pottery in Essex, in C. M. Cunningham and P. J. Drury, *Post-medieval sites and their pottery: Moulsham Street, Chelmsford,* Counc. Brit. Archaeol. Res. Rep., **54**, 1-16.

Denholm-Young, N., 1947 — *Richard of Cornwall,* Oxford University Press.

Fowler, R. C., 1911 — The Hospital of Newport, *Trans. Essex Archaeol. Soc.*, n.s. **11**, 269-70.

Gould, I. C., 1909 — The Hospital, Newport, *Trans. Essex Archaeol. Soc.*, n.s. **10**, 264.

Harper, C. G., 1904 — *The Newmarket, Bury, Thetford and Cromer road,* London.

Haslam, J., 1985 — *Early medieval towns in Britain,* Princes Risborough: Shire Publications.

Hooper, B., 1986 — Human bones — report, *Newport News,* **26**, 19-20.

Morant, P., 1768 — *The history and antiquities of the country of Essex,* London.

Nurse, B., 1985 — Looking for the 'Leper' Hospital, *Newport News,* **24**, 3-7.

Powell, W. R., 1988 — The medieval hospitals at East and West Tilbury and Henry VIII's forts, *Essex Archaeol. Hist.*, **19**, 154-58.

Rubin, M., 1987 — *Charity and community in medieval Cambridge,* Cambridge University Press.

RCHM — *An inventory of the historical monuments in Essex,* vol. I, London: HMSO, 1916.

Sperling, J. H., 1863 — On the churches of north-west Essex, *Trans. Essex Archaeol. Soc.*, **2**, 157-63.

VCH — *The Victoria History of the County of Essex,* vol. II, ed. W. Page and J. H. Round, London: Constable, 1907.

Webb, E. A., 1921 — *The records of St Bartholomew's Priory and of the church and parish of St Bartholomew the Great, W. Smithfield,* Oxford University Press.

Notes

1. The historical research is mainly by Bernard Nurse, and the part relating to the excavations mainly by David Andrews. For a shorter account of this work, see Nurse 1985. A detailed archive report, and the finds, are stored in Saffron Walden Museum.
2. The earliest payment of this gift is to be found in *The Great Rolls of the Pipe for the second, third and fourth years of the reign of King Henry the second, A.D. 1155, 1156, 1157, 1158,* ed. J. Hunter, London: Eyre and Spottiswoode, 1844, p. 72, 132. The Pipe Rolls have so far been published up until 1220. The gift is not however recorded in the volume published out of sequence for 1230. The typical wording used is *Et in terris datis in Essex' infirmis de Neuport ijs.*
3. Westminster Abbey Muniments 977.
4. St Martin le Grand cartulary, 15th century: Westminster Abbey Muniment Book 5, f.CXd.
5. St Martin le Grand cartulary, 15th century: f.CIIId.
6. See W. C. Waller, Transcript of the 'Register Book' of Tilty Abbey, *c.* 1900, typescript in Essex Record Office, T/B3, 73.
7. St Martin le Grand cartulary, 15th century: f.XCIII.
8. Public Record Office, Rentals and Surveys, SC 12/5/74: St Leonard's Hospital, rental, 1542-1543.
9. Essex Record Office, D/DXb 72: marriage settlement of Henry, earl of Suffolk.
10. See *Herts. and Essex Observer,* 16 February 1907; and Gould 1909.
11. Kindly identified by the Museum of London.
12. Its history bears a certain similarity to that of the hospital at East Tilbury (Powell 1988).

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Early brick chimney stacks

by D. F. Stenning

Summary

Early brick chimney stacks are notoriously difficult to date with any accuracy. Previous enquiries have tended to concentrate on the dimensional, or other characteristics of the bricks, on the plan locations or the particular form of mantel beam mouldings. The paper is the outcome of a prolonged search of Essex and neighbouring counties to discover other factors of comparable significance. The phenomenon here described seems to be restricted to a limited geographical area which includes Essex and the western half of Suffolk. The survey has enabled the compilation of lists of chimney stacks with common and distinctive features, which are stylistically related to the innovative brick mansions of the mid 15th-century. Clearly it would be rash to claim that all early brick stacks shared these features and more utilitarian examples probably exist. However the particular decorative features discussed here, should provide new criteria for dating stacks and for considering the reintroduction of brick in the eastern countries. The research also demonstrates the dissemination of stylistic features, down through a series of social strata. In addition, it also shows the adaptation of a decorative concept, to keep pace with the gradual evolution of house types. Distribution maps demonstrate a clearly discernible pattern of examples and an interesting relationship with the earlier brick mansions and contemporary brickwork, in the Parish Churches. The paper also includes comparisons with other early brick stacks, elsewhere in Britain, where similar features are also found. Finally, other related phenomena, such as contemporary smoke hoods and masonry 'fire walls' are also considered, with a view to considering the possible spread of architectural concepts.

The background

The lack of building stone in Essex has had a profound effect on architectural development. Medieval domestic buildings were, with few exceptions, timber framed even where their buildings were of a high social status. Where stone is encountered, it usually appears as 'robbed' or secondhand material from a convenient Roman or ecclesiastical source nearby. It is a revealing fact that the most common use of stone is for the mantels and jambs of fireplaces, usually an important status feature. However, in national terms, stone was the material of castle and great house and thus the usual medium for innovation and change. In this context, the wall fireplace was an early, probably twelfth century, development, with its flue taken up within the thickness of the fabric. Nevertheless, the 'central' hearth in the open hall, enjoyed great status and was sanctified by its long ancestry. In Essex and other 'stoneless' areas, the central hearth was clearly the necessary choice. Despite this attraction, it had obvious disadvantages and a means of funnelling the smoke was clearly desirable.

The chimney of timber and daub, or 'smoke hood', was probably the first partial solution (Fig. 1). The present state of research would suggest that they were occasionally employed, but not as frequently as one might expect. Surviving examples are usually of post-medieval date and in buildings of a relatively low status. It is conceivable that the so-called 'low beams' in houses in Thaxted were intended to act as a support for a hood. (Alcock and Moran 1984). In the 15th century, the 'smoke bay' was sometimes employed, but this is generally accommodated at the rear of a lengthened, service crosswing. In this location, a cooking function is clearly suggested and the open hall had its independent central hearth.

In addition to smoke hoods and smoke bays, there are some slight indications of probable former wall stacks. Cammas Hall, White Roding, has a three storey crosswing of the late 14th Century with a wide gap in the studwork on each floor. Did this once have a stack of stone, or rubble or timber, or was this an exceptional example of early brick? In this example, the gap was later filled by a typical brick stack of the late Tudor type.

The Reintroduction of Brick

The art of brickmaking, in the medieval period, presents something of a conundrum. Whilst there are a number of examples of the competent use of the material, they remain somewhat isolated and not really a part of general building development. Little Coggeshall Abbey (Essex) Little Wenham Hall (Suffolk) and various works in Hull and Beverley (Yorks) are frequently cited examples (Lloyd 1925).

Sometime around the 1430s, a fresh era began, with an important series of new buildings, substantially of brick. Principally, these were houses built by men of considerable means and all were located in South Eastern England. Rye House (Hertfordshire), Faulkbourne Hall (Essex) and Oxburgh Hall (Norfolk) are significant examples which are relevant to our theme (Smith 1975).

A number of our innovative Gentlemen had experience of the continent, whence this new concept sprang. This group of new houses has striking

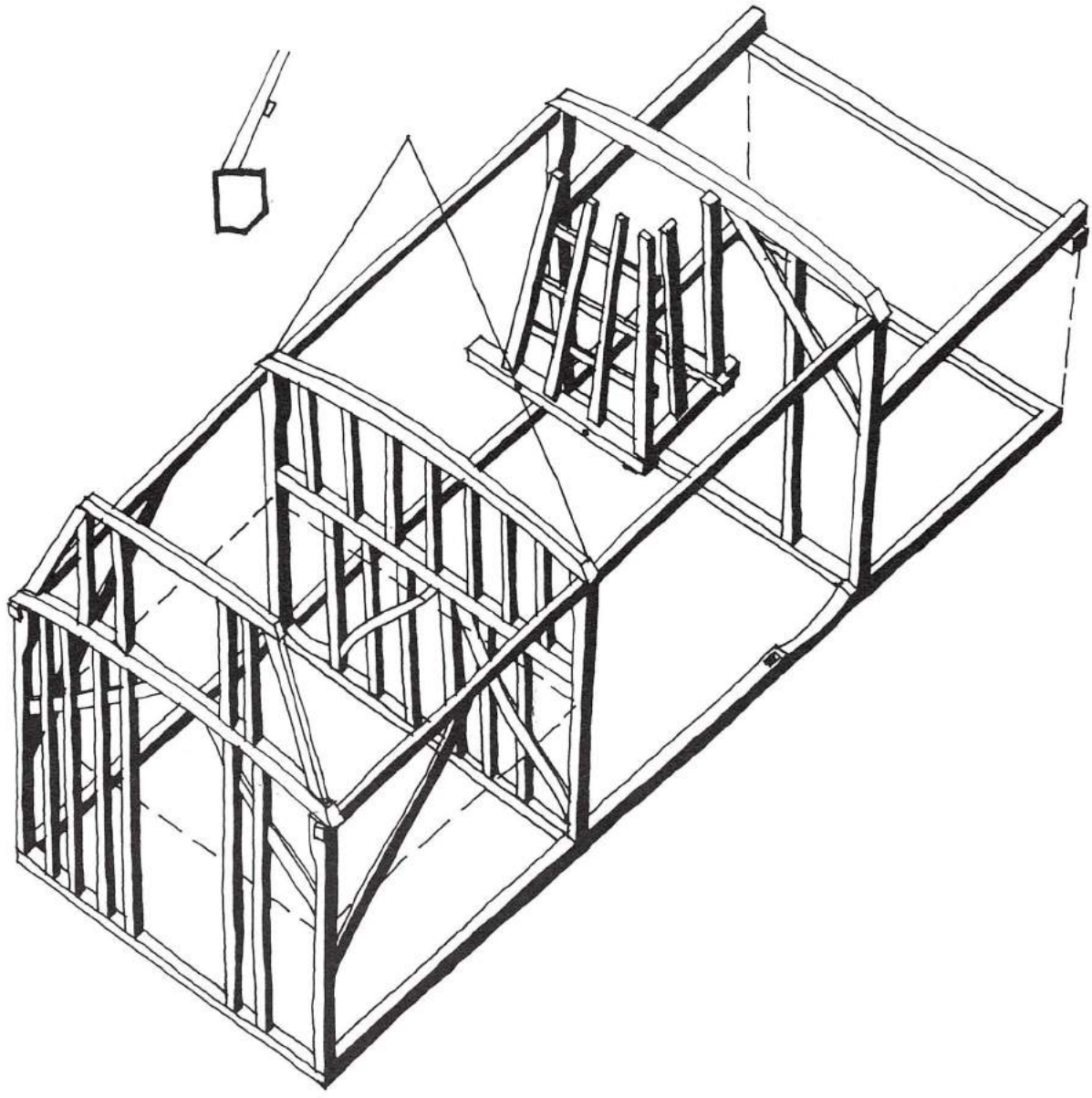

Fig. 1 Timber chimney stack or smoke hood (late 16th century).

similarities and incorporate the following important motifs:

(a) Elaborate crenellations.
(b) Corbel tables, comprising trefoil and/or cinquefoil, moulded brick arches on shaped brick corbels.
(c) Diaper-work of vitrified headers.

The recessed panels, below the corbel tables and other arch-headed recesses, were partly lime-washed (or plastered) to emphasise the decoration. Sometimes there were also small holes to receive decorative plaques or other features.

All these are characteristic of contemporary Continental work and are markedly at variance with our home-grown Tudor/Perpendicular. Documentary evidence also indicates the presence of alien craftsmen, with German sounding names and an exotic architectural style.

It has frequently been suggested, that these particulars features, originate in the low countries and particularly Flanders. Whatever its origins, this important development introduced a new material for chimney stacks, a vocabulary of decoration, and craftsman to exploit the potentialities.

The Parish Churches

Towards the end of the 15th century (precise dating is still a problem) this fashionable new style was adopted for parish churches, buildings of equal, if not greater status. Generally, this took the form of a new tower (Ingatestone, Rayne) or a new porch (Rayleigh, Fryerning) but was, on occasions, a more major work (Billericay, East Horndon). The majority of the examples, with crenellations, trefoils and diapering are within Essex but there are a small number in adjoining countries. The distribution map (Fig. 2) indicates the location of known examples of houses and church work

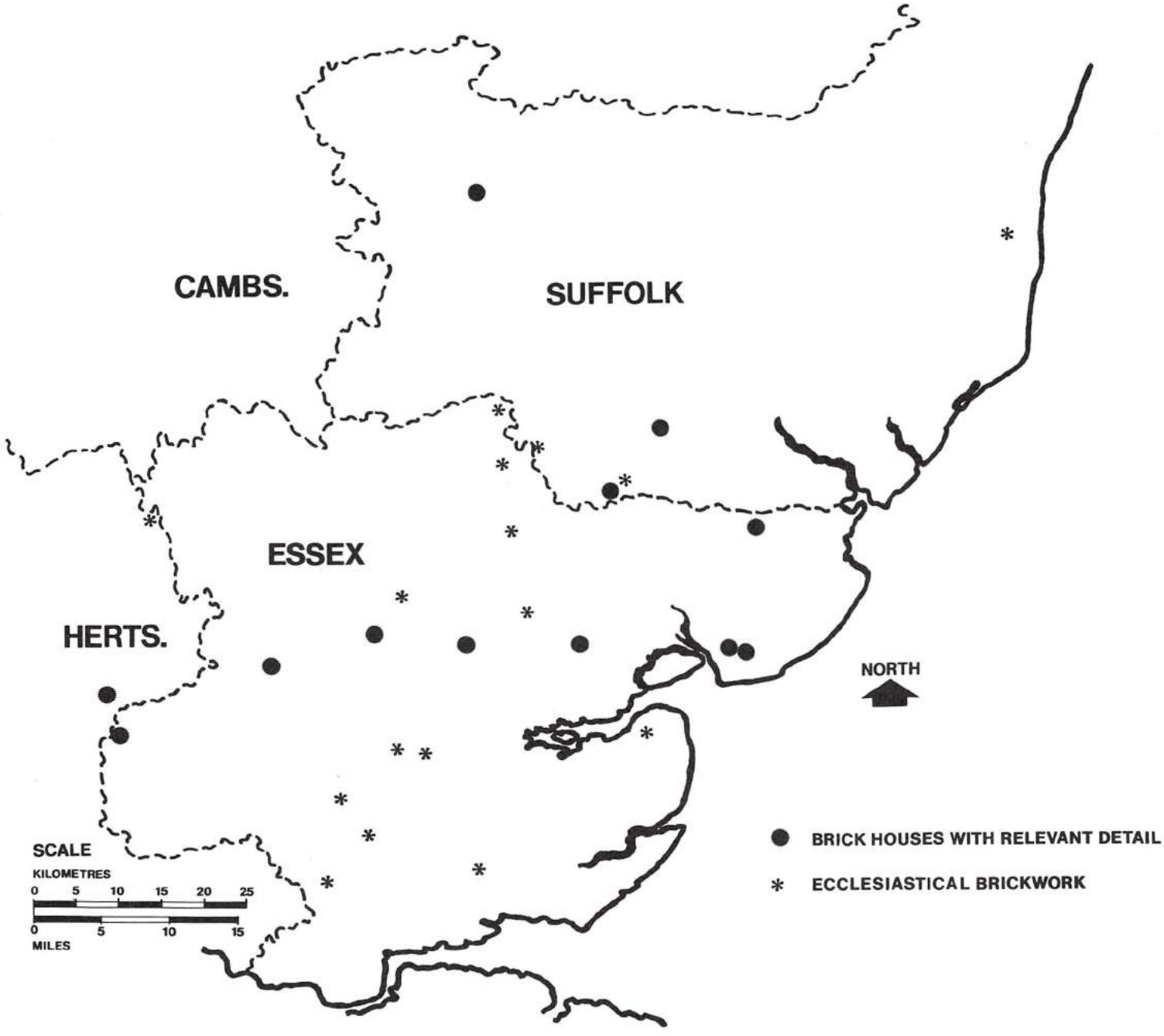

Fig. 2 Distribution map: churches and big houses.

of the kind described. In detail, the works to the churches follow the domestic examples very closely, including the plastered areas within the recesses.

From the middle of the 16th century onward, the motifs seem to have been abandoned and brick towers, in particular, were of a much simpler design.

The Brick Chimney Stack

The first brick chimney stacks, at the manorial or substantial 'Yeoman' level, made use of all these features. That is to say, a group of chimney stacks can be recognised as early, because some or all at these features are present. Again, this seems to have been a development of the late 15th century and principally concentrated in the county of Essex (Fig. 3). The majority of evidently 'early' examples were incorporated into pre-existing 'open-halls' and a number of standard features can be identified (Fig. 4).

They are usually sited to back on to the cross-passage and thus act as a kind of masonry 'screen'. They are offset on plan so that the stack itself avoids the collar purlin and penetrates the roof to one side of the ridge. A moulded timber mantel beam is normal practice and there are arched seat recesses within the flanks of the inglenook. Crenellations are usual as is an elaborate decorative treatment above the mantel, involving recessed panels and trefoil or cinquefoiled corbel tables.

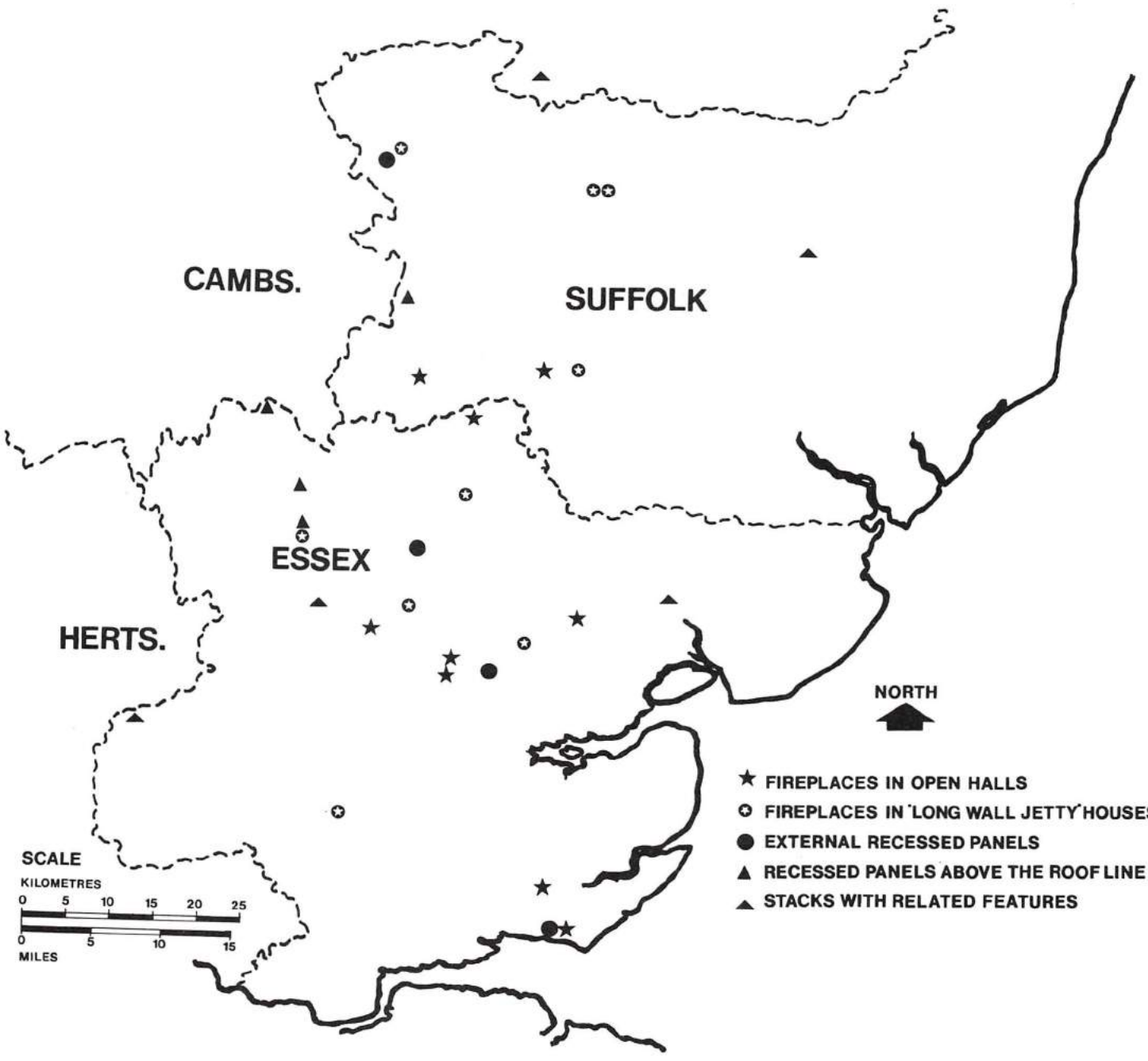

Fig. 3 Distribution map: fireplaces.

The principal examples, so far identified, are listed below in a suggested chronological order.

The catalogue

Reynolds House, West Street, Prittlewell, Essex (Fig. 5)
This is probably the oldest example so far encountered, and was formerly situated in an open hall. Uniquely, the fire surround is of stone and the simple stack had an arched recess, visible on the exterior above the roof. The treatment of the recessed panel, with its enclosing depressed arch, has a distinctly Belgian look with the cinquefoils composed of numerous single cusp components. (The stack is now in Southend-on-Sea Museum).

Pannels Ash Farm, Pentlow, Essex
Again, this makes use of an enclosing arch, but the design seems somewhat more advanced. The elaborate, tracery-like patterning is part brick and part plaster and retains substantial remnants of the original painting. Separate moulded and shaped brick enrichments include a star, a Tudor Rose and a human head. The rear of the stack, facing the cross passage, also has a recessed panel.

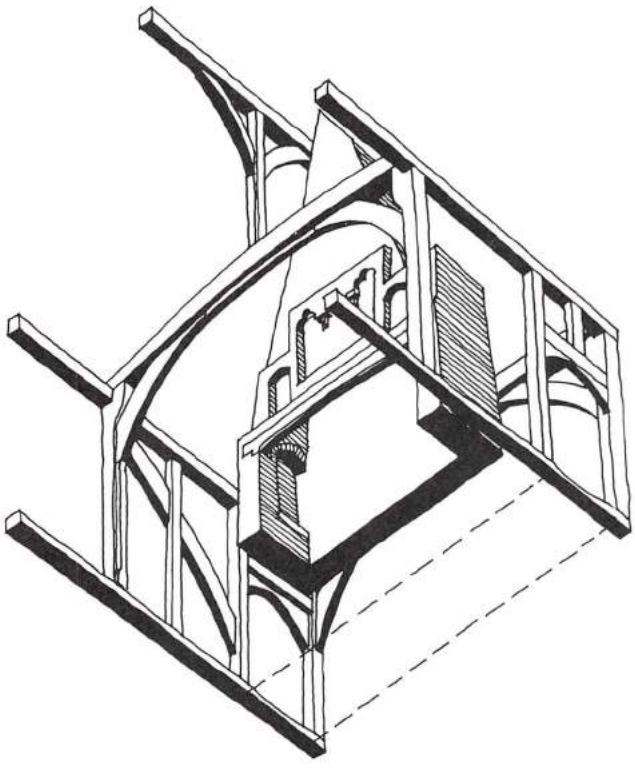

Fig. 4 Typical stack location.

'Thatchers Hall' Hundon, Suffolk (Fig. 6)
Here there are three simple plastered and arched recesses and no sign of any moulded brick work. Above the recesses is a splendid painting, in a circle, of the Agnus Dei, which has been dated to the late 15th century (E. Clive Rouse, pers. comm.). The house itself is of the 'Wealden' type.

Dover House, Ixworth, Suffolk
Another 'Wealden' house and the fireplace is, unusually, at the 'high end'. There is a row of cinquefoiled arches and a moulded and carved mantel beam of unusual richness. This is a compressed design without crenellations to fit below a contemporary inserted floor (Coleman 1964).

17 South Street, Rochford, Essex
The recessed panel has three trefoil arches and four-centered arched recesses on either side. This building, now District Council owned, is often open to the public.

Little Badcocks Farm, Easthorpe, Colchester, Essex (now in Castle Museum, Colchester)
Similar to the above, but there are crenellations and the recesses have been fused into one composition. The house was demolished earlier in this century.

Potash Farmhouse, Felsted, Essex
A small fireplace in a small open hall, with crenellations and a simple recessed panel.

Troys Farm, Fairstead, Essex
Four trefoiled arches, set within an angled projecting bay, with a kind of miniature roof above. The lower parts are completely obscured.

Ringers Farmhouse, Terling, Essex
A stack with four trefoil arches over its recessed panel. All other details are now uncertain, following a complete reconstruction.

The Old Tobacco House, The Hythe, Colchester, Essex
Another demolished building where an old photograph indicates a fireplace with creneliations in its flank (photograph in Castle Museum, Colchester). This was probably an open hall but the evidence is uncertain.

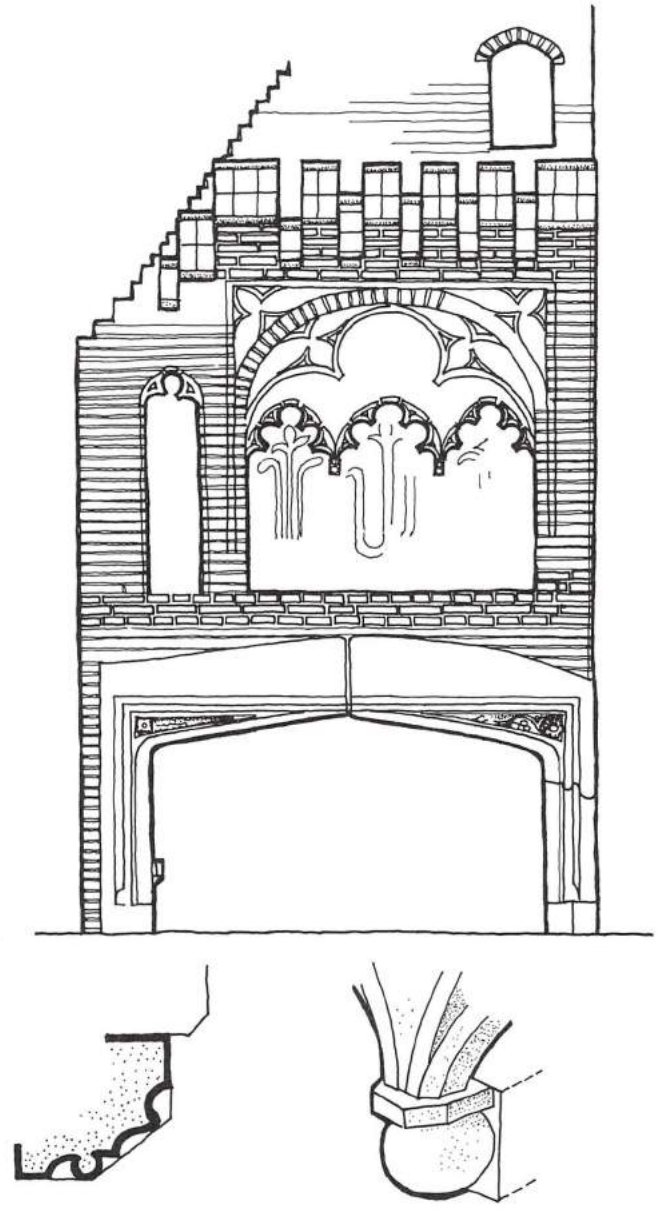

Fig. 5 Reynolds fireplace, Prittlewell (now in Southend-on-Sea Museum).

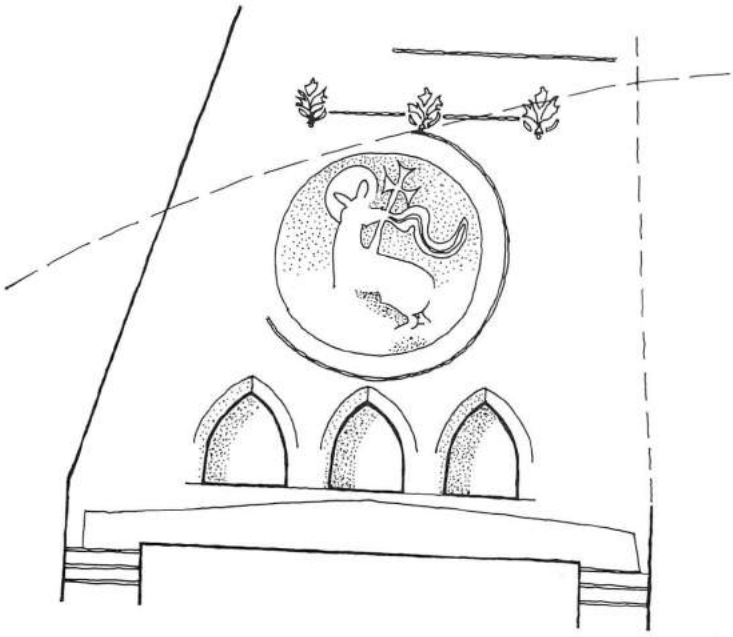

Fig. 6 Thatchers Hall, Hundon.

Mill Farmhouse, Bridge Street, Alpheton, Suffolk
Incorporates a shallow panel and six, steeply raking trefoiled arches. The general effect resembles the following type but, it clearly predates the introduction of a first floor.

Chimney Stacks in houses with contemporary first floor
In the late 15th century, a new and important house type was gaining popularity, particularly with the growing merchant class. This is the so-called 'long-wall jetty' house with a traditional 'in-line' plan form, but with a first floor over all the accommodation. The jettied overhang along the full length of the front (and occasionally elsewhere) gives the type its name. We thus find houses of this type, with a variant of our chimney stacks, where the decorative treatment is condensed to a single storey height only. The stacks tend to be contemporary with the frame and the plan location to remain as before. Examples are as follows: (order based on similarities).

The Wheatsheaf Public House, Castle Hedingham, Essex
As is usual with this type, crenallations do not appear and there is a simple panel and corbel table. Here there are five trefoiled arches, the central one taking an 'ogee' form. (Fig. 7).

The Bell Public House, Ingatestone, Essex
This example has a moulded, shelf-like mantel beam and seven trefoiled arches.

The Cyder House, Ixworth, Suffolk
This has six, simple trefoil arches.

Park Farmhouse, Park Street, Thaxted, Essex
This has two recessed panels, each with four plastered and chamfered triangle-like 'arches' on simple corbels.

Rayne Hall, Rayne, Essex
The very tall hall has a rear wall fireplace with five uncusped, pointed arches projecting only a little proud of the large recessed panel.

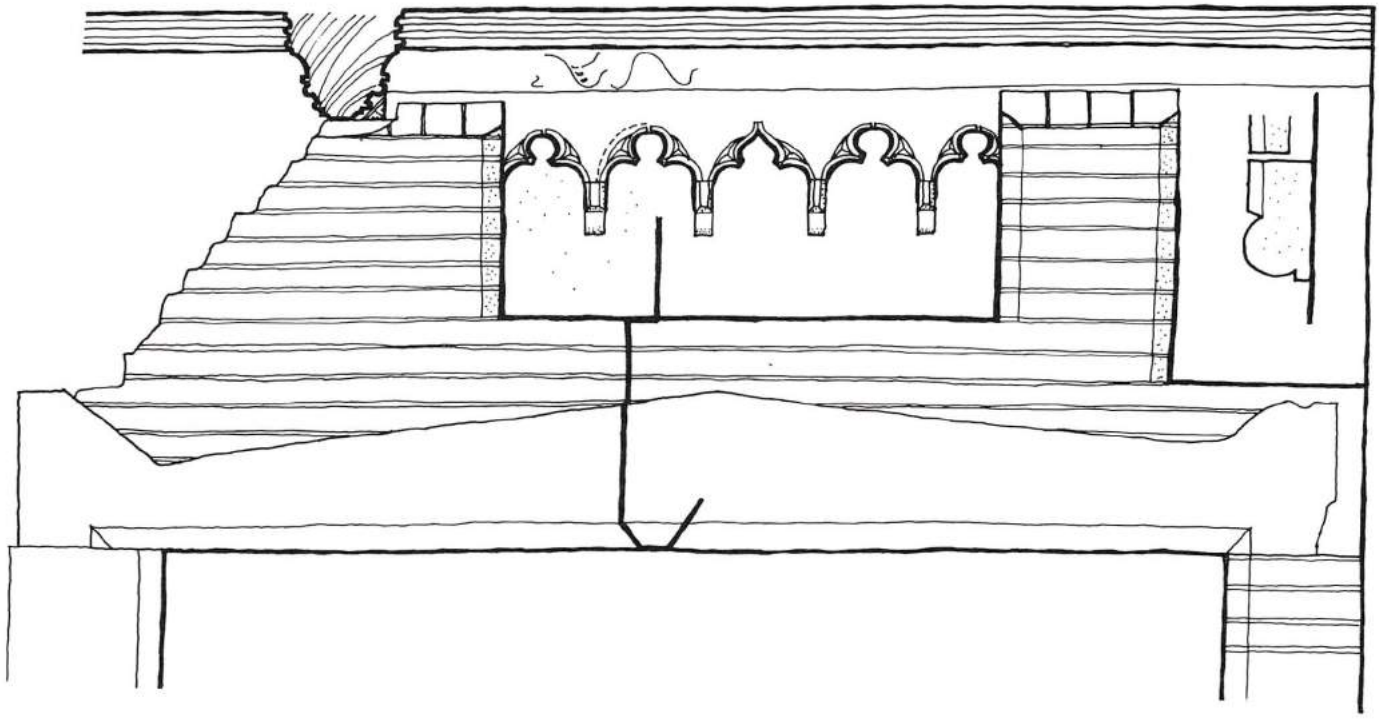

Fig. 7 The Wheatsheaf, Castle Hedingham.

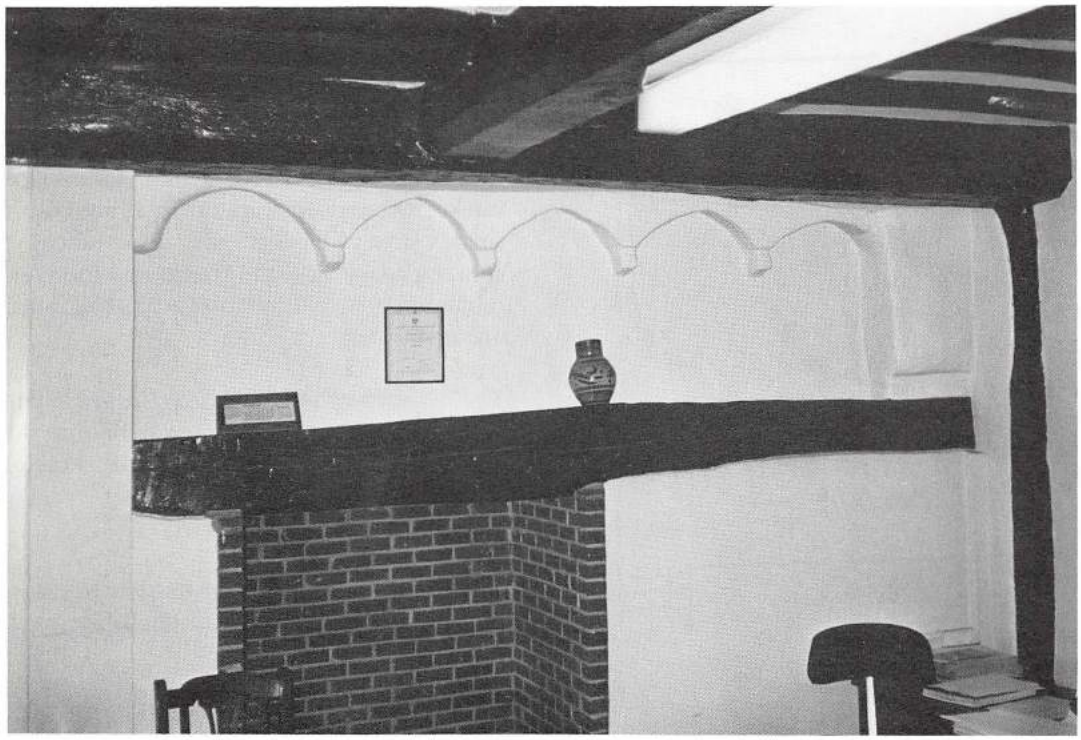

Plate I No. 11, Mill Street, Mildenhall, Suffolk.

No. 11 Mill Street, Mildenhall, Suffolk (Plate I)
This is a very primitive looking example with five depressed and uncusped plastered arches on simple corbels.

No. 1 Gracechurch Street, Debenham, Suffolk
The treatment here is very different with a linked pair of niches and with asymmetrical corbeled arches. Either side are simple arch-headed recesses.

External Decoration
The next, distinct category involves a more restrained fireplace, but, where the trefoil arched panels move to the outside of the building. The flank wall of the stack, below the level of the jetty, is exposed to external view and displays various forms of panels.

The Priests' House, Rotten End, Wethersfield, Essex (Plate II)
Here the flank wall has a sloping roof like coping and recessed panel with three trefoiled arches. The fireplace itself has a simple recessed panel, elaborately moulded and inscribed mantel and a trefoil headed niche within the inglenook itself.

The Old Manor House, Chipping Hill, Witham, Essex
This rather similar example has a pair of trefoiled arches over a narrow panel, coping-like head and a very simple fireplace inside.

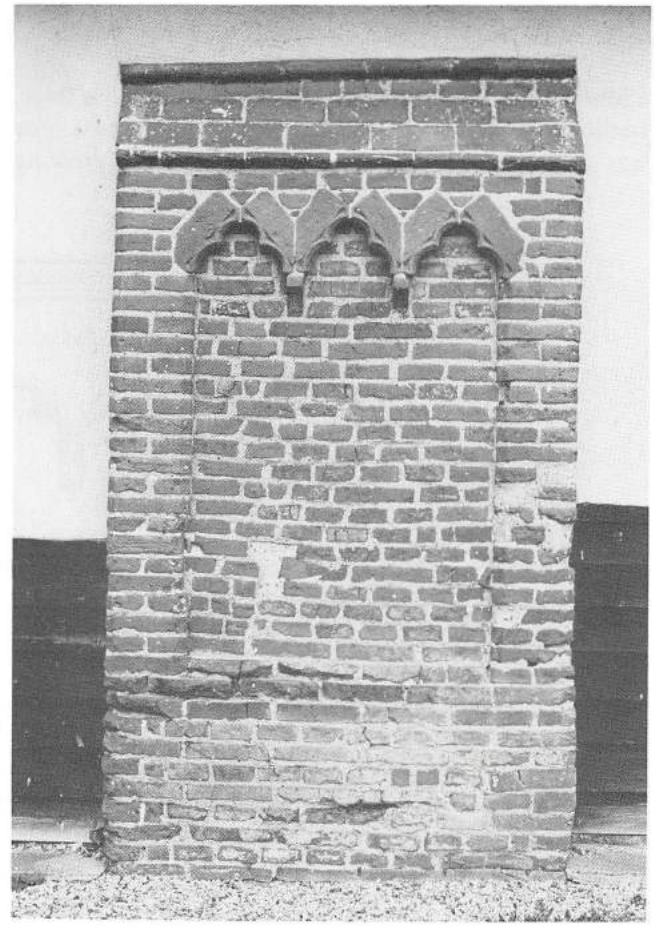

Plate II External stack, Rotten End, Weathersfield, Essex.

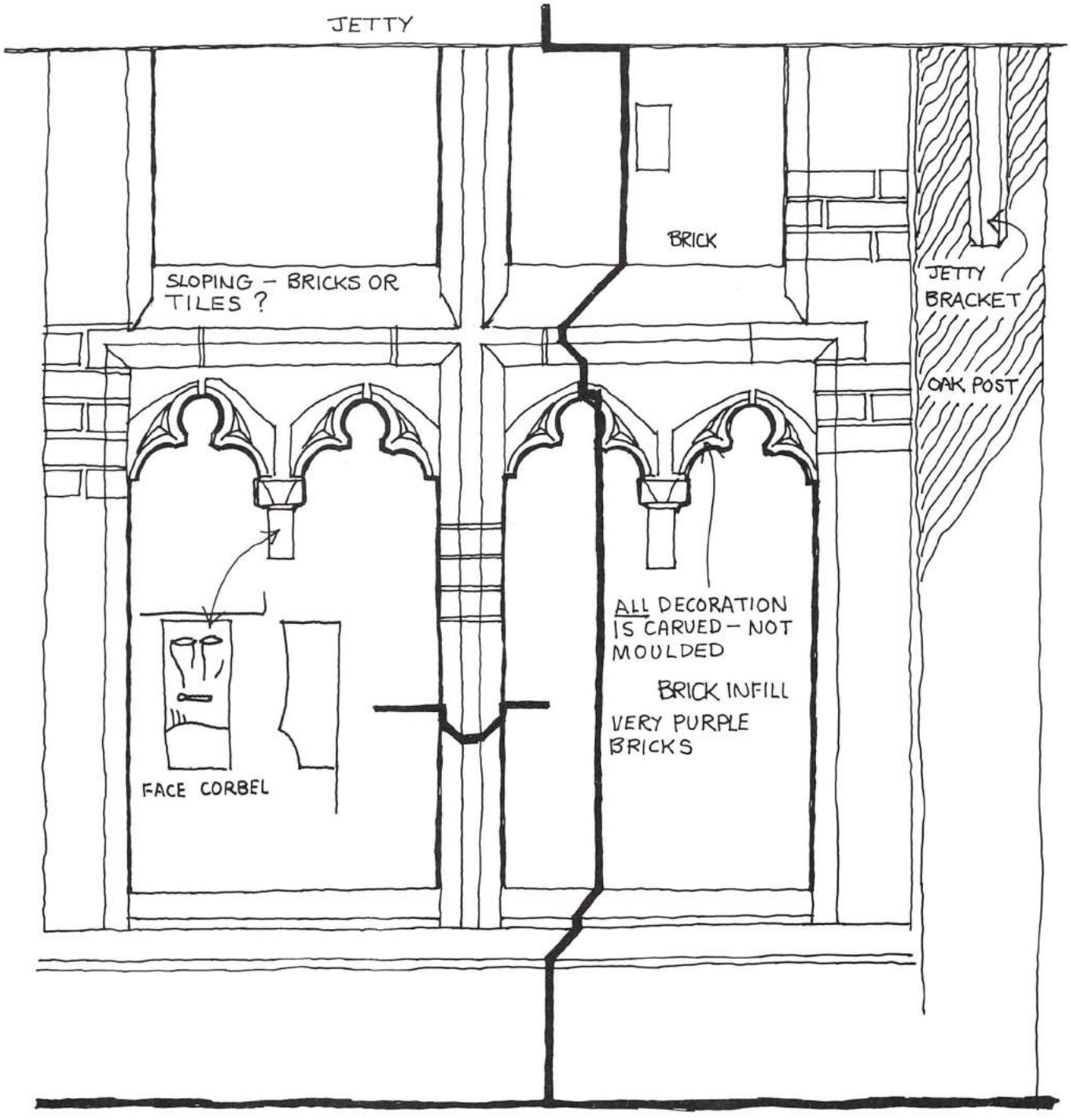

Fig. 8 Worlington Old Hall.

Worlington Old Hall, Worlington, Suffolk (Fig. 8)
A very elaborate example with two tiers of paired panels, the lower pair having two trefoiled arches. The corbels take the form of sub-human heads.

Superimposed Fireplaces
The logical development was to enlarge the stack and provide fireplaces to serve each floor:

House in East Street, Prittlewell, Essex (demolished) (Fig. 9)
An interesting example which was fortunately photographed during the process of demolition (Southend-on-Sea Museum). Here there were trefoil arches on each storey of the flank and trefoil headed niches over the first floor fireplace.

Bacons, Feering Hill, Kelvedon
In this instance, the rear wall stack has a simple trefoil headed recess over the ground floor fireplace and a four-centred arched recess over the fireplace above.

1 and 2 High Street, Kelvedon, Essex
Another rear wall stack with back-to-back fireplaces on

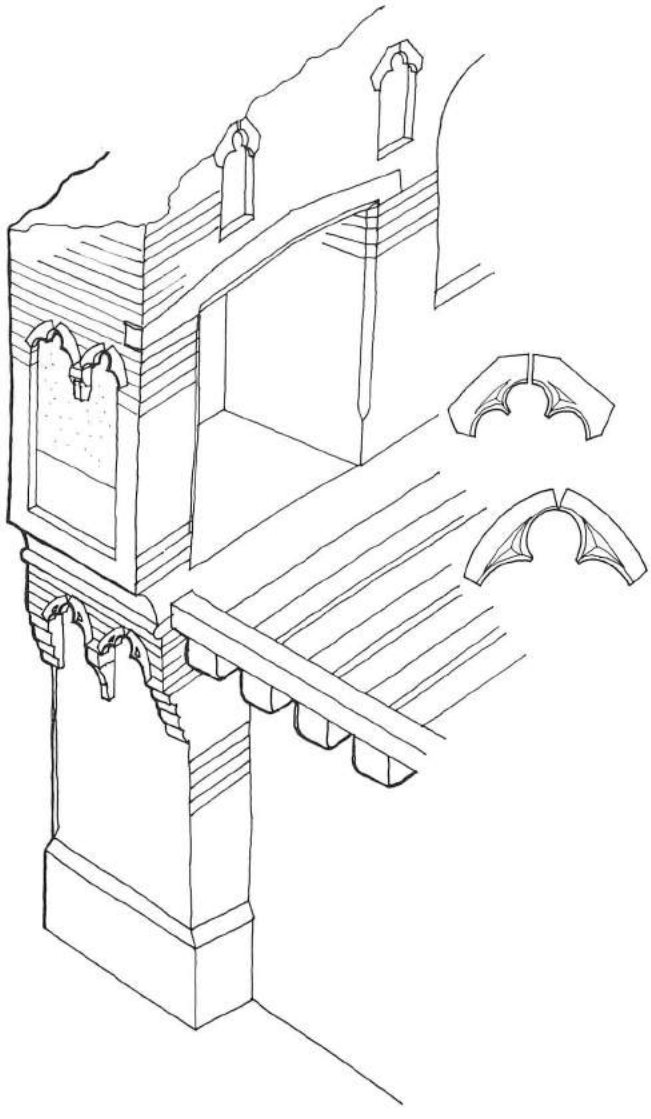

Fig. 9 East Street, Prittlewell.

the ground floor and a single arched headed recess over the first floor fireplace. On the ground floor, the major room has a paired trefoiled recess, projecting moulded apron and chamfered, enclosing frame. The rear wall fireplace has three trefoil arches over the usual recessed panel. The flanks of the stack also have arched external recesses.

No. 12 Market Square, Lavenham, Suffolk
The stack appears to be contemporary with this 'long-wall jetty' house and has a simple fireplace with small, arched, recesses in the rear wall of the inglenook. On the flank wall, at first floor level, are two cinquefoil headed niches, now plastered, with a narrow sub-dividing wall between.

Another method of 'overmantel' decoration that has been noted involves a series of plastered, recessed panels separated by moulded, mullion-like brick strips. Good examples are at 'Portways', Great Dunmow (Essex) and The Ancient House Museum, Thetford (Norfolk). 'Old House' Harlow (Essex) has a rare, timber portal fire surround and a pair of trefoiled niches within the inglenook. These are related but different to our basic concepts and fall on the margins of our distribution pattern.

Panels above the roof line
The final form of stack decoration, which lies within the 'main line' of development is again to be found on the exterior of the building. Here the recessed panel is above the roof line and form a decorative base to the large 'blocky' stack.

Street Farm, Lidgate, Suffolk
In this example the stack bestrides the ridge and has a panel of five trefoils on each face. The corbels are of the human head form. The stack carries three octagonal shafts which may have been rebuilt.

'Maddings', Hadstock, Essex
A small stack has three trefoils on one face only. The upper part has been removed.

Radwinter Grange, Essex
A tall back wall stack has six trefoils over a large squarish panel. The upper parts have been renewed.

Discussion

Chronology
With the exception of the indisputably 'early' examples, it has so far proved impossible to define a strict chronology for these varied types.

The evidence, such as it is, generally consists of similarities between examples and an evolutionary tendency to simplify the detail. In some cases, the stack is clearly contemporary with the timber frame, and the latter can often be dated with some accuracy. Taking these factors into account, it seems reasonable to suggest, that all the above examples pre-date 1550.

There are, however, numerous stacks of the later 16th century which clearly reflect the earlier ideas. Crenellations, high up on the exterior of the stack, are one form and many, above ridge line panels, include reminiscences of the older concepts. In a late development, perhaps of the 1590s the crenellations are found, as part of the fireback, with ingenious vent holes to increase the draught.

Further Embellishments
It seems probable that the recessed plaster panels found inside the buildings were intended to receive painted decoration. In the case of Reynolds fireplace, Prittlewell and Little Badcocks at Easthorpe (the two museum

examples) such painting still exists. The first has curious, three stemmed plant forms which have been interepreted as symbols of the Trinity. Little Badcocks has a six-pointed 'compass drawn daisy' randomly painted on the plaster. The 'daisy' appears inscribed on the mantel beam at Alpheton and moulded on bricks on the church porch at Meesden (Herts). In Suffolk there are an abundance of 'daisies' on fireplaces, doors and ceilings which may represent charms to ward off evil-spirits. The superficially similar Maltese, or Consecration, cross appears twice at Pannels Ash, painted on the brickwork, together with diminishing triangles with a probable 'Trinity' connection. The five-pointed star appears painted here and also moulded in brick. Further stars occur, painted on a girt in the Tobacco House, Colchester, and carved in timber on the mantel at Weathersfield. This same timber also has a Sacred Heart and Our Lord's name inscribed twice. The 'human head' corbels appear three times and are likely to be a localised phenomenon.

Distribution

Fig. 3 shows the location of all the stacks mentioned above. The various sub-types are differentiated by their symbols and the inter-relationship between these sub-types can be observed. The simple, cusp-less arches occur in the north west as do the stacks with above-roof-level trefoils. Otherwise, the main pattern is of a broad sloping zone with the greatest density in central, north Essex. It is probable that there are further examples to be discovered in Babergh District, (Suffolk), where the D.O.E.'s Historic Building lists have not been revised.

Related Chimney Stacks elsewhere in Britain

It is somewhat surprising to discover that a group of related and contemporary stacks appear in the north west. Speke Hall, Lancashire (Fig. 10) has a truly remarkable fireplace with niches, crenellations and numerous heads. Denton Hall, Formby (Lancs) and now demolished, had something similar and drawings apparently exist (Haslem 1987). The fireplace at The Blackmores Head, Rhuddlan (Flints) was recorded in the 18th century and a family likeness is evident (Smith 1975). Little Moreton Hall (Cheshire) has a first floor fireplace with gabled side buttressing (Pevsner 1971). Closer to home, a fireplace at Pollard House/Pollard Cottage, Lingfield (Surrey) has 4 ornamental niches with depressed arches (Mercer 1975).

Some Observations on the Survey Material

The geographical origins of the brick vocabulary have yet to be established with any accuracy. Clearly, the builders of the early houses were dependent on the knowledge and skills of foreign craftsmen. There would also seem to be an element of English, late Gothic, fused with the exotic ingredients. In seeking the Continental

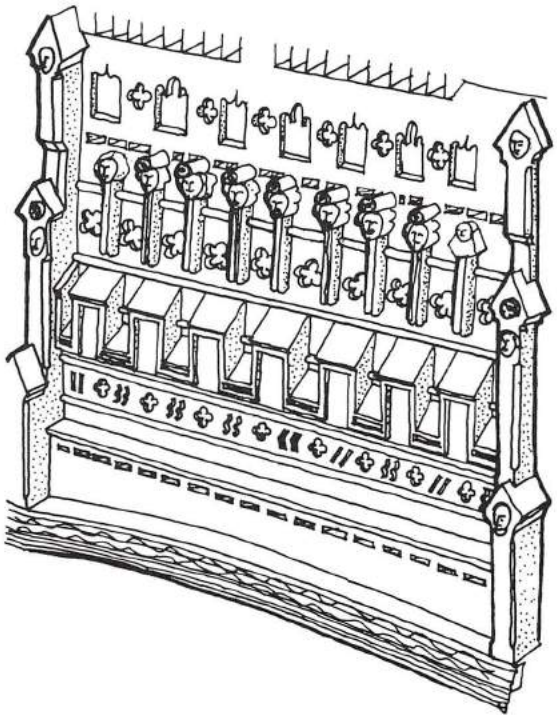

Fig. 10 Speke Hall, Lancashire.

origins of this style of decoration, the earliest examples are probably the most relevant. It seems probable that in these the influences were most direct, but clear parallels are still difficult to find. It would also seem sensible to remember the contemporary, but dissimilar, decorative brickwork of Norfolk, such as East Barsham Manor of Great Cressingham Priory.

The arched corbel table is the strongest common link between the majority of our examples. This, usually in stone, is a conspicuous feature of the Lombard Romanesque and was widely disseminated throughout Europe. In Germany it enjoyed prolonged popularity and was frequently employed, above recessed plastered panels, reminiscent of our fireplaces. In a developed, trefoil guise, the final English examples are of the 13th century (Salisbury Cathedral). Lombardy itself, is a home of fine brickwork, and corbel tables of moulded trefoils are a 15th century feature. It would seem difficult to argue a direct north Italian link, but the terra-cotta work, at Layer Marney Towers (Essex) is thought to be Italian.

The Hanseatic cities of northern Germany are a more likely source, where a secular brick architecture had been long established. Town houses in Lübeck, Stralsund and elsewhere show recessed, plaster panels, trefoil arches and elaborate moulded work. In particular, they made use of fringe like bands of interlocking quatrefoils, as at West Stow Hall (Suffolk), Giffords Hall Nayland (Suffolk) and other East Anglian brick houses. The device of a series of moulded brick arches, stepping up the sides of a gable (Bradfield Hall Essex, All Saints Parish Church Feering Essex), seems another German concept.

Commonly held opinion cites Belgium and the low countries as the favoured origin for this particular development. However, despite geographical proximity, the real parallels are difficult to find. The crenellated parapet may be direct Belgian influence, but again, may be an inherited feature of the native perpendicular. Intersecting, blind brick tracery, as in the Prittlewell Fireplace (Fig. 5) is a marked Flemish feature (No. 69, Naamse Straat Leuven).

It is reasonable to assume that native craftsmen soon learnt the new skills and that the majority of our examples were the product of their work. Carefully comparing the trefoil bricks, a wide diversity of detail and profile is soon apparent. I would suggest that there are marked differences between the moulded brick of each example shown and an equal lack of similarities in the churches and houses.

It would seem that moulds were made for each particular job and were constantly varied to suit particular requirements. The simple, plastered niches on the north west fringe of the distribution pattern may represent a purely local phenomenon. They do suggest a relative lack of brickmaking skills and the Hundon example is fairly early, suggesting a parallel, rather than later, development. The general distribution forms a strong pattern but the underlying reason is more difficult to establish. Can it represent the routes of itinerant craftsmen or were known sources of brickearth a stronger influence?

The similar fireplaces in Wales, Lancashire and Cheshire are a separate problem of equal difficulty. It was already known that 'early' brickwork appears in this area, but an independent line of development seems most unlikely. A common source must surely be sought and the most obvious theme would be the continental links. However, it seems worth noting that Framsden Hall, Suffolk is a fine timber-framed building where the influence of the carpentry of north-western England has often been deduced (Mercer 1975).

In the Calder Valley area of West Yorkshire, there are (or were) numerous, medium sized houses with elaborate firehoods. Backing on to the cross passage, they resemble our plan arrangement and seem to be contemporary with the early brick stacks. The strangest parallel is that they were built for textile workers, who, of course, were even more in evidence in Essex and Suffolk.

It is, of course, possible that the 'idea' of decorating a brick stack has earlier roots, in timber smoke hoods or other such structures.

The stacks with decorative external flanks bear more than a passing resemblance to the masonry 'fire break walls' found in many timber areas.

Frequently, these have mouldings to follow the profile of a jetty and various forms of surface patterning. Some Norfolk examples employ flint and moulded bricks to achieve niche-like effects.

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Biobliography

Alcock, N. W. and Moran, M., 1984	'Low open-truss beams (mantel-beams); problems of function and distribution', *Vernacular Architecture*, 15, 47–55.
Coleman, S., 1964	'A Wealden house at Ixworth, Suffolk', *Proceedings of the Suffolk Institute of Archaeology*, 29, 336–41.
Giles, C., 1986	*Rural houses of West Yorkshire* London: HMSO (for RCHME and West Yorkshire Metropolitan County Council).
Haslem, R., 1987	'Speke Hall', *Country Life* (April issue).
Lloyd, N., 1925	*A history of English brickwork.*
Mercer, E., 1975	*English vernacular houses,* London: HMSO (for RCHME).
Pevsner, N., 1971	*Buildings of England; Cheshire,* London: Penguin Books.
Smith, P., 1975	*Houses of the Welsh Countryside,* London: HMSO (for RCHM Wales).
Smith, T. P., 1975	'Rye House, Hertfordshire, and aspects of early brickwork in England', *Archaeological Journal* 132, 111-150.

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Essex Archaeology and History **20** (1989), 103-108

Wealden houses and urban topography at the lower end of Maldon High Street

by D. D. Andrews and D. F. Stenning

Summary

A pair of Wealden houses, an adjacent timber-framed building, and associated stratigraphy are described, and placed in the context of medieval buildings in Essex and the medieval topography of Maldon.

Introduction

The refurbishment in 1988 of a row of low rendered cottages used as shops (nos. 160-66) at the lower end of Maldon High Street (Fig. 1) revealed them to be older and more interesting than was thought. The most northerly two buildings were shown to be a semi-detached pair of Wealden houses datable to *c.* 1400, whilst the most southerly one was a little later in date. Of the two Wealdens, the southern one was completely stripped back to its frame and could be examined in detail. The Wealden house is one in which the hall is flanked by jettied cross-wings under a continuous roof, the eaves being carried on braces in line with these jetties so that the hall is recessed behind them. Typically such houses seem to have belonged to wealthy peasants or yeomen, and they are most common, as their name suggests, in Kent and Sussex. At Maldon, the Wealden houses are adapted to urban conditions, being much smaller with just one cross-wing each (Fig. 2). The most southerly house is more conventional, comprising originally a hall and cross-wing under separate roofs. As work progressed on the buildings, and on a sheltered housing development immediately to the south, a somewhat perfunctory watching brief was maintained, records being made of their frames and of the stratigraphy in the foundation trenches.

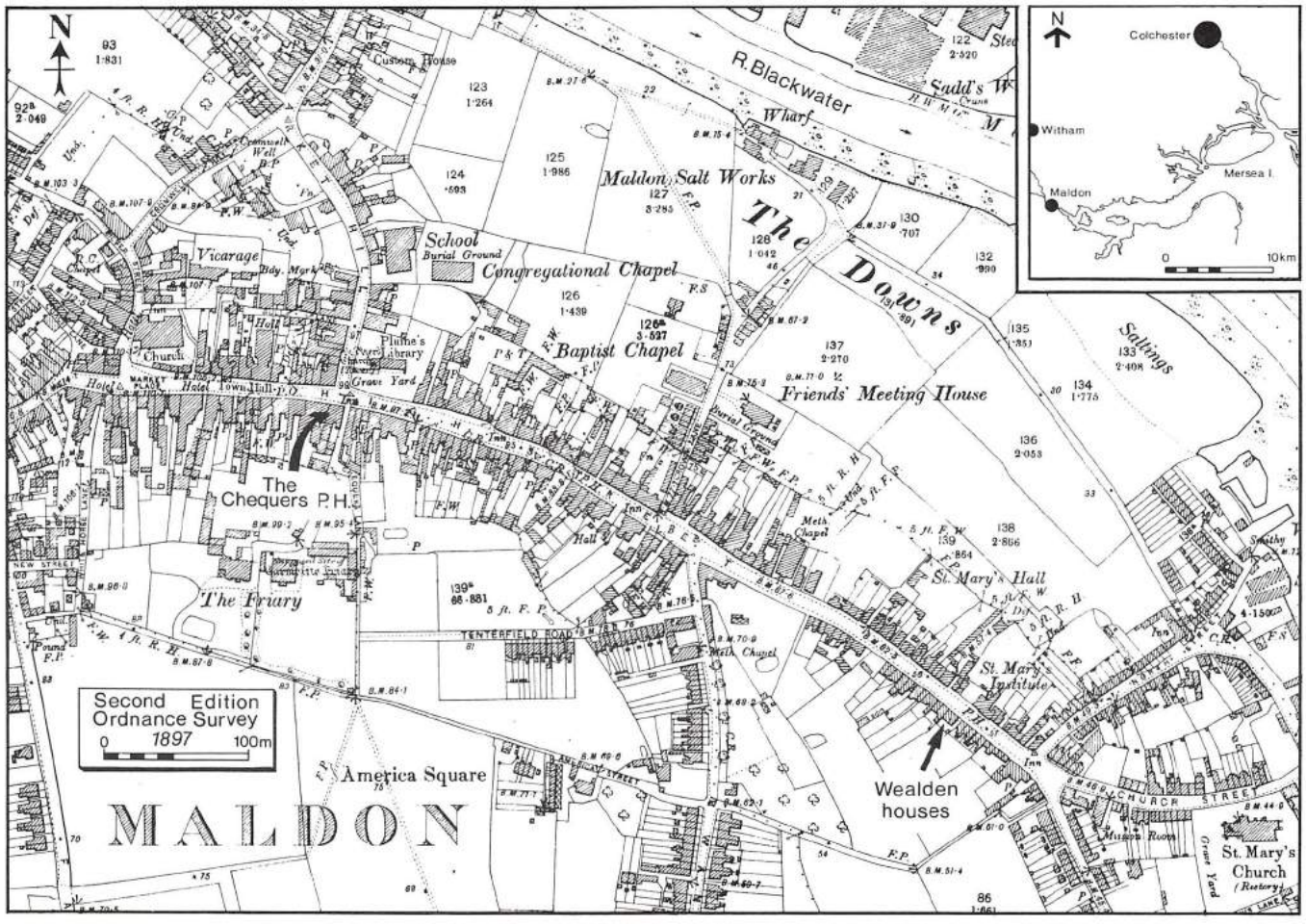

Fig. 1 Location map (based on OS 2nd edition of 1897)

The Wealdens

Each unit comprises a hall and cross-wing measuring about 5.0m deep by 4.2-4.5 m wide internally, the cross-wings being slightly smaller than the halls (Fig. 2 & 3). They are built of oak timbers of approximately square section, the studs measuring 180-240 mm and being set at intervals of 350-410 mm. The floor joists are slightly wider (150-200 mm) than they are high, as are the rafters (150 by 110-120 mm). In general, whole or halved timbers were used. Some of the partition walls preserve the original wattle and daub. The vertical wattles are set close together, only about 10 mm apart, those at the edge of the panels being sometimes set diagonally. Every so often there are horizontal wattles sprung in notches in the studs and bound with thongs to the vertical ones. The daub is tempered with straw and grit.

The cross-wings contained an included cross passage with a wide spered opening to the hall to its right. They were of the conventional service type, with a central transverse partition (indicated by mortices in the soffit of the bridging joist) dividing the ground floor into two rooms. That to the front was a shop: the absence of studs in the wall shows that it was largely open, whilst there is evidence in the girt for a second, narrower "coffin" door (Stenning 1985) adjacent to the cross passage door for a direct and presumably separate access from the street. The room to the rear doubtless combined the functions of parlour and service room. It was lit by a small four-light diamond mullion window, and contained a stair to the upper floor. The lack of any sign of a permanent framed partition between cross passage and the service and shop areas can be paralleled in a number of other Essex buildings.

The first floor was probably a solar, being undivided and open to the crown-post roof. It had windows in the front and rear walls, the former retaining a single curiously moulded mullion with a trench for a carved window head. This was probably composed of a series of

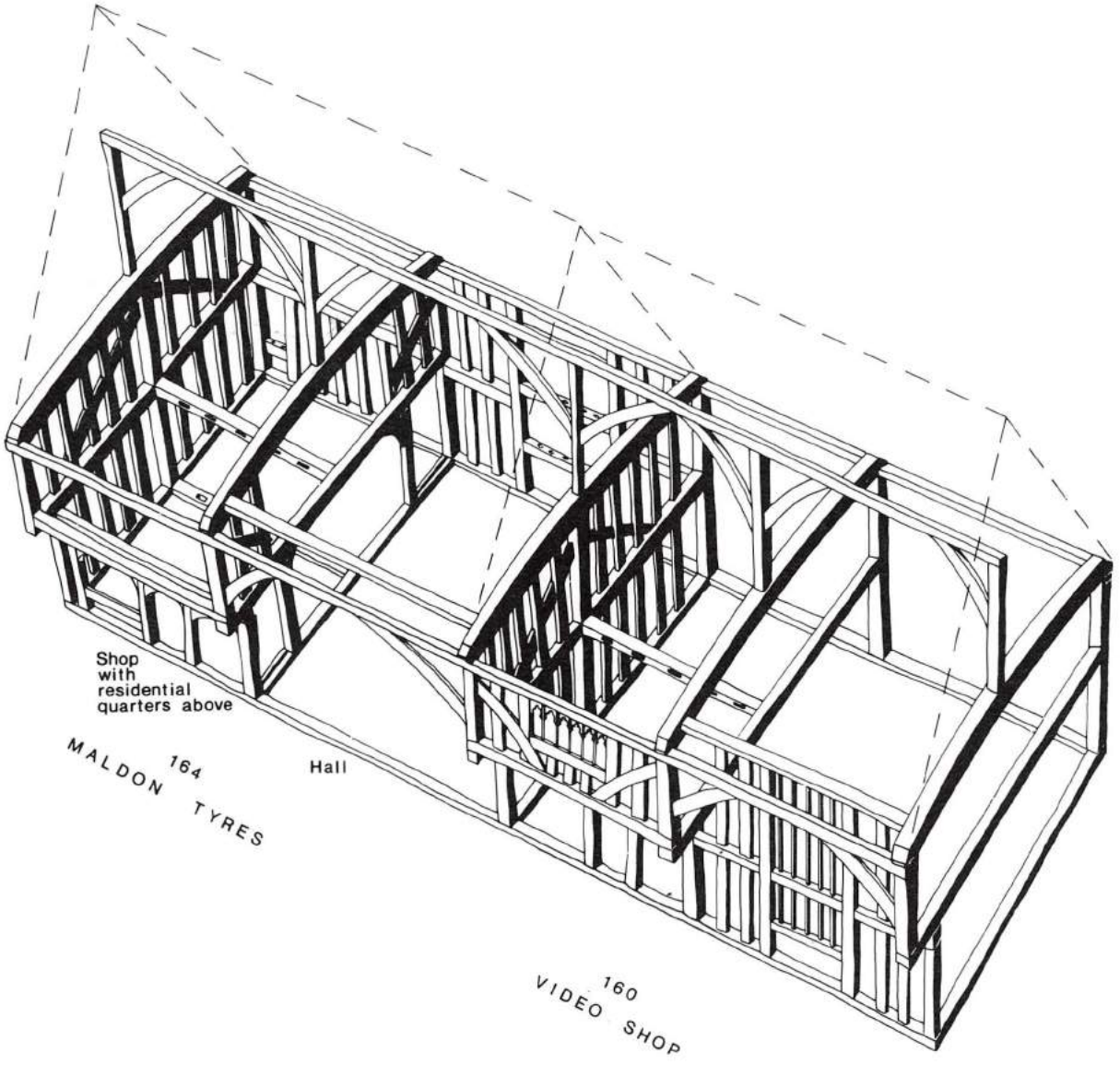

Fig. 2 Reconstruction drawing to show the frame of the two Wealden houses

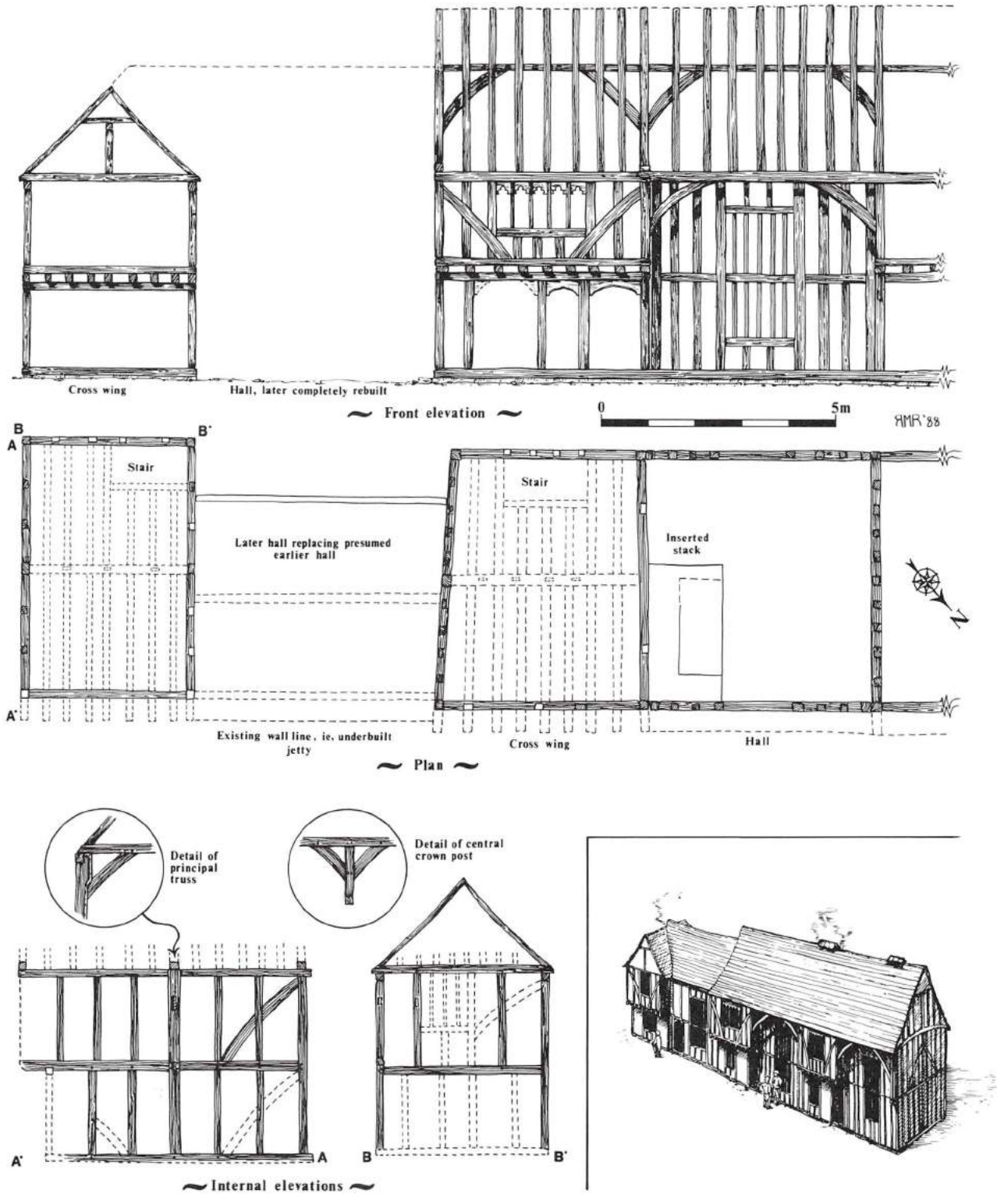

Fig. 3 Plan and elevation of the cross-wing building and the southern Wealden

ogee or trefoil heads cut into a single plank of timber.

The hall had large six-light windows set between storey posts in the front and back walls. The short studs above the lintels of these windows have slight tenon-like projections to their inside faces which are simply wedged into the wattling groove. The wall on the north side of the hall of the southern Wealden had numerous dowel holes for the high end bench.

Features useful for dating comprise the relatively wide stud spacing; the absence of jowls; the thickish, straightish braces of the crown-post roof; the use of pegs in the dovetails joining the tie beams to the top plates; the joists with central tenons; and the edge-halved scarf joints (the halvings are rather short) with bridled

abutments (Fig. 4). These are mostly rather archaic and typical of the later 14th century. The suggested date of *c.* 1400 for these houses must be regarded as provisional. An attempt to use tree ring analysis to tie it down more precisely was unsuccessful.[1]

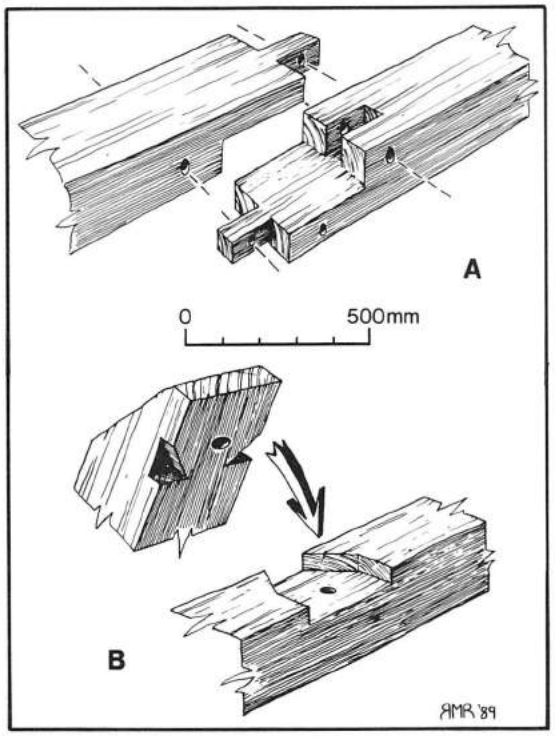

Fig. 4 Joints from the Wealden houses: a) edge-halved scarf joint with bridled abutments b) dovetail between tie beam and wall plate

With the passage of time, these buildings were remodelled but the frames remained substantially intact. The hall of the southern Wealden had a brick stack inserted into it. This had one hearth at the ground floor and two at the first floor. The size of the bricks (only 55 mm high) in the stack, and more particularly its position against the front wall of the house, suggest it was built relatively early in the 16th century. The halls had floors inserted into them, and were jettied out at the upper storey so that the two houses had a single jetty running their full length. The large windows at the back of the halls were infilled (though in the northern one a small diamond mullion window was inserted in this position) and outshots and extensions were added on this side. The roofs have also been rebuilt, as the long incised Roman numerals on the rafters are not in sequence. Most of these alterations took place long ago, probably in the late 16th and 17th centuries. Wattle and daub are used in the infill of the hall windows, and the binding joist for the inserted floor of the southern Wealden has lamb's tongue chamfers with single notches.

The southern hall and cross-wing house

Of this, only the cross-wing, which measures 3.34 m wide by 5.20 m deep, survives (Fig. 3). The adjacent unit, originally a hall, was entirely rebuilt at a later date. The cross-wing was in a poor condition, especially the east wall on the High Street which had been underbuilt and clad in brick. It was built mainly of elm. The studs were generally 120-150 mm square, and the storey posts about 200 mm square. The joists were made of quartered timbers, and were wider (160 mm) than they were high (120 mm), as are the rafters (110 by 80 mm). The studs are set at intervals of 650 - 710 mm (wider than in the Wealdens). The building is of two bays, the ground floor being divided into two units at the bay division. The trap for a stair was identified in the floor joists at the rear of the building, but otherwise there was no evidence for how the building functioned, apart from a four-light window with a rebate for a shutter in the rear wall at the top storey. It is presumed that this building was also a shop. Dating features were few. The joists had central tenons. There were no jowls, except at the top of the storey posts at the bay division. These storey posts also have, exceptionally, plain chamfers. Here too the suggested date of *c.* 1450 must be regarded as provisional.

The building to the north replacing what must have been a hall was built mainly of reused timber. It is uncertain how its roof was made, but it probably had clasped purlins. The walls are framed with primary bracing. The floor joists were 90 mm wide and 110 mm high, with soffit tenons. The fact that the binding joist was off-centre to the ground-plan suggests it was jettied. It may be dated approximately to the 17th century.

The watching brief

Service and foundation trenches inside and to the rear of the southern Wealden revealed how its foundations had been constructed. Exceptionally, these were in many places in their original form and had not been renewed and underpinned. The footings were set into a yellow clay flooring layer. They were made of, first, a rather roughly built offset foundation of septaria with some chalk bonded with a weak orangey brown mortar about 300 mm deep, above which there was a levelling course consisting mainly of brickbats covered with a very well smoothed off yellowish sandy render, on which the ground cill had then been set. The rought offset foundation must have been buried, and the floor would presumably have been at the level of the rendered brick. The use of brickbats is an approximate dating indicator, for such materials are unlikely to have been readily available before the 15th century. In the offset foundation, a brick with a yellow ochre fabric and a greenish-yellow glaze, 245 mm long by 50 mm high was noted. This seems to be one of the white bricks which are though to be of Low Countries origin and datable to the 14th century which occur in some Essex churches such as

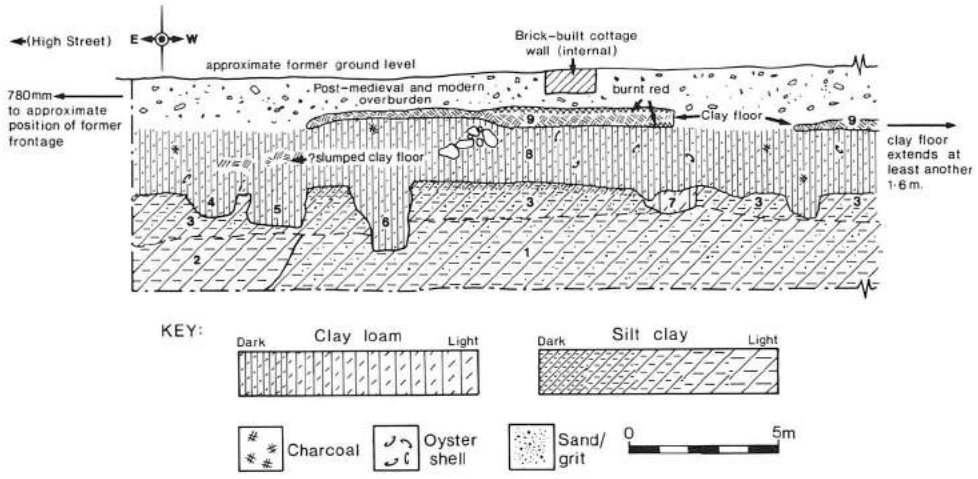

Fig. 5 Section at right angles to the High Street observed on the sheltered housing development

Dengie and Purleigh. Where observed, the foundations of the southern cross-wing were substantial, up to about 600 mm deep, and built of stone, mainly large flints bonded with a whitish mortar.

On the sheltered housing development to the south of the timber-framed buildings there had been a terrace of cottages dating approximately from the third quarter of the 19th century. Of the numerous foundation trenches dug for the new development, one running east-west at right angles to the frontage was recorded (Fig. 5). The natural was a yellow orangey brown silty clay (1), which to the east had been cut into by a largish feature (2) extending beyond the trench and in the right position to have been a roadside ditch. Across the entire section there extended a greenish grey silty deposit (3), in places rather sandy and gritty, and also bearing evidence of having been trampled. Cut into it were, to the east, three features (4-6) with rectangular profiles and clearly linear because they were present on the other side of the trench. The greenish layer looked like a levelling a make-up deposit for a building, and these features could have held cill beams of about 200 mm section for a series of buildings on the frontage. To the west, there was another feature (7) which seemed to continue on the other side of the trench and might also have been a beam slot, as well as several depressions which could have been features.

The greenish layer, and the features cut into it, were covered by a deposit (8) of mixed dark brown clay loam, with much oyster shell and charcoal, about 400 mm deep. This had the appearance of a "dark earth" type layer characteristic of gardens and waste land where organic refuse was being dumped. This was the only layer in the section from which any finds were recovered, a few sherds datable to the 11th-13th centuries.[2] The scarcity of pegtile tends to confirm this dating, as in later deposits it would generally be common. Above the dark earth, there was a yellow clay floor burnt red in places. This could be traced over a distance of about 6 m east-west, and indicates the existence of timber buildings which would eventually have been superseded by the 19th-century cottages.

In the builders' trenches in and around the cross-wing and the southern Wealden, the stratigraphy was broadly similar (Fig. 6). However, no greenish layer was observed between the natural (1) and the dark earth (2), and there were two clay floor type layers (3 & 4) above the dark earth. A few sherds datable to the 12th-14th centuries were found in the black earth deposit (2) and the layer (3) above it. In a service trench for the cross-wing, two sherds in a fine sandy red fabric datable broadly to the 15th century were recovered from a clayey layer above the black earth that was either associated with an earlier building, or else was make-up for the cross-wing itself.

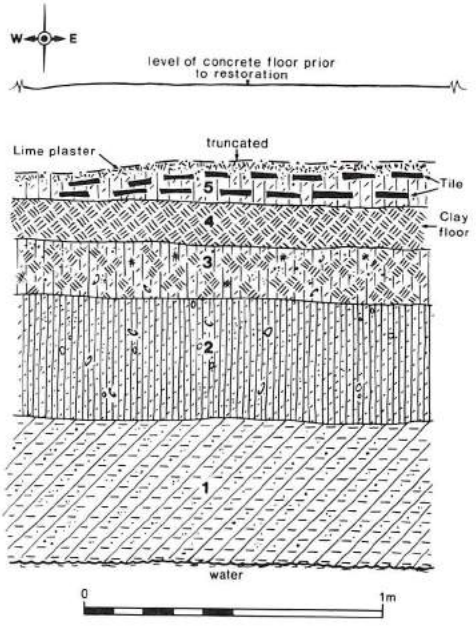

Fig. 6 Stratigraphy recorded behind, and on the line of, the south wall of the south Wealden

Discussion

Wealden houses in fact have a wide geographical range, and can be found scattered throughout the Lowland Zone of England. It has long been held that outside their main concentration in Kent (where 350 examples are known) and Sussex, they are usually of the compact "half Wealden" type, specially adapted for urban situations. As at Maldon, they typically consist of a single, storeyed bay (the cross-wing) and a single-bay hall, and are arranged in terrace-like blocks. The majority clearly included shops or workshops, and were probably built as speculative ventures.

In Essex, about 25 Wealdens have so far been identified, almost half of which are in "urban" situations. A particular concentration of "half Wealdens" can be seen in Saffron Walden, where they clearly represent the "commercial export" version popular outside Kent and Sussex. However, the majority of the Essex examples are substantial buildings of the "yeoman" type with two cross-wings and a two bay hall. Many are obviously rural with no specific commercial connotations.

Our Maldon examples are relatively early, even in the Kent/Sussex context, and are probably part of the first wave of popularity of this singular concept. The provision of single, but generous wings, and spacious halls with a remarkably wide span, suggests a hybrid and perhaps experimental type. Designed to occupy sites of restricted width, they are obviously far from utilitarian. Nevertheless, the quality of timber is somewhat uneven, and the standard of carpentry and finish is decidedly basic. The girt above the spered opening is without the customary mouldings, the only example so far noted in Essex. The provision of two identical units, the quality of workmanship, and the showiness of the front, are suggested to be undeniable indications of a speculative development.

The jowl-less posts are worthy of note, and are unlikely to be found in the Wealden heartland. Posts without jowls are usually considered as a pre-1300 feature, and this is correct for most of Essex. However, in Maldon and Colchester they are a common feature, even as late as the 15th century, and may represent a local carpentry style. This would suggest a local carpenter catering for a local speculator. The shop window design, which seems not to have had a single arch and has therefore been reconstructed with two small arch braces at its outer extremities, is also a point of interest. The only other examples previously encountered in Essex are all in Colchester, suggesting a further link. Such shop windows, however, have been identified elsewhere in England.

The survival of these Wealden houses and the adjacent property provides an unusually vivid insight into what this part of Maldon looked like on the 15th century. As has already been mentioned, the Wealdens seem to be speculative building for rent, something which raises questions about when and how this part of the High Street came to be developed. This is a problem on which the archaeological watching brief can shed some light, though the interpretation of hastily observed sections in foundation trenches needs to be treated with caution.

Maldon seems to have grown up round two centres, the fortified *burh* founded by Edward the Elder as a defence against the Danes in 916 at the west end of the High Street, and the port down at the Hythe where St Mary's church is situated. The irregular pattern of streets at the west end of the High Street has evolved in the market area outside the gate of the *burh*.[3] A series of unpublished excavations towards the west end of the High Street, almost opposite the junction with Market Hill, at Lloyds Bank, Tesco's and the Chequers, have all indicated that by the 11th century, and perhaps even the 10th, settlement extended a considerable distance down the line of the High Street away from the *burh* gate. To date, virtually nothing is known about the development of the lower end of the High Street and the Hythe. However, there are remarkable similarities between the stratigraphic sequence on the sheltered housing site south of the Wealdens, and that on the Chequers.[4] Here, too, there was a roadside ditch that was covered over by subsequent encroachment. There was, too, a greenish layer cut by slots apparently representing structures of the 11th-12th centuries, sealed by a dark earth deposit containing 13th-14th century finds, in turn overlain by the clay floors of timber buildings. This similarity could be taken to indicate that much of the High Street from the *burh* to the Hythe was built up by the 11th-12th centuries. The absence of the greenish layer from the area of the cross-wing and the southern Wealden could suggest that this part of the frontage was not occupied, but may in fact be illusory, a false impression obtained from narrow trenches of very limited extent.

The significance of the dark earth layer is uncertain, but if a garden-type deposit that formed over a period of time, rather than dumped make-up material, then presumably it represents a period when plots on the frontage were abandoned, and the Wealdens and the other house belong to a phase of urban renewal in the 15th century. However, in the builders' trenches adjacent to the Wealdens and the cross-wing, there was a layer of yellowish-brown clay below the clay floors of the standing buildings. This could be regarded as either a preparation layer for the construction of these buildings, or else the floor of earlier structures. The latter interpretation is supported by the plan of the southern Wealden, which was laid out slightly askew, presumably to fit into a row of tenements. If there were earlier buildings at this level, they were not of the quality and durability of the existing ones.

Acknowledgements

We should like to thank thank Marven Developments, the various building contractors, Dorothy Allen (Saddlers), and Ventura Video for their help and co-

operation in this investigation. Fig. 2 was prepared by Barry Crouch from an original drawing by Dave Stenning. The other drawings are by Roger Massey Ryan.

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Notes

1. Samples from the southern Wealden (one from a storey post, two from another storey post, and one from a stud) were submitted to the Sheffield University Dendrochronology Laboratory.
2. These sherds included Thetford-type ware, a plain slightly everted rim in a shelly fabric, and sandy medieval greywares.
3. From a summary account of the town's development, see Eddy and Petchey 1983, 63-66. The most up-to-date account of the *burh* can be found in Maldon Archaeological Group 1986.
4. The excavation at the Chequers was carried out in 1987 by the Maldon Archaeological Group and Essex County Council.

Biobliography

Eddy, M. R., and Petchey, M. R., 1983 — *Historic towns in Essex,* Chelmsford: Essex County Council.

Maldon Archaeological Group, 1986 — *The Maldon Burh jigsaw,* Maldon.

Stenning, D. F., 1985 — Timber-framed shops 1300-1600: comparative plans, *Vernacular Architecture,* **16**.

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Essex Archaeology and History **20** (1989), 110-119

A late medieval cutlery manufacturing site at Weaverhead Lane, Thaxted

by David Andrews

Summary

Traces of a structure, and large quantities of bone-working waste, were found in a small rescue excavation in Weaverhead Lane. This is a part of Thaxted where settlement seems to have retreated from its maximum extent in the Middle Ages. The bone waste consisted almost entirely of foot bones from which flat pieces of bone had been removed to make scale tang knife handles. On existing evidence, the Thaxted cutlers seem to have engaged mainly in putting handles of knives.

Introduction

This site lies on the west side of Weaverhead Lane just south of the junction with Margaret Street, and comprised a half acre plot of grassed over waste ground acquired for development by Uttlesford District Council (Fig. 1). When in 1979 six sub-soil test pits were dug for engineering purposes, the presence of late and post-medieval pottery was noted by M. R. Eddy. Documentary evidence indicates that there were houses in Weaverhead Lane in the Middle Ages (Newton 1960). An attempt was made, therefore, to assess the site more fully when development finally took place in 1984. Since resources were very limited and Uttlesford Council did not want the ground disturbed where foundations where to be laid, it was decided to re-excavate the test pits and record the sections.[1]

Excavation

The ground sloped down by up to 1.6 m from east to west. The ditch which formed the western boundary of the plot seemed in origin to have been a stream, as it lay at the bottom of a valley separating the gardens of the houses in Town Street from the development site. The natural was a yellowish to grey-brown chalky clay, occurring at a depth of 600 - 700 mm. Naturally formed soil profiles were revealed in test pits 1 and 20. In the others, there were pits and other cut features, mostly post-medieval. Test pit 50, however, produced late medieval finds, and this was therefore extended into a small area excavation.

Area 50 (Fig. 2)

The test pit had been dug into the fills of a pit (120), which was only partially investigated, but which was about 1.8 m deep and 3.8 m across. To judge from its size, it may have been a quarry pit. It had been filled with layers of clay of varying textures, apparently deposited in two main stages, with subsequent levelling up as the ground settled.

Where the extension was made to west and north of the test pit, a layer of mid yellowish-brown clay (111) 260 mm thick, with stones, grit, and flecks of brick or tile and coal or charcoal pressed into its surface overlay the natural. Cut into this was a slot (108) about 400 mm wide and 60 mm deep running approximately north-south, at about 90° to Weaverhead Lane. To the north, it butt ended; to the south, it petered out. At each end of it, and just west of it, were two postholes (114, 107). To the west of the slot, and defined by it on this side, there was a layer of greyish-white chalk (110), overlain to the north by reddish yellow sandy gravel (109). These layers and features seem to represent a building which would have lain mainly beyond the western limit of excavation. Layer 111 may be interpreted as a levelling layer to prepare the site, whilst 109 and 110 seem to be surfaces. Slot 108 would probably have held a stone foundation for a timber cill.

No stratigraphic relationship was observed between the remains of the building and pit 120. The area of the pit was covered by stony and gravelly layers with large quantities of worked bone (117, 112, not illustrated), probably external surfaces, which sealed what seemed to be a buried soil overlying the final levelling layer (118) in the pit. That they occurred only in the area of the pit, where there had been subsidence, suggests that they had been more extensive but had been removed by truncation. There seem to be two possibilities: that the surfaces were external to the building, which would therefore be later than the pit; or that they had sealed both the pit and the remains of the building, and were associated with activity taking place elsewhere. The upper part of the surfaces (102) was immediately below the topsoil and contained 19th century as well as medieval finds. This layer was cut by a small feature (103, not illustrated) of indeterminate character, the fill of which contained 16th-17th century pottery as well as being contaminated by 19th century finds.

Very little pottery was recovered from the pit fills and the contexts associated with the building, with the exception of the levelling layer (118) over the top of the pit. What there was dates mainly from the 15th century. The most diagnostic types for dating are slip-painted redwares (fabric 21, see pottery report below) and

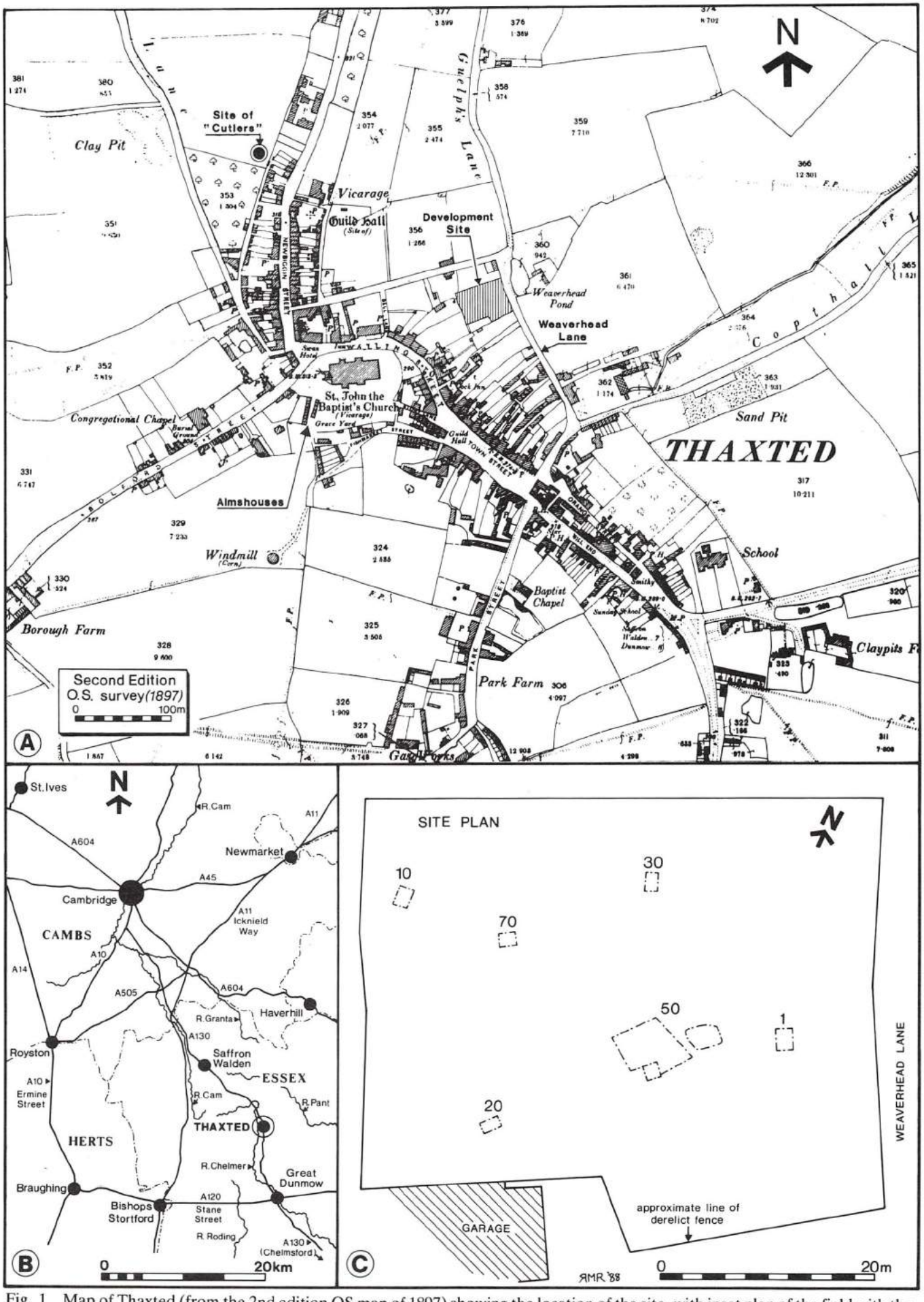

Fig. 1 Map of Thaxted (from the 2nd edition OS map of 1897) showing the location of the site, with inset plan of the field with the test pits.

sgraffito wares. The almost total absence of fine red earthenwares (fabric 40) suggests that occupation had ceased by the 16th century or did not continue long into that century. There were relatively larger groups of pottery from the surfaces over the pit. They were not sealed and were contaminated by superficial activity, but contained predominantly the same range of pottery with some later types such as fine red earthenware, some blackwares, and a little 19th century china and stoneware. The feature cut into surface 102 contained blackwares as well as other pottery and would therefore seem to have been filled in the 17th century. The 16th-17th century pottery does hint at the possibility of continuing occupation nearby, but could equally well have been associated with husbandry or casual activity. A proportion of the sherds from the superficial deposits were abraded, no doubt as a result of cultivation.

Layer 118 was rich in finds, including nails, a knife blade, bone offcuts, and copper alloy objects, mainly offcuts and scrap. Bone offcuts were also present in the lower fills of pit 120, in the levelling layer 111, and in large quantities (120 pieces) in one of the surfaces (117) sealing the pit. It is clear that bone-working, and no doubt bronze-working too, was being carried on in the vicinity. Only four small pieces of slag were, however, recovered.

The other test pits

Possible evidence of late medieval activity was found in no. 30, where there was a cut feature about 500 mm deep. A thin layer of charcoal was present at the bottom of the feature, above which there was a fill of brownish-grey silty clay containing oyster shell, bone, tile and late medieval pottery. Finds from the re-excavation of the test pit comprised medieval pottery of the same date as that from area 50, together with some worked bone, a knife blade, and a large quantity of pegtile.

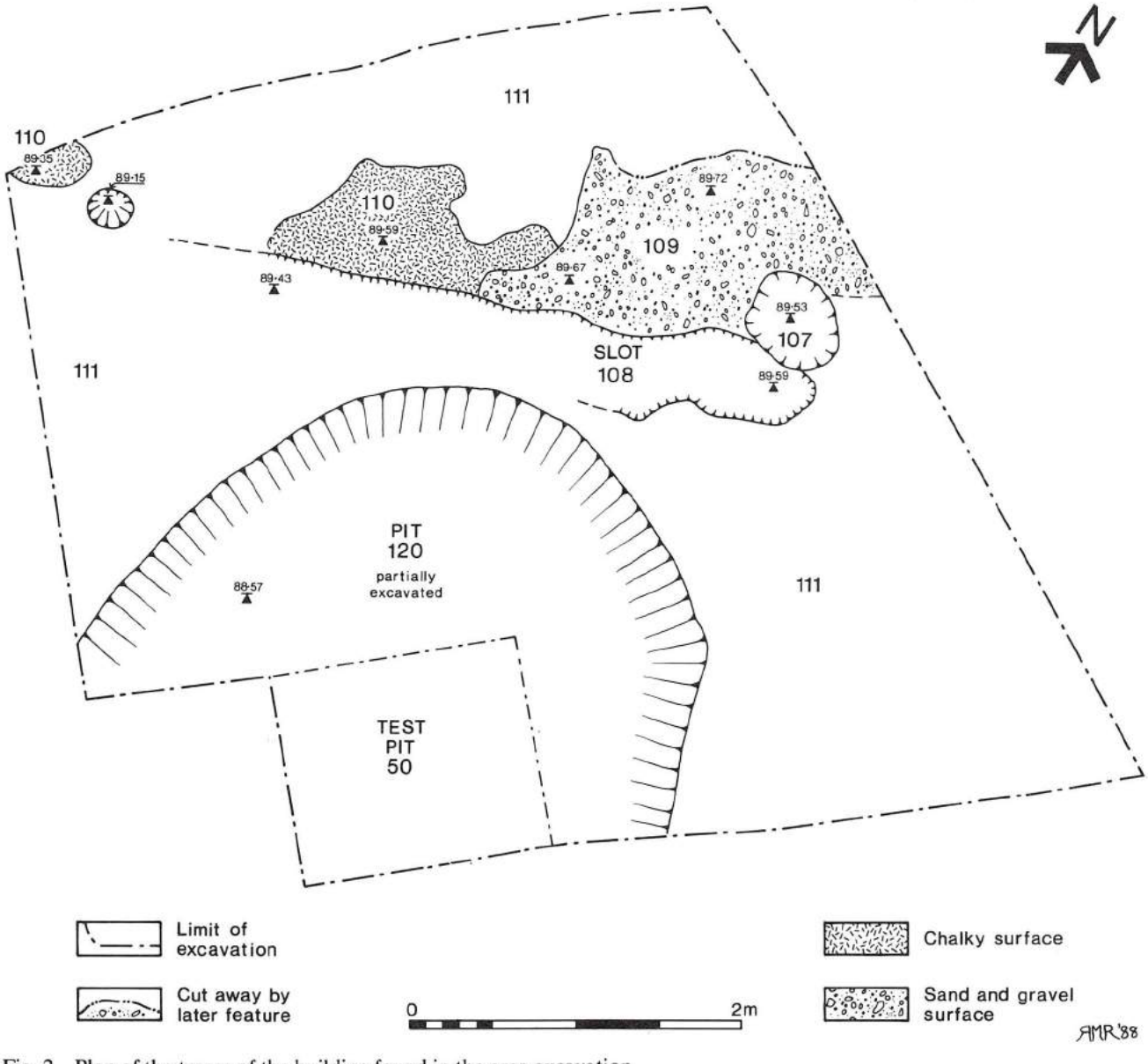

Fig. 2 Plan of the traces of the building found in the area excavation.

The excavation of test pit 70 was curtailed by waterlogging at a depth of 1.2 m. The natural was not discovered. The two lowest layers could have been dumped material, and were overlain by a layer of mixed sandy silt and clay with building debris which seemed to have been used a surface and had been cut by a stakehole. Five sherds ranging in date from the 14th-17th centuries were recovered from the re-excavation of the test pit. The bricks amongst the building debris looked 16th-17th century.

Two inter-cut pits were found in test pit 10. The earlier must have been at least 1.4 m deep, and was filled with layers of brown clay, the only finds from which were peg tile indicating a late or post-medieval date. The second pit was deeper still and had been re-cut once. It contained mid to late 19th century household refuse and could have been a rubbish or cess pit.

Test pits 1 and 20 revealed only soil profiles of apparently natural formation. Although the presence of abraded pottery was indicative of cultivation, largely stone-free topsoils with bands of worm-sorted stones at the base of them in test pits 1, 30, 50 and 70 suggested that the field had not been cultivated in recent times, and had presumably been used as rough pasture.

The finds

The pottery

A total of 315 potsherds were found, ranging in date from the 14th to the 20th century, with the exception of a fragment of a 1st-2nd century South Gaulish amphora recovered from the topsoil in test pit 50.[2]

Very little pottery has been excavated or published from north-west Essex, and that considered here is the first from Thaxted. None of the products of the known Essex medieval kilns (at Mill Green, Ingatestone, in the Hedingham area, and at Colchester) are recognizable amongst this material. Indeed the only widely traded wares identified are a single sherd from Cheam, and a few fragments of sgraffito, a type of pottery probably made in Cambridgeshire in the 14th and 15th centuries, the term being derived from the decoration incised through an off-white slip (Bushnell and Hurst 1952).

The framework currently adopted for Essex pottery studies is that established by Cunningham (1985a), who divides the locally made common wares into three main groups:

Fabric 20: sandy grey wares, typically 13th-14th century in date
Fabric 21: a hard, usually oxidised somewhat sandy fabric with slightly pimply surfaces, made from the 14th-16th centuries
Fabric 40: red smooth earthenware with very few visible inclusions. At Chelmsford this was made from the 15th century and supersedes fabric 21 during the 16th century.

The distinctions between these fabrics, particularly 21 and 40, can be somewhat arbitrary, and within them, subdivisions can sometimes be recognized, but in the absence of the discovery of new kiln sites the excessive identification of fabric variations is not a particularly productive task. At Thaxted, both fabrics 20 and 21 contain occasional pieces of chalk and white grit. A substantial proportion of the fabric 20 sherds have dark grey surfaces and reddish brown cores, resembling pottery which has been excavated at Market Row, Saffron Walden. There are also some distinctive fabric 20 sherds which are light grey or buff externally often with reddish cores, and have rough sandpapery surfaces.

Sgraffito is grouped by Cunningham within fabric 21, and indeed there is nothing that obviously sets it apart from other pottery of that sort. It contains little visible sand. More conspicuous are occasional white grits and pieces of red iron ore. The undecorated surfaces are slightly rough to the touch and pimply in appearance. The slip is usually applied only to the exterior of the vessel. The incised lines are quite wide (1-3 mm) and neatly done, and the vessels are covered with a yellowish glaze, sometimes speckled with green. Only small body sherds are present, but the forms are normally jugs.

The pottery recovered was too small a sample and too little of it was well stratified for it to be valuable for the purposes of study. In this report, the sherds from the well sealed contexts associated with the late medieval building and pit will be first treated as a group, and then general remarks will be made on those in other contexts. The former comprise no more than 55 fragments, of which rather more than one-quarter are in fabric 20, about half are in fabric 21, and seven are sgraffito. Fabric 40 is absent. It is on these grounds that the main period of occupation has been dated to the 14th-15th centuries. A few sherds in fabric 40, and rather more of the sort transitional between 21 and 40, were present in the topmost surface (102) overlying pit 120, but this immediately underlay the topsoil and also contained post-medieval and modern finds.

Pottery from sealed contexts (Fig. 3)

About half the fabric 20 sherds were reddish brown in section. Only one form is present, a jar with a vertical neck and flanged rim (no. 1).

About one-third of the fabric 21 sherds bear traces of thin transparent glaze, usually external, and almost one half of them have slip-painted decoration, in some cases over a darker red slip or on a reduced grey external surface. Forms are bowls (no. 2), jars (no. 3) and jugs (no. 4). No. 5 could be from a cistern rather than a jug. No. 6 is a bowl rim in fabric 40.

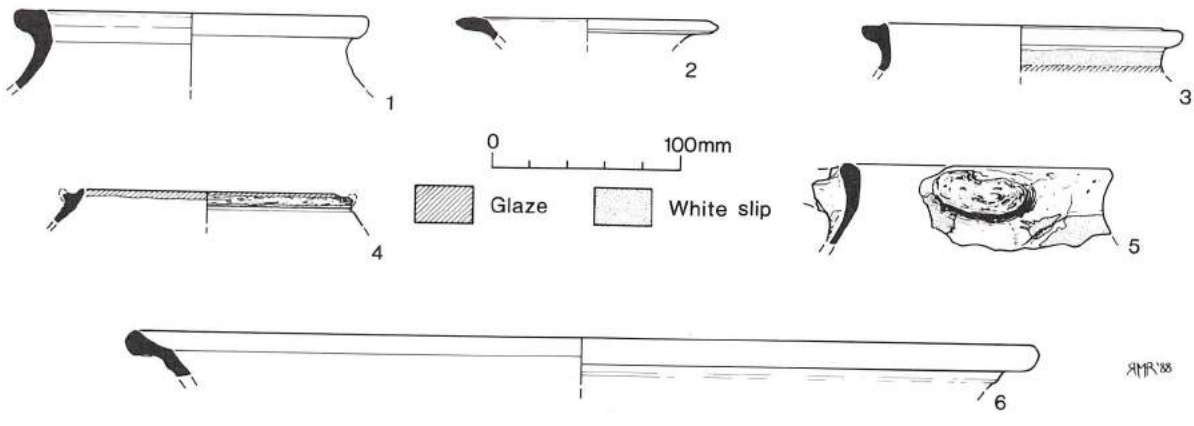

Fig. 3 Pottery.

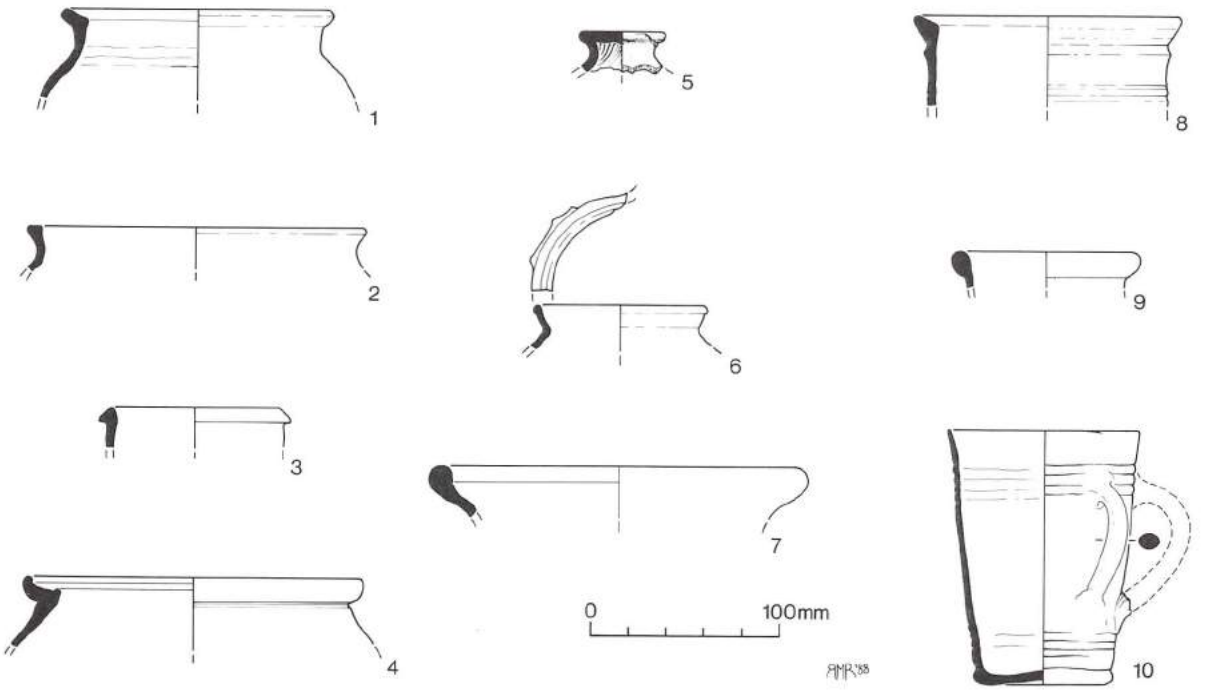

Fig. 4 Pottery.

Pottery from the later layers in area 50 and the test pits (Fig. 4)
The more notable pieces are illustrated in Fig. 4. Also present were one or two small sherds of Tudor Green, Southern Whiteware, and German stoneware.

1. Fabric 20, hard, dark grey, high fired. Area 50, unstratified.
2. Fabric 20, reddish buff core. Area 50, 102.
3. Fabric 21, jug rim with white slip internally and externally, and a speckled green glaze externally. Possibly sgraffito. Test pit 1, unstratified.
4. Fabric 21, thin glaze on top surface of rim. Area 50, 104.
5. Fabric 21. Lid knob. Patchy transparent glaze. Test pit 30, unstratified.
6. Fabric 40. Dark red slip. Spots of glaze. Test pit 30, unstratified.
7. Fabric 40. Glaze internally and externally over a dark red slip. Test pit 10, unstratified.
8. Fabric 40. Blackware. Test pit 70, unstratified.
9. Fabric 40. Blackware. Test pit 10, unstratified.
10. Fabric 40. Blackware. Area 50, 104.

Stone objects
Three struck flints, probably late prehistoric, were found in layer 102 in area 50. Part of a Norwegian ragstone whetstone[3] was present in the top levelling fill (118) of pit 120 (Fig. 5). Since for most of its length it is unworn, this portion must have served as the handle, the object having been broken at the junction between this and the worn sharpening surfaces.

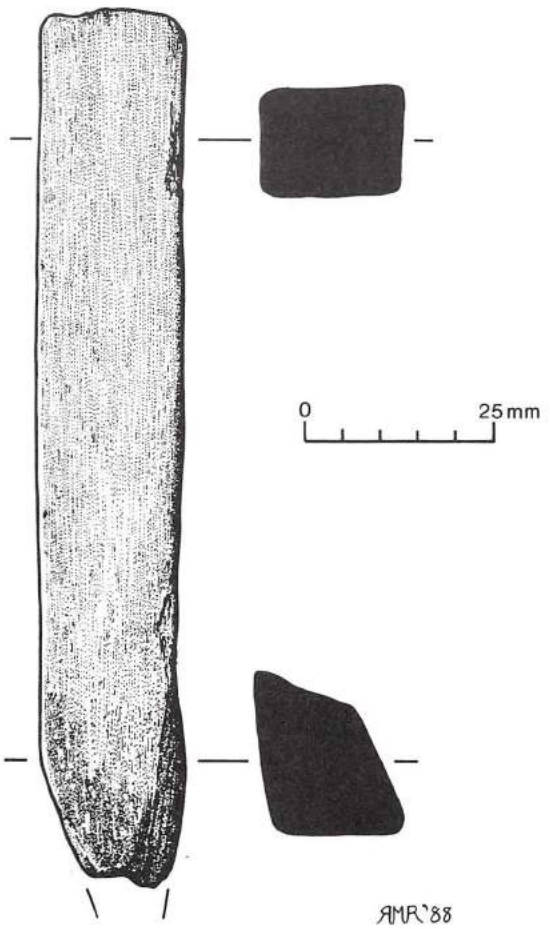

Fig. 5 Whetstone.

The animal bone
by Owen Bedwin
The assemblage of 'unworked' animal bone was small, consisting of only 47 fragments. All were in excellent condition (as were the worked pieces), showing little sign of post-depositional decay. Of the 47 fragments, five came from unstratified contexts, and a further 8 were unidentifiable. The remaining 34 all came from late medieval or early post-medieval contexts in area 50. Four species were present: *Bos, Ovis, Sus* and *Equus*. The assemblage is so limited that no firm conclusions can be drawn about the diet of the inhabitants of the town.

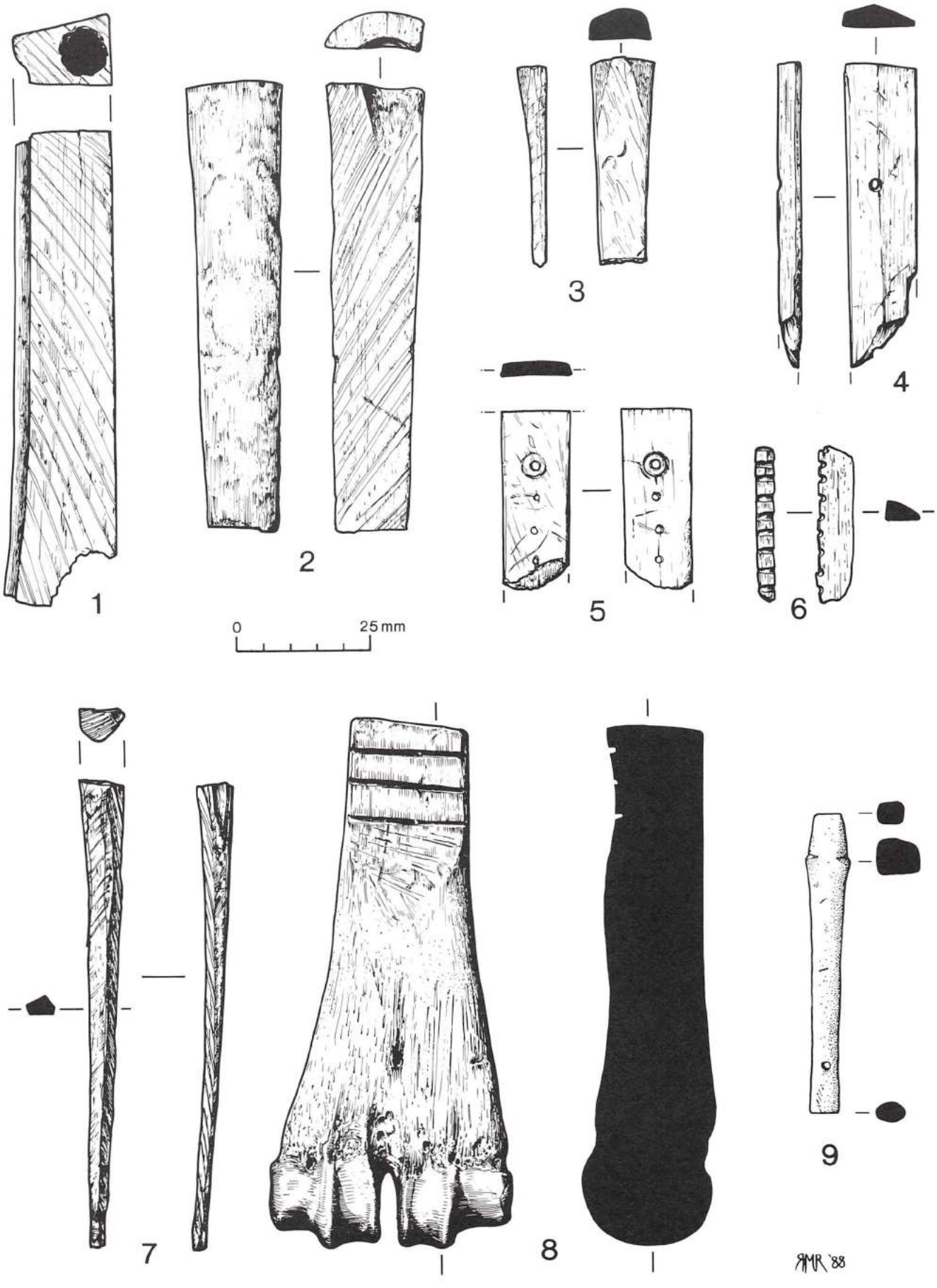

Fig. 6 Bone objects.

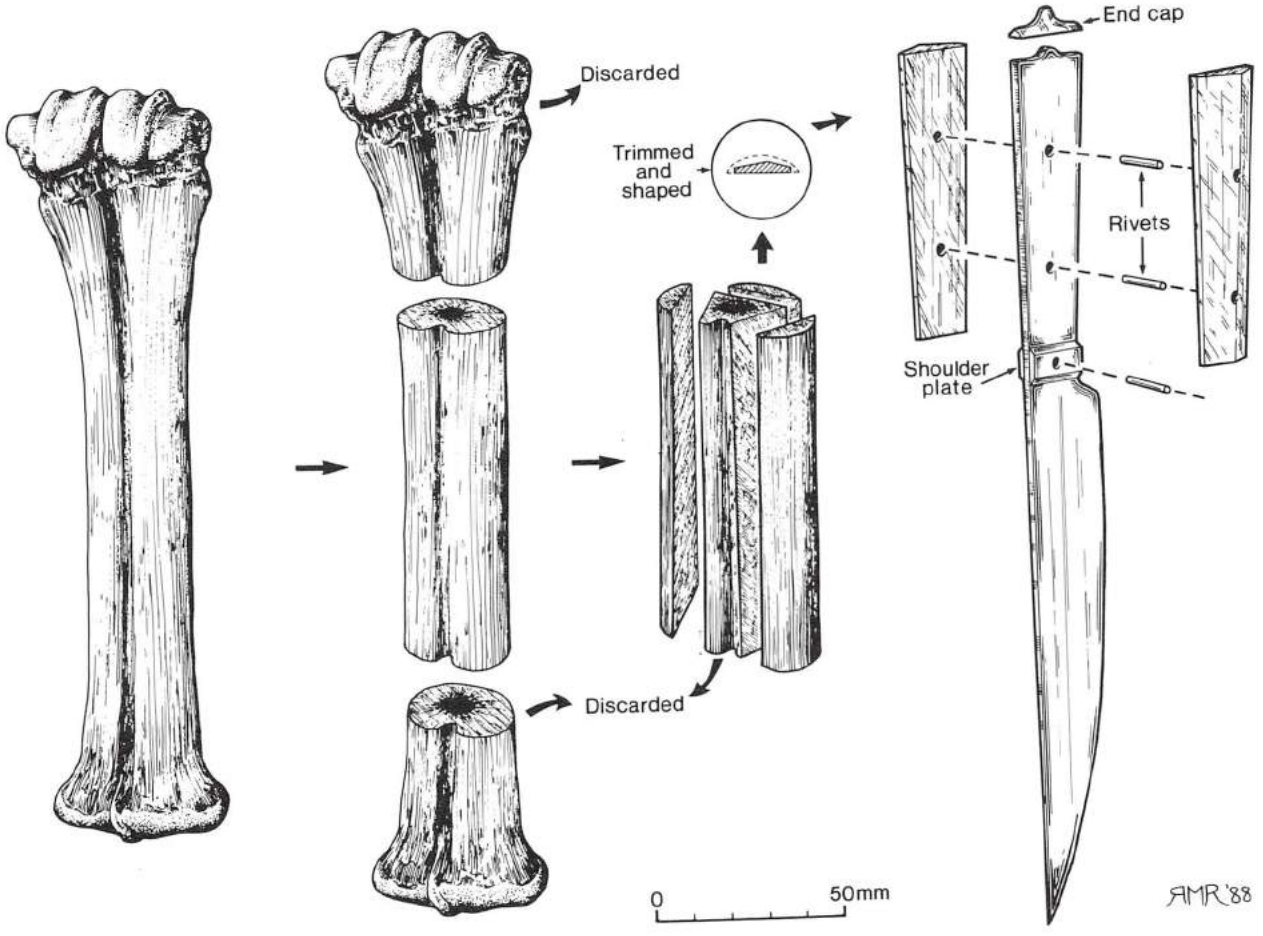

Fig. 7 Diagram showing the process of fashioning a scale tang handle from a cannon bone or metapodial.

The worked bone (Fig. 6 & 7)
by David Andrews and Owen Bedwin

A total of 320 offcuts and reject pieces from bone-working were found in area 50, half of it from the levelling layer (118) at the top of pit 120 and one of the surfaces (117) sealing that pit. Three offcuts were also found in test pit 30, and one in test pit 20. More than half these pieces (181 or 56.6%) were the sawn-off ends of metapodials or foot bones, also known as cannon bones. The other most common single type of waste were the shafts of the cannon bones (no. 1) which had been roughly squared off in the course of the removal of thin plates of bone. A few (22 pieces, 6.9%) of these plates were present, presumably rejects (nos. 3 & 4, from 102 and 118 respectively). In addition, there were five which had been taken further in the manufacturinag process and were recognizable as the plates or scales for knife handles (nos. 4 & 5, 102), leaving no doubt that the bone working waste is tangible evidence for the Thaxed cutlery industry.

Most of the bones were from cattle, but there were seven examples of horse metapodials worked in the same way, and three examples of sheep/goat metapodials. There were also a few *Bos* tibiae and radii which had been similarly worked.

The working procedure seems straightforward (Fig. 7). The joints or epiphyses of the canon bones were sawn off, and then thin plates or scales, usually four or five in number, were sawn from the shaft. The one constraint on this was a shallow depression running longitudinally down the centre of one side of the bone, casusing the plates to be removed obliquely to the faces of the shaft. The edges of the scales were then trimmed to the width of the knife handle, and the upper surface flattened off. These finishing processes would have been carried out by filing and polishing.[4] Finally, holes were drilled in the plates or scales for attachment by rivets to the iron knife handles, the construction of which is discussed below. In some cases (possibly no. 6, 118), these holes may have been decorative as well as functional, though this piece could be from something other than a knife handle.

Amongst the waste objects are pieces that suggest other forms of bone working were carried out alongside the production of knife handles. There are ten long thin pieces of bone, one of which (no. 7, 117) looks as if it was an awl. Two pieces of flat or membrane bone might be casual or might have been for the production of other types of object. The same is true of two rings consisting of cross-sections cut from the shafts of cannon bones. There are also two cannon bones which have been cut in half longitudinally. A joint from the end of a cannon bone has had one side flattened and grooves cut in it so that it resembles a pinner's bone (no. 8, 118), a tool which was used to hold pins whilst they were sharpened (MacGregor 1985, 171; Cunningham 1985b). This together with the copper alloy scap points strongly to metal-working being carried out on the site. Finally, there is what is probably a lace bobbin (no. 9, from the fill of the feature in test pit 30).

Copper alloy (Fig. 8)

59 fragments of copper alloy were recovered from area 50. About half consisted of strips ranging from about 3-15 mm in width, sometimes with tapering sides, which as has already been observed, look like offcuts from manufacture. Very little bears any trace of working, but one fragment (no. 1, 102) has been punched, and quite exceptional is a piece of binding strip with stamped decoration and a rivet (no. 2, 102). The second largest category of object is pieces of wire, all fragmentary apart from an S-shaped book (no. 3, 102). Some of these pieces may have been from pins. Several pin shafts were recognized, but intact pins were only two in number (no. 4, 102). Both have their heads made from a twist of wire fashioned into an almost hemispherical shape.

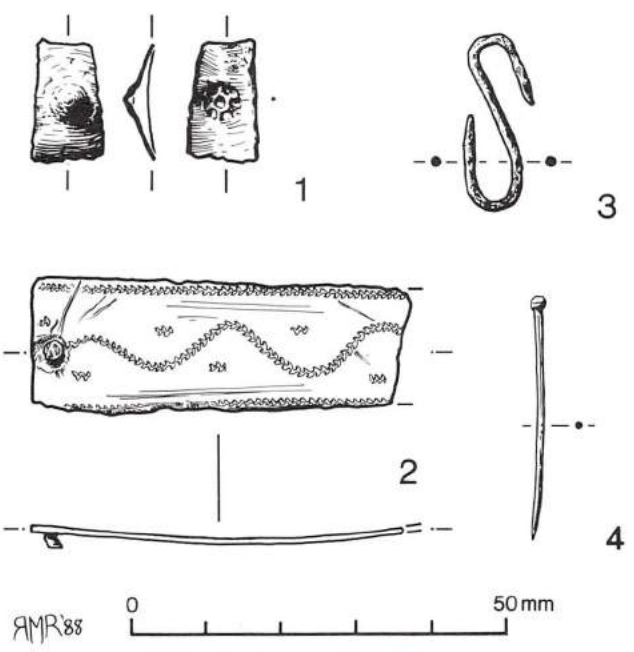

Fig. 8 Copper alloy objects.

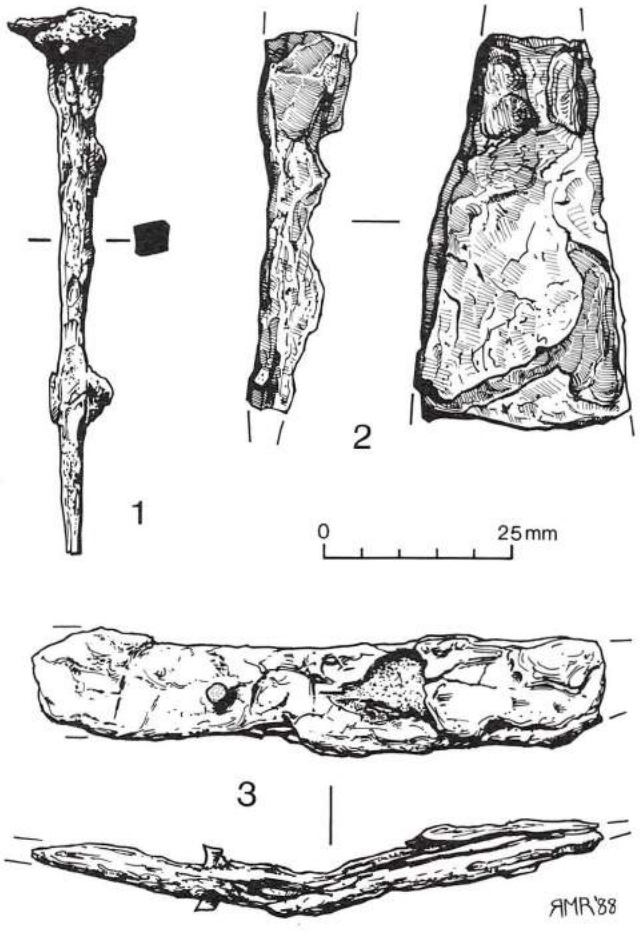

Fig. 9 Iron objects.

Iron (Fig. 9)
48 nails were found in area 50, mostly corroded and fragmentary. A group of nails from 118, the levelling layer over pit 120, seemed to be similar, something in excess of 70 mm in length to judge from the most complete examples, with shafts measuring 3-4 mm and broad flat sub-circular heads (no. 1). Some of them looked unused. A number of similar nails were present in overlying contexts.

Apart from a wedge-shaped piece of iron of uncertain function (no. 2, 112), quite the most interesting finds, in view of the Thaxted cutlery industry, are the fragmentary and very corroded knife blades, one from 118 and two unstratified examples from test pits 50 and 30, both almost certainly late medieval in date. The first (no. 3) is from a scale tang knife with one surviving rivet and a blade about 15 mm wide. The other two are in very poor condition but seem to be of similar width and also to have had scale tang handles. Medieval knives had either whittle tang handles, in which the blade has a tapering protrusion which was fixed into a one-piece, usually cylindrical handle; or scale tang handles consisting of a flat piece of iron narrower than the blade to which 'scales' of wood, bone or rarely metal were riveted. In the early Middle Ages, whittle tang handles are the only type known. Scale tang knives only seem to have been used in England from the first half of the 14th century (Cowgill *et al.* 1987).

Clay pipes (Fig. 10)
Clay pipe stems were recovered in very small quantities from test pits 10, 20 and 70. Fifteen were found in the superficial layers in area 50. All were too incomplete to warrant comment, apart from a 19th century specimen from test pit 10 decorated with a crossed keys motif, a not uncommon design at the period, and bearing the initials 'JM'. For a similar pipe from Pleshey, see Major 1988.

Building materials
Fragments of pegtile were present in most contexts in area 50, whereas brick was absent. From the top fill of pit 120 was recovered a piece of brown-glazed floor tile 25 mm thick.

Pegtile was found in most of the test pits, again in a fragmentary state. There was a particular concentration in test pit 30, which also produced a small piece of brick 48 mm thick, and a probable floor tile fragment 30 mm thick.

Glass
The only finds (apart from late 19th century material in test pit 10) were two fragments of window glass, one from 102 in area 50, and one from trench 1 (unstratified). The former was very weathered and could be 15th-16th century. The latter was pale green, possibly 18th-19th century.

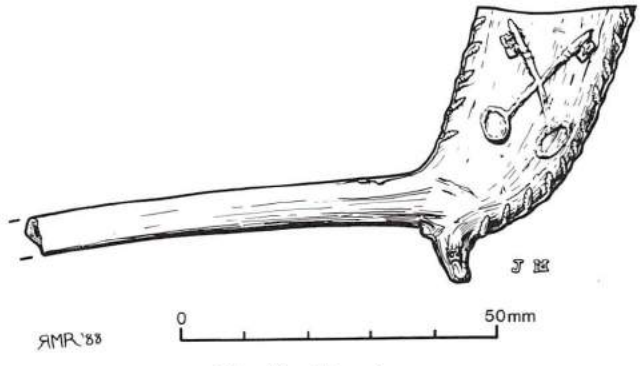

Fig. 10 Clay pipe.

Discussion and conclusions

Three worked flints and a fragment of amphora rim sherd may or may not be evidence of prehistoric and Roman occupation at Thaxted, as they were residual in the contexts in which they occurred. The earliest traces of occupation found date from the late Middle Ages. They comprise a building, represented by a slot and surfaces, and a large pit, sealed by later surfaces, located in area 50. Both were only partially investigated, but the pit could have been a quarry and, in view of the large quantities of bone-working waste and also copper alloy scrap, the building may have been an artisan's residence or workshop. Its position at some distance from the street frontage would be more consistent with the latter. The occupation would seem to have been of relatively short duration, and on the evidence of the rather small assemblage of pottery may be dated to the 15th century. Finds of much the same date and traces of contemporary activity were found in some of the other test pits, but there was nothing however to indicate the presence of structures.

The site is of interest, first, for what can be learned about the topographical development of the town, and, second, because there can be no reason for not linking this activity with the elusive Thaxted cutlers. Well preserved medieval centres like Thaxted can give a false impression of accurately representing the appearance and extent of the medieval town. On this side of Thaxted, however, it is clear that there has been settlement shrinkage, for today there are no old buildings in Weaverhead Lane. A survey of 1393 records as many as nine messuages there, one of them belonging to a smith.[5] Contraction began early. The rather limited archaeological evidence suggests that the site had been abandoned by the 16th century. Later finds in poorly sealed and topsoil contexts raise the possibility of some continuing occupation, but were probably associated with husbandry and casual activity. Desertion could also explain why Newton (1960, map III) could not assign the area of the site to a particular manor on his plan of the town based on surveys of the 16th and 17th centuries.

Apart from the fact that the 1381 poll tax records 79 cutlers and four sheathers (Newton 1960, 20), virtually nothing is known about the Thaxted cutlery industry.[6] The number of cutlers is very large indeed, comparable or even in excess of those recorded at London (Cowgill *et al.* 1987, 32), and must explain the growth and prosperity of the town, as reflected in the increase of burgess holdings, in the second half of the 14th and in the early 15th centuries (Newton 1960, 27), at a time when most places were experiencing economic depression.

The job of the cutler was to attach the handle to a knife, and extended to a general responsibility for the finishing of the product, even to the extent of sometimes making sheaths (Cowgill *et al.* 1987, 32). The iron, for which there was no local supply, must have been brought in, possibly being imported in the form of ready-made knife blades. However, the relatively large number of smiths at Thaxted (eleven in 1381, Newton 1960, 20) probably indicates that blades were being made locally. Indeed, in view of the market created for them by the numerous cutlers, it would be strange if this were not the case. It is worth noting that the absence of a local supply of iron and steel is not an obstacle to the development of a cutlery industry: London, of course, had no raw materials, and even the Sheffield cutlers were importing foreign steel in the 16th century (Lloyd 1913, 69-70).

The many bone offcuts from area 50 are an unusual find on archaeological excavations. Although including only a very few scales from knife handles, they are consistent with activity of this sort, and make it clear that this is what the Thaxted cutlery industry consisted of. This conclusion is supported by the discovery of bone-working waste elsewhere in the town, notably at the house built by the Abbs family in Water Lane between Newbiggin Street and Watling Lane, and at the old almshouses (Moore 1987). The material from both sites consists mainly of the shafts of cannon bones from which scales have been sawn off. These sites are all at the periphery of the town where an anti-social activity involving the defleshing and boiling of bones might be expected to be located. There is, however, documentary evidence that the cutlers were also established in the centre of the town, in particular in the main street and Middle Row or what is now Mill End (Newton 1960, 21).

The impression that the knife handles were mainly of bone could be misleading. In a sample from London, recovered mainly from the Thames waterfronts (Cowgill *et al.* 1987), the majority of the handles were of wood. At Thaxted, of course, wood would not have survived being buried in the ground. But the sheer abundance of bone offcuts makes it seem probable that bone was the main material being used there. The London sample dates mainly from the late 12th to the 15th centuries, whereas the Thaxed material seems to be mainly 15th century. This chronological disparity could explain both this and another difference, namely that in the London sample whittle tang knives outnumber scale tang ones, whereas at Thaxted there is evidence only for scale tang knives. Scale tang handles are only known from the 14th century onwards, and it may not be too far fetched to see the development of this sort of handle giving an impulse to the growth of the cutlery industry, and even being linked to the establishment of the cutlers at Thaxted.

Although the cutlery industry might be seen as involving no more than the fitting of handles to knives, it called upon a wide range of skills, which could include wood-, bone- and ironworking, grinding and sharpening, and the making of scabbards. In addition, scale tang knives would require copper alloy or precious metal fittings such as shoulder plates, end caps and hilt bands, and considerable potential for decorative treatment. It is not surprising therefore that copper alloy scrap suggestive of metal-working was found at Weaverhead Lane, and that some of the bone waste might have been from the manufacture of objects other than knife handles. The growth of the cutlery industry would probably have spawned ancillary activities and

manufactures, widening and stimulating the economic base of the community.

Acknowledgements

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Notes

1. The paper archive and finds are deposited at Saffron Walden Museum (site code TX2).
2. Identification by Colin Wallace. See Going 1987, 11 (fabric 56).
3. For the use of this stone for whetstones, see Moore 1978.
4. For bone working techniques, see MacGregor 1985, 55 *seq.*
5. Newton 1960, 51, 64. Newton identifies Weaverhead Lane as the way known as *Fro Kentesbridge to Asshfeldfoteway*.
6. But see also Symonds 1889, and Simcoe 1934.

Bibliography

Bushnell, G. H. S. and Hurst, J. G., 1952 — Some further examples of sgraffito ware from Cambridge, *Proc. Cambridge Antiq. Soc.*, **46**, 21-26.

Cowgill, J., de Neergaard, M., and Griffiths, N., 1987 — *Knives and scabbards. Medieval finds from excavations in London:* HMSO.

Cunningham, C. M., 1985a — A typology for post-Roman pottery in Essex, and The pottery, in C. M. Cunningham and P. J. Drury, *Post-medieval sites and their pottery: Moulsham Street, Chelmsford*, London: Counc. Brit. Archaeol. Res. Rep., **54**.

Going, C. J., 1987 — *The Mansio and other sites in the south-eastern sector of Caesaromagus: the Roman pottery*, London: CBA Res. Rep. **62**.

Lloyd, G. I. H., 1913 — *The cutlery trades*, London.

MacGregor, A., 1985 — *Bone, antler, ivory and horn. The technology of skeletal materials since the Roman period*, London and Sydney: Croom Helm.

Major, H., 1988 — Other finds, in D. Priddy, Pleshey castle — the northern bailey: excavations at the village hall site, 1987, *Essex Archaeol. Hist.*, **19**, 1988, 174.

Moore, D. T., 1978 — The petrography and archaeology of English honestones, *Jnl. of Archaeol. Science*, **5**, 61-73.

Moore, S., 1987 — A note on archaeological finds relating to the Thaxted cutlers, *The Thaxted Bulletin*, **40**, 21-25.

Newton, K. C., 1960 — *Thaxted in the fourteenth century*, Chelmsford: Essex Record Office.

Simcoe, E., 1934 — *A short history of the parish and ancient borough of Thaxted*, Saffron Walden: Hart & Son.

Symonds, G. E., 1889 — Thaxted and its cutlers guild, *Trans. Essex Archaeol. Soc.*, ns **3**, 254-61.

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Ashmans, Woodham Walter: a post-medieval house and its setting

by P. M. Ryan, M. R. Eddy and P. J. Gilman

Summary

Ashmans is the only pre-1600 house of a small, copyhold farming unit to survive in the parish of Woodham Walter, Essex. It consits of a late 15th or early 16th-century crosswing and a hall/service block which was renovated early in the 17th century. The crosswing was extended and an outshot added to the main block in the second half of the 18th century. The property is exceptionally well documented from the late 16th century to the present, allowing correlations to be made with the successive alterations to the house, the various types of wall infill and decoration, the archaeological finds, and to some extent the effects of change in farming practice.

Introduction

Early in 1977 Mr and Mrs P. J. Williams purchased Ashmans from Mr E. Ratcliff with the intention of modernising and restoring the Grade II listed building. It had been uninhabited for nine years and was in a very poor state of repair. The building was stripped to the timber-frame, the chimney stacks dismantled and 18" of soil removed from the floors. The renovation works were observed by P. M. Ryan but building operations inhibited rigorous recording. Measured sketches were made of the exposed timber frame and a watching brief undertaken on ground disturbance within and around the building. All measurements were recorded in feet and inches.

Location (Figs 1 and 2)

Ashmans stand one mile east of Woodham Walter village, at Curling Tye Green (TL 8215 0715, E.S.M.R. No. TL80/96). The green, now reduced to a triangular road junction, is situated on a glacial sand and gravel terrace overlooking the Chelmer Valley. Originally, the green extended westwards on both sides of the road leading into Woodham Walter village, and Ashmans stands on the south side near the western end. The house faces north, towards the road, and the agricultural buildings of the farmstead lie to the south-east. Water was obtained from a well and an earth-closet provided sanitary arrangements.

Description (Figs 3-7)

Exterior

Ashmans is a plastered, timber-framed house with a red plain-tile roof. The building comprises a hall and a service block of one and a half storeys with a rear outshot, and a two-bay, two-storey crosswing with a rear extension. A chimneystack had been inserted between the crosswing and hall, there is a rebuilt stack on the western end of the hall block and an external stack to the crosswing extension. The main entrance door has a fine doorcase with an open pediment. The remains of prick pargetting were visible on the north facade.

Crosswing

The simple two-bay crosswing has no jetty. It originally contained a single room on each floor, the parlour and parlour chamber, but a slight wooden partition divided the upper room into two before renovation commenced in 1977. Curved tension braces are trenched into the outside of the studs in the east wall of the ground floor, and west wall of the upper floor, but into the inside of studs in the north, east and west walls of the upper floor. Where the original infill survived, it was constructed of riven oak splints or stakes tied with willow bark.

The first floor has common joists of straight timber with clean cut arisses (5 to 6" × 5" section), jointed with soffit tenons. The bridging joist is supported on a shoulder on the central post (Fig. 5.3). When the later ceiling of thick riven laths and lime and hair plaster was removed, the smoke-blackened joists and undersides of the floorboards were revealed.

The west wall of the crosswing was reconstructed when the chimney was inserted. A number of one-inch chisel-cut carpenters marks were found on some of the studs. The ground floor, of 9¼" boards, was laid on a 3" deep earth floor.

In the rear wall three diamond mortices for an unglazed window were found in the girt of the lower room and two in the wall plate of the room above (Fig. 4). Similar evidence, but for smaller windows, was found in the east wall. Most of the evidence for the front fenestration had been removed when the sash windows were installed. However, a central rectangular mortice and two circular mortices in the wall plate suggest a glazed window of two lights preceded the present, 19th-century windows.

The roof, of side purlin construction, has slightly curved wind bracing at each end (Fig. 4). The rafters are laid flat. The central truss has two straight collars, the lower lapped and the upper tenoned into the principal rafters. Two-inch chisel-cut carpenters marks were found on this and the southern gable truss. An inserted floor forms garrets in the roof. Two bridging joists are lodged on the wall plates. The common joists (3" × 3"

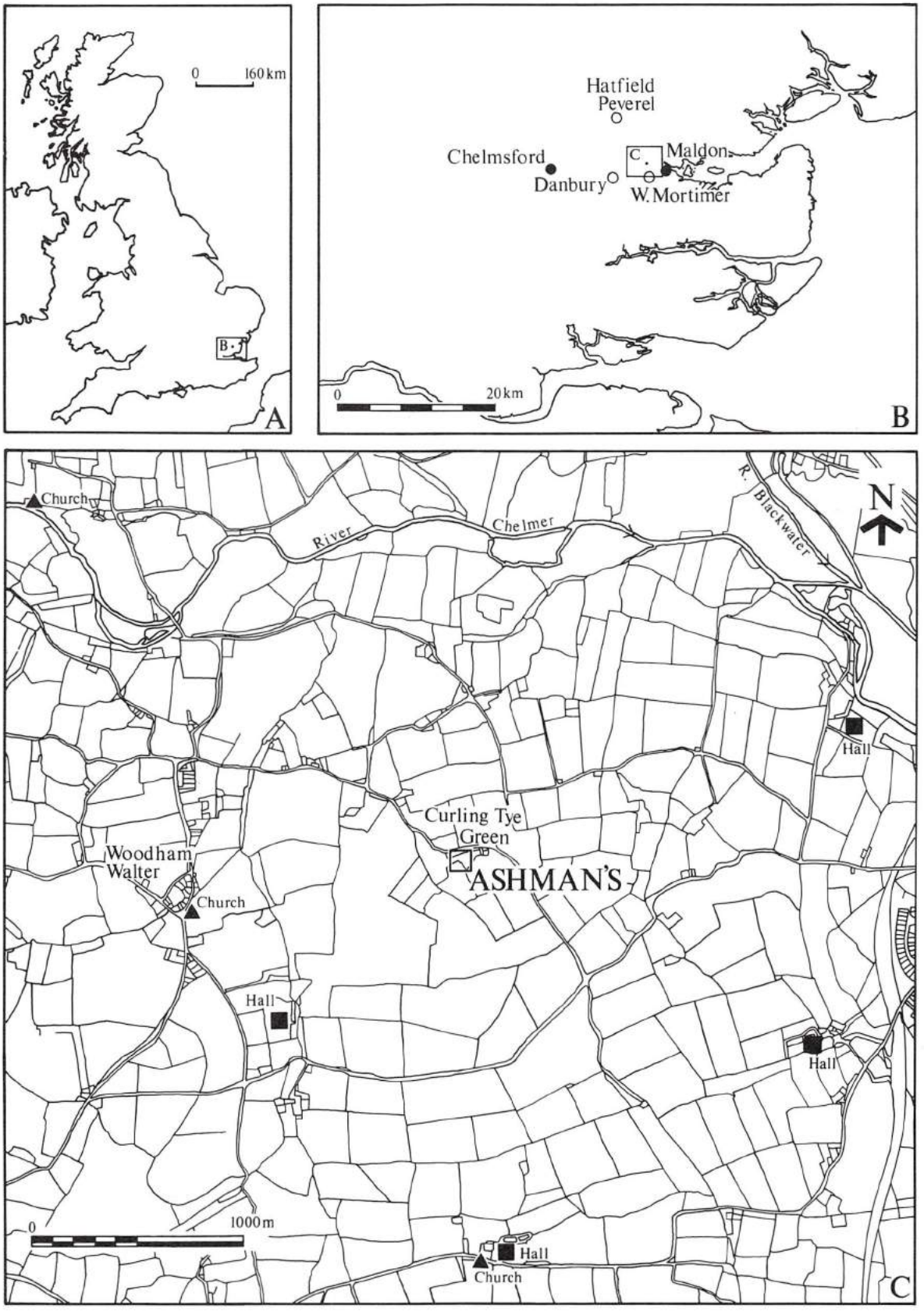


Fig. 1 The location of Ashmans and the present-day landscape.

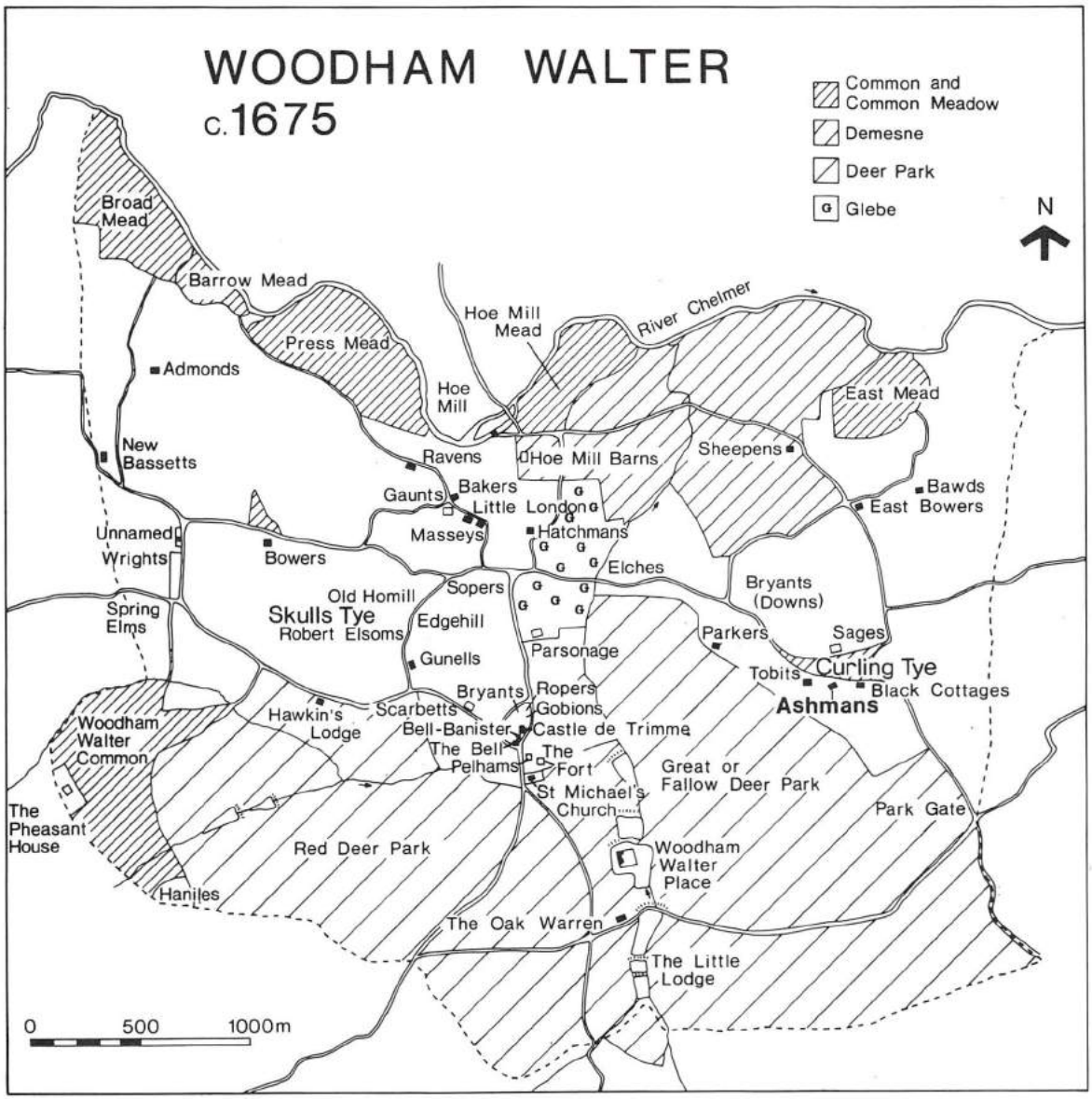


Fig. 2 The parish of Woodham Walter in the later 17th century. Houses shown in solid black survive in some form from this period. The positions of those shown as open squares are known from fieldwalking or documentary evidence. The sites of those indicated by a house name only have not been identified on the ground at the time of writing.

section) have soffit tenons and the joist-ends were cut to fit the waney section of the main beams (Fig. 5.4). The central roof truss had been infilled to form a partition wall, the lower collar cut and a doorway constructed. The undersides of the tiles were daubed and plastered. Steps were built in the angle between the parlour and hall chimneys to gain access. The southern garret is lit by a dormer window.

The crosswing had been extended to form an additional room on each floor, the back parlour and back parlour chamber. The frame is of hardwood (4″ × 4″ stud section) but of much poorer quality. It has straight primary bracing in the upper walls. The original cladding was an inner and outer skin of narrow laths and plaster. The vertical section joists of the first floor (2¼″ ×4¼″ secton) are jointed to the bridging joists (7″ × 7″ section) by diminished haunched tenons with pendant soffits. The two-bay roof is of side purlin form with a ridge piece. The rafters are laid on edge. The straight collar of the central truss is lapped to the principal rafters. All carpenters marks are of the scribed witness type. The windows in the east wall are later insertions. When the concrete ground floor was removed traces of a wooden floor were found in the soil beneath.

Main Block

The main block consists of two unequal bays and a chimney bay. Originally of one and a half storeys, the subsequent heightening of the front wall has given the front elevation the appearance of a two storey building. The hall occupies the larger bay and the service room, more recently known as the dairy, the smaller. Both rooms are floored over to form upper rooms. The joists

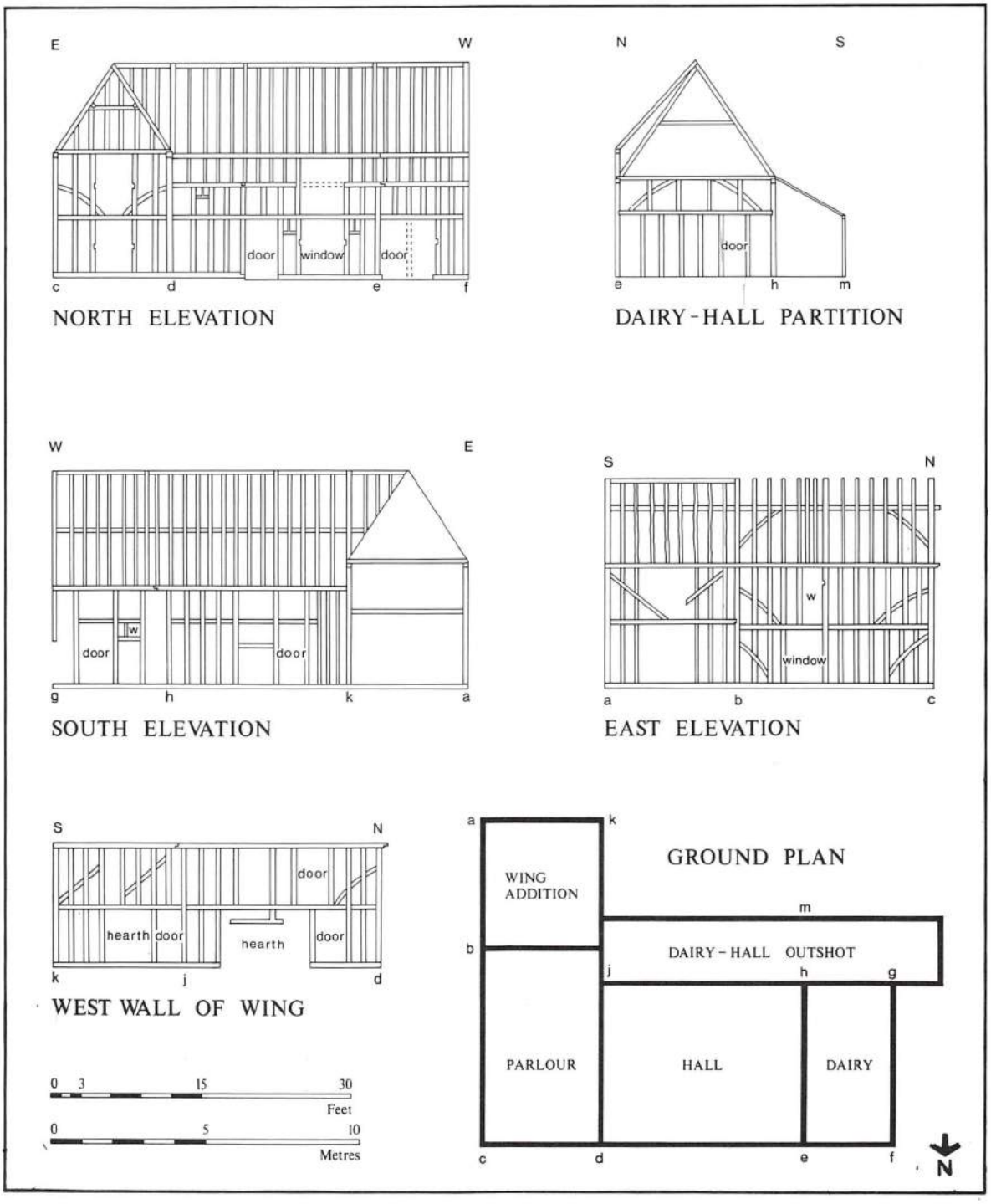
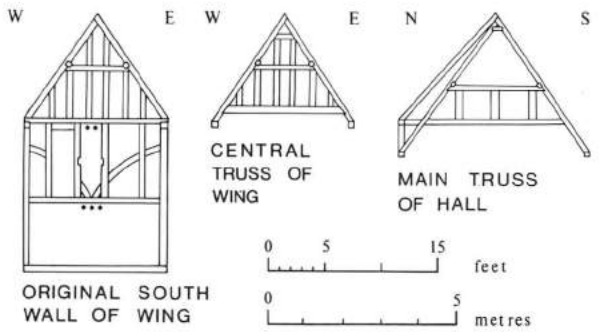


Fig. 3 The principal timber-frames of Ashmans.

above the dairy are of poor quality, varying in section from 5½″ ×4″ to 4″ by 4 ¾″. They are jointed to the bridging joist with diminished haunched soffit tenons (Fig. 5.2). The floor over the hall has joists of deep section (3½″ × 5″) jointed to the bridging joist with diminished haunched tenons with pendant soffits (Fig. 5.1). They are lodged on a clamp pegged to the south wall and on the girt of the north wall. Access to the dairy chamber is by a stair in the corner of the room below. Much of the timber in this part of the building is re-used. There is no girt to the rear wall (studs 5″ × 5″ section). The only bracing to survive is the arch bracing in the dairy/hall partition wall. The west gable has been rebuilt in brick using Flemish bond. The bricks are similar to those in the central chimney stack (9″ ×4¼″ × 2¼″) and probably came from an earlier stack, the footings of which were found to the west of the wall. Three large, roughhewn pieces of limestone, *c.* 13″ × 7″ × 7″ (33 × 17.8 × 17.8 cm), were found when new footings were being dug for the west wall of the main block. Their exact depth and location were not recorded, but it is possible that they are remains of stylobates from an earlier building.

A rose farthing token, dated 1637-9, was found in a



The original frame of the south wall of the wing, and the hall and wing roof trusses.

disused mortice in the partition wall. The token was wrapped in a piece of linen (see textile report, below) and was small enough to have been inserted through the peghole. It must have been deliberately concealed, as the peghole was plugged with a similar piece of cloth.

The framework for the infilling was of riven oak splints tied with willow bark below the girt of the north wall, below the tie-beam of the partition wall, and in the vicinity of the chimney in the south wall. In much of the remainder of the south wall and between the girt and the original wall plate of the north wall it was tied with twine. A framework of hazel and ash rods with a few oak splints tied with twine was found to the east of the dairy outshot door, above the tie-beam of the partition wall, below a cupboard fitted into the south wall of the hall, and at the south end of the hall chamber/chimney bay partition. Whilst several race-knife carpenters marks were found on the rear studs their positions were scrambled. However, a number of one-inch chisel-cut marks on the north wall were in consecutive order.

Evidence for a glazed window with smaller side lights was exposed in the front wall. As the jambs and lintel of the main door opening were free of mortices and infill nicks this must have been the original entrance (the position of the front door has been moved during the recent building work). The 19th-century door and window in the dairy were also replacements because three diamond mortices for an unglazed window were found in the girt and there were no mortices for studs above the doorway. A small glazed window had lit the stairs. Impressions of lead cames were found on the black of the plaster blocking. Any evidence for a window in the hall chamber had been lost when the sash window was installed.

There was no evidence to suggest that the rear doorways from the hall and dairy were not original, and the unglazed windows by the dairy door may also have been original. However, the four diamond mortices in the wall plate of the dairy chamber indicate this was probably a re-used timber.

The roof was originally of side purlin form with straight collars tenoned into the principal rafters and the common rafters laid flat. Mortices for wind bracing were found in the main rafters. The truss nearest to the chimney had no tie-beam but an upper collar lapped and a lower collar tenoned into the principal rafters, to allow adequate headroom from the landing. Both central and chimney bay principal rafters had one-inch chisel-cut carpenters marks. When the front wall was heightened, the north face of the roof was rebuilt with the rafters laid on edge and a ridge piece inserted. The additional section of wall was clad with an inner and outer skin of lath and plaster in the hall chamber but only an outer skin in the dairy chamber. The scarf joint used in the original wall plate is edge halved with square abutments and four face pegs (Fig. 5.5a). The later plate has a counter bladed scarf (Fig. 5.5b). During re-tiling, a gully tile with a scratched inscription, 'SR August 10 1829' was found. Although the position of the tile was noted when the roof was dismantled, it must have come from the junction of the wing and main block. This suggests that the front wall was heightened and the roof adjusted shortly after 1829.

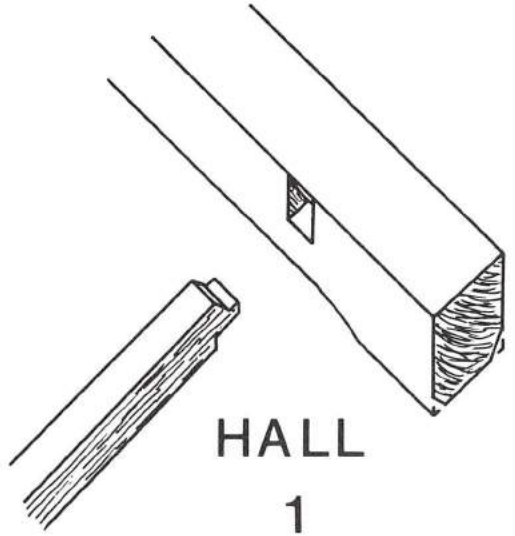
The walls and ceiling of the hall had been lined with a lime plaster on thick riven laths. When the ceiling was removed, the joists and an earlier plaster ceiling between the joists were found to be heavily smoke-stained. On removal of this plaster, the underside of the floorboards was seen to be quite clean.

The central chimney stack was built towards the south side of the chimney bay. In order to allow sufficient headroom on the landing, the newel stair was located against the front wall. This accounts for the unusual position of the front door which opened directly into the hall. The original stack had two back to back hearths, the larger in the hall and the smaller in the parlour. Both had wooden mantle beams. The stack was broken into when fireplaces were installed in the upper rooms at a later date. Both parlour and hall fireplaces had been reduced in size twice.

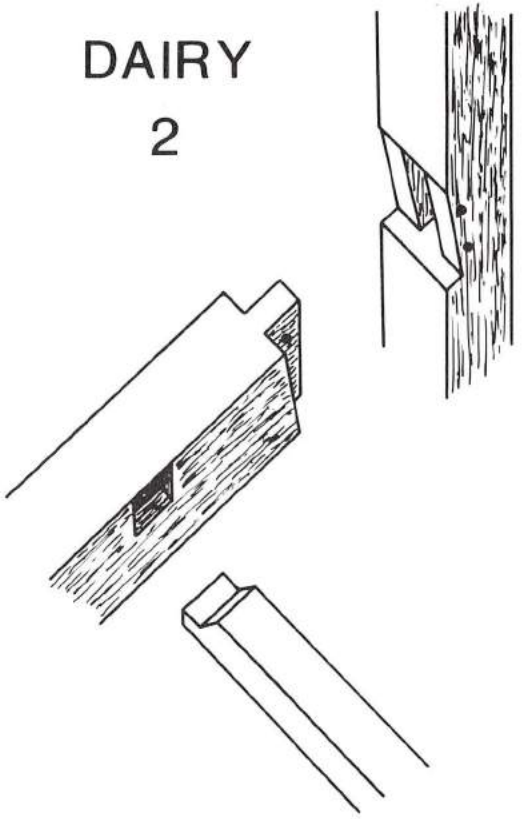
A later outshot was added to the north wall of the main block. This extended beyond the existing west wall in 1977. However, when footings for the earlier chimney stack were found, the end wall proved to be in line with the exterior face of this chimney. The timber-frame of the outshot was in an advanced state of decay and collapsed before any detailed record could be made. The cladding consisted of narrow laths tacked to the outer side of the studs and plastered on both sides. The outshot was divided into three small rooms, one entered from the dairy, a second from the hall leading to the back door and the third which lay between this and the dairy outshot. An unglazed window ventilated the dairy. It was protected by a grille of one-inch laths at two-inch centres on the outside and by a horizontal sliding wooden shutter on the inside.

The Finds

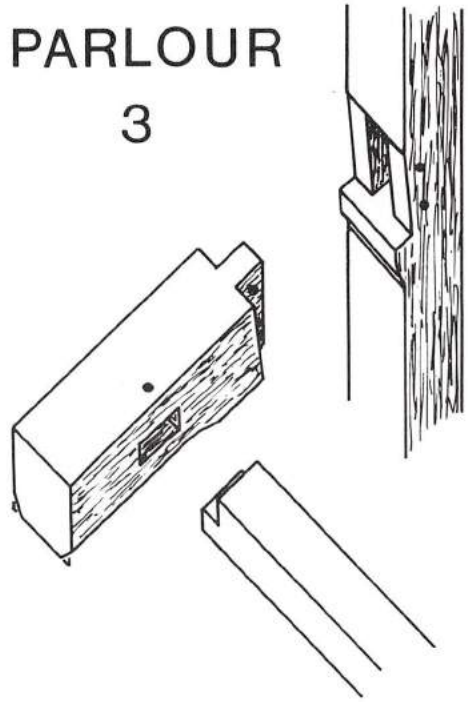
Finds were collected as and when opportunity allowed, and as a result were often only located by room. Only the more interesting artefacts are reported on below. More detailed finds reports, together with notes on clay pipes, post-medieval glass and metalwork, can be found in the site archive in the Essex Sites and Monuments Record. The artefacts themselves are in the possession of the owners of Ashmans.



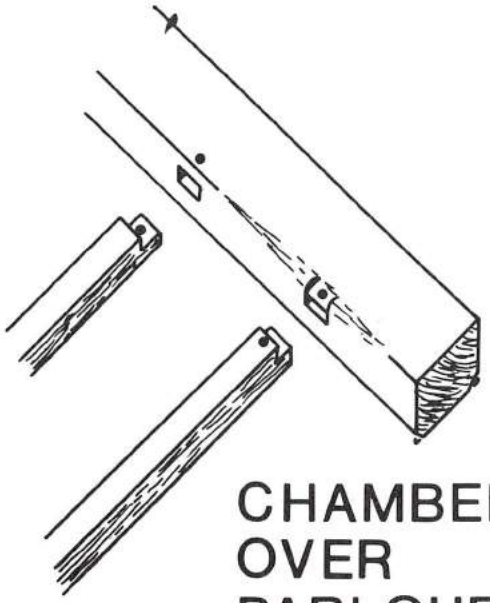
HALL
1



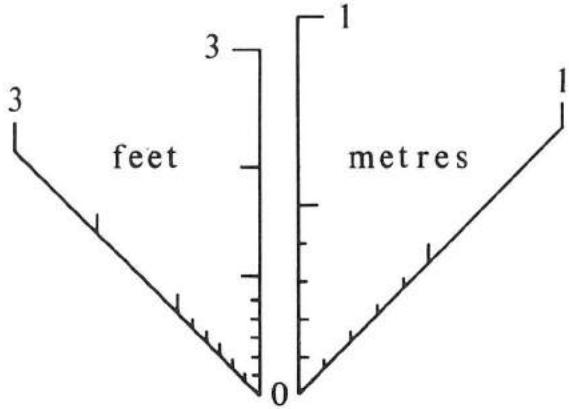
DAIRY
2



PARLOUR
3



CHAMBER
OVER
PARLOUR
4

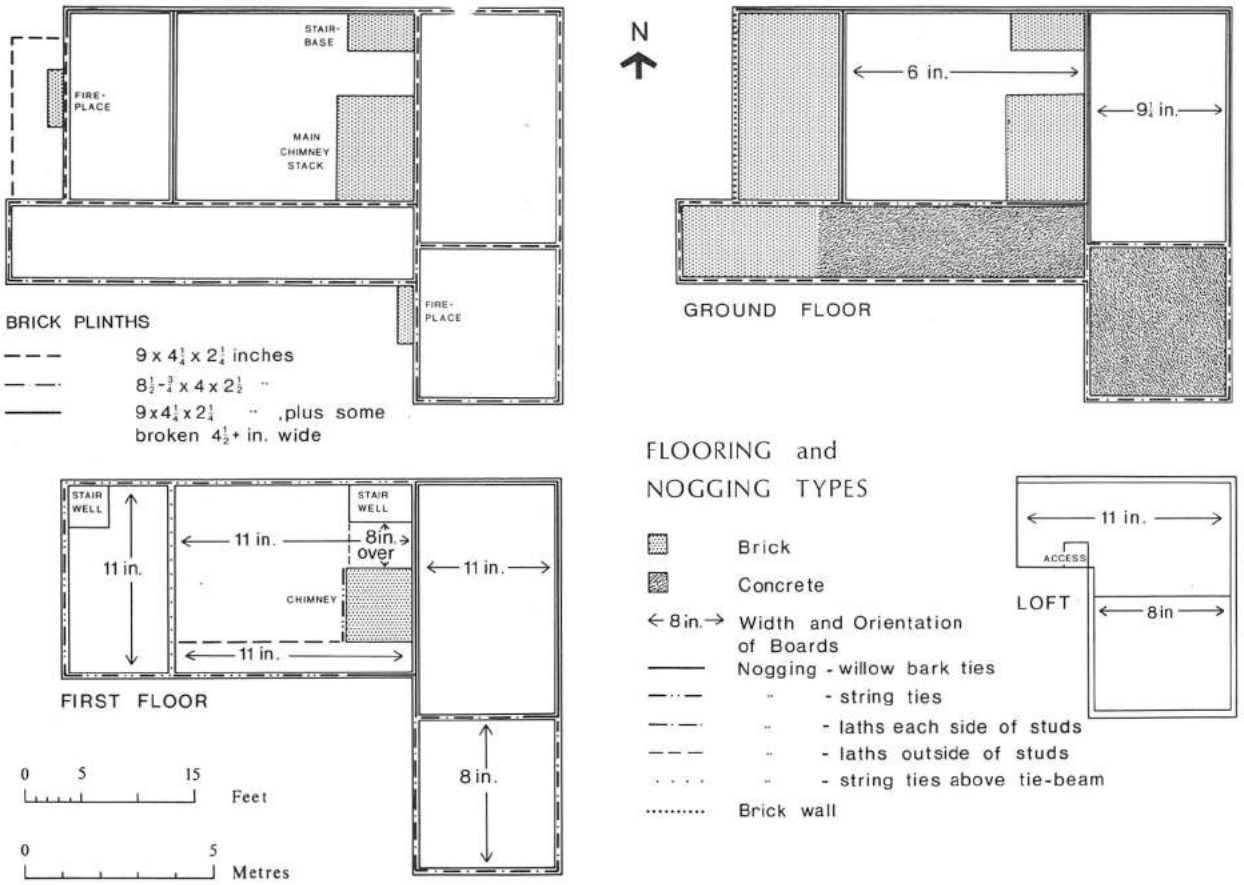


SCARF JOINTS

ORIGINAL WALL PLATE
5a

LATER WALL PLATE
5b

Fig. 5 The carpentry joints.



Plan showing the positions and types of floor-boarding, brickwork and wall infilling employed at Ashmans.

The pottery
(by Helen Walker)
Introduction
In all, 259 sherds weighing about 2.41 kg were excavated from various underfloor deposits. The pottery ranges in date from *c.* 1200 to the 20th century. It has been recorded using Cunningham's typology (Cunningham 1985a, 1-2), fabrics present in each context are summarised in Table 1.

The Fabrics (in chronological order)

Fabric 20 Medieval coarse ware, 12th-14th centuries. All sherds are small and abraded.

Fabric 21 Sandy orange ware, medieval.

Fabric 35 Mill Green ware, manufactured near Ingatestone, Essex. Described by Peace *et al.* (1982), late 13th to mid-14th century. Only four small unglazed body sherds were found and without evidence of form and surface treatment identification as Mill Green ware can only be tentative.

Fabric 40 Post-medieval red earthenwares, also includes black-glazed wares and one sherd of Metropolitan slipware dating from the 17th century (Cunningham 1985b, 64, 71).

Fabric 45 Stonewares.
45B Siegburg, mid 14th-16th century.
45D/E cologne/Frechen, 16th to later 17th century.
45F Westerwald, early 17th and 18th centuries.
The above German stonewares are fully described in Hurst *et al.* (1986, 176-184, 208-226).

Fabric 46 Tin-glazed earthenares, most have a thick, all over white tin-glaze, either plain or blue painted and are probably English (Fabric 46A); *c.* 1630 to end of the 18th century.

Fabric 48A Chinese porcelain, imported in quantity from the late 17th to the end of the 18th century.

Fabric 48B English porcelain, mid-18th century onwards.

Fabric 48P Pearlware, 1779 — *c.* 1830.

Fabric 48D Staffordshire ironstone types, early 19th century onwards.

Fabric 51 Late kitchen earthenware.

Fabrics 20, 21 and 40 were fully described in Cunningham (1982 and 1985a) and Drury (forthcoming). Fabrics 46-48P are described by Draper (1984) and Copeland (1982).

The Catalogue

Medieval

Fig. 8.1 Curfew fragment (or thumbed base). Fabric 20; grey-brown with red external surface; organic inclusions, low-fired; thumbed edge. *Wing addition.*

Not illustrated:

Cooking pot rim. Fabric 20; pale grey; simple, slightly developed, everted rim, Cunninghams type B2 (Drury forthcoming); perhaps datable to *c.* 1200. *Wing addition.*

Cooking pot rim. Fabric 20; red-buff with grey core; sooting on rim; short upright neck beneath a flat-topped rim, Cunningham's type H1 (Drury forthcoming), a 13th-century type. *Wing addition.*

Cooking pot rim. Fabric 20; uniform grey; hard; blocked rim, neckless, Cunningham's type H3 (Drury forthcoming). Late 13th - early 14th-century type. *Wing addition.*

Post-medieval fine wares or imports

Fig. 8.2 Jug or mug rim. Fabric 45F; decorative motif outlined with incised lines (fragment only visible). *Found outside.*

Fig. 8.3 Body sherd. Fabric 45F; applied stamped pad; manganese-purple as well as cobalt-blue decoration indicates date after 1665. *Found outside.*

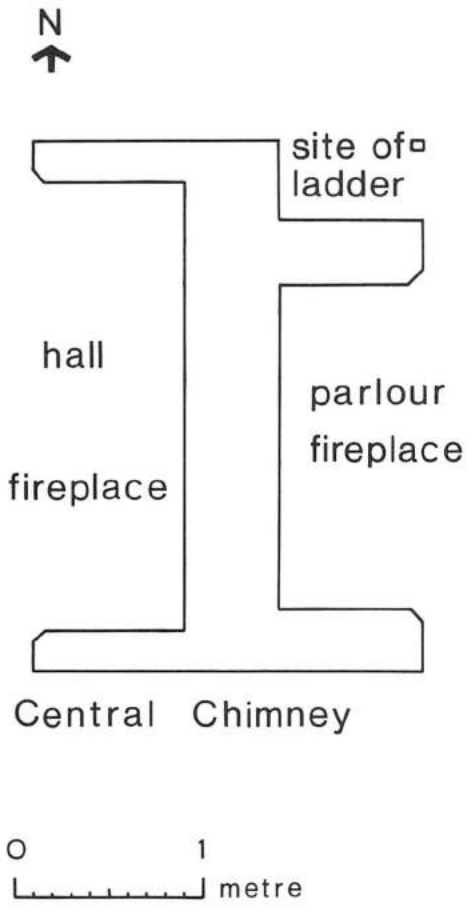


Fig. 7 Plan of the central chimney hearths.

Fig. 8.4 Body sherd. Fabric 46; buff fabric; very pale blue tin-glaze on inside, plain lead-glaze on outside indicating early date; green foliage decoration outlined in blue, also brown colouring — Mediterranean colours. *Wing addition.*

Fig. 8.5 Part of ?tea-bowl. Fabric 46; buff fabric; all over white tin-glaze; blue painted decoration; ?English. *Parlour.*

Fig. 8.6 ?Tea-bowl. Fabric 48A; under glaze blue, over glaze red and gold. *Found outside.*

Not illustrated:

Base of jug/bellarmine. Frechen stoneware; Fabric 45D; mottled 'tiger' ware salt-glaze; late 16th to 17th century. *Wing addition.*

Body sherds from hollow ware. Fabric 46; pink-buff fabric; speckled manganese tin-glaze outside, white tin-glaze inside; possibly a Malling jug imported from the Low Countries during the second half of the 16th century (Hurst *et al.* 1986, 126) but could equally well be English and slightly later in date (e.g. Garner and Archer 1972, no. 6, dated 1628). *Wing addition.*

Cup. Fabric 48B; hard paste porcelain; red-brown transfer-printed church in oval with words 'ROMFORD PARISH CHURCH' beneath. Souvenir crested china was very popular during the 1890s to 1920s and this piece may date from that era. However, as it was found with a mid-19th-century clay pipe, it may be earlier. *Cupboard under stairs.*

Post-medieval coarse wares

Fig. 8.7 One-handled jar. Fabric 40; all over internal plain lead glaze, external glaze splashes; wear mark at basal angle (as shown by line). *Wing addition.*

Fig. 8.8 One-handled jar. Fabric 40; all over green glaze; abraded externally. *Wing addition.*

Fig. 8.9 Jug rim. Fabric 40; pulled spout; greenish glaze, all over external, partial internal. *Wing addition.*

Fig. 8.10 Barrel-shaped jug. Fabric 40; very dark green, slightly mottled glaze rather than black-glazed, all over external and partial internal glaze cover; 17th century shape. *Wing addition.*

Fig. 8.11 Unidentified form. Fabric 40; glaze colour as No. 10; all over glaze cover; thumbed applied horizontal strip. *Wing addition.*

Discussion

Medieval wares were found in all rooms of the house; as sherds are small and abraded they are probably residual, perhaps brought in with soil used for floor make-up levels. The cooking pot rim types and the presence of Mill Green ware give a date range of *c.* 1200 to mid-14th century and at least indicate medieval activity in the area of the house.

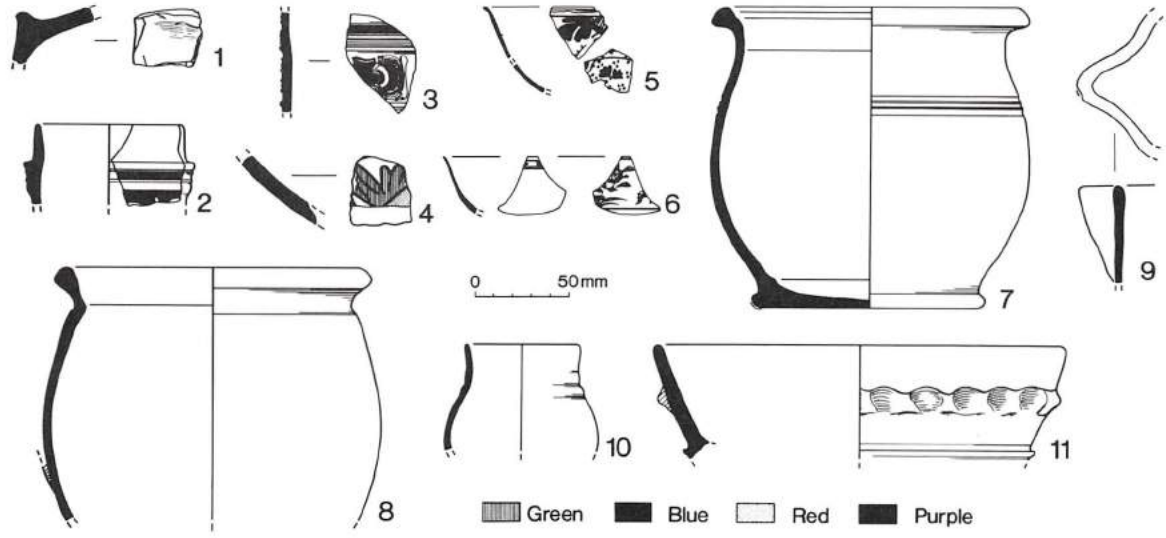


Fig. 8 Medieval and post-medieval pottery from Ashmans.

	FABRIC NAME AND NUMBER																
	20	21	35	45B	40	45D/E	45F	45	46	46A	48A	48B	48P	48D	51		
CONTEXT	Medieval coarse ware	Sandy orange ware	Mill Green ware	Siegburg stone ware	Post Medieval red earthen-ware	Cologne Frechen stone ware	Wester-wald stone ware	Stone ware unattri-buted	Tin-glazed earthen-ware	?English Tin glazed earthen-ware	Chinese porce-lain	English porce-lain	Pearl-ware	Stafford-shire ironstone types	Late kitchen earthen-ware	NON POTTERY DATING EVIDENCE	COMMENTS
PARLOUR	16	1	1	—	7	1	—	—	—	4	3	—	1	—	—	Dated on architectural grounds to C.16th or earlier	Cross-fit with pottery found outside (No. 5)
HALL	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	Hall block reconstructed circa. 1637. Context contained 1939 halfpenny	
UNDER STAIR CUPBOARD (in hall)	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	Context also contains mid C.19th clay pipe	
WING ADDITION	19	6	2	1	119	7	3	1	8	18	—	—	—	—	—	Mid C.18th from docu-mentary evidence	Red earthenwares (Fabric 40) include sherds of black glazed ware and metropol-itan slipware (1, 4, 7–11)
SOIL TIP FROM FLOORS	5	—	—	—	2	—	—	—	—	—	—	1	—	—	—		
FOUND OUTSIDE	1	—	1	—	9	—	3	—	—	—	1	1	—	8	5		(Nos. 2, 3, 6)

Table 1 Quantification of fabrics within each room/context by sherd count. (The fabrics are arranged in chronological order).

The wing addition yielded the greatest amount of pottery (weight 1.44 kg). The sherds of Siegbury and Frechen stoneware provide the only evidence for occupation during the mid-14th to late 16th century. Most of the pottery belongs to the 17th to 18th century but not the late 18th century because of the absence of later wares such as creamware, white salt-glazed stoneware etc. In which case, all the pottery was deposited before the wing addition was built (see Table 1).

The under-floor deposits in the hall contained only two sherds, the later of which, a sherd of Westerwald stoneware, may have been current with the reconstruction of the hall block *c.* 1637, but finds other than pottery date to the 20th century. The parlour, perhaps the oldest part of the house (see Table 1) contained pottery no earlier than that from the other rooms. The latest sherd, a fragment of pearlware, is datable to the end of the 18th-earlier 19th century. Only the pottery found outside can definitely be dated to the 20th century.

Bricks

The bricks found in the building can be classified into eight groups. The earliest comprised a few bricks, 10½-11" × 5" × 2¼"-2¾" found in the plinth of the north wall and dairy/hall partition. These are similar to bricks in Woodham Walter church, dated 1563. The other groups ranged in date from late 16th/early 17th century through to the 20th. Details can be found in the Site Archive.

Tile

The gully tile with scratched inscription, 'SR August 10 1829' (see Description, Main Block): parish register show that Samuel Rand was a brickmaker in Woodham Mortimer in the early part of the 19th century.

Leather (Fig. 9), based on information from Miss J. M. Swann

Parts of at least four leather shoes were recovered from a gap between the main chimney stack and the adjacent timber-framed wall.

1. Inner, middle and part of outer sole. Man's shoe. Appears to have a foot-shape toe, shaped for the left foot — ?the result of distortion in wear, as the pegged heel and impressions of bracing thread are typical of the 17th to the first third of the 18th century when 'straights' were usual.
2. Woman's shoe, with pointed toe, 2¼" covered wooden heel, latchet-tie, made straights. One of the quarters is missing, as is the forepart sole, apparently cut for repair though some cheap shoes were made with the sole pieced. Top edge has tunnel stitching as reinforcement. Early 18th century.
3. More fragmentary version of 2, with a lower heel, pegged. Patch over the side seam.
4. Possibly a stiffener, perhaps from an early 18th-century man's shoe.
5. Part of the vamp of another shoe.

Textiles

by Elizabeth Crowfoot, fibre identification by Penelolpe Walton

Two fragments of textile, used to plug a peg hole in a beam in the dairy/hall partition wall (see Description, Main Block), dated by the presence of a rose farthing of 1637-9.

(a) inside, rolled up, a wedge-shaped fragment *c.* 6.0 × 4.3 cm, all edges cut, good flax, undyed, both threads Z spun, no selvedge preserved, rather loose spin, weave tabby (plain), count 17/15 threads per cm, even and close; cloth impregnated with ?resin.

(b) wrapped round (a), rectangular fragment *c.* 6.5 × 4.0 cm, good flax, undyed, possibly bleached, both threads Z spun, no selvedge preserved, spinning rather loose and variable, particularly in the finer system, weave tabby, close, even, count 18-20/19-21 threads per cm. All edges cut, but one long and one short edge are turned under 4-5 mm, and have been neatly hemmed along the folded edge with loose Z, S ply flax thread.

They are of suitable quality for (a) good quality sheeting, (b) medium quality shirting. The hemmed edges of (b) suggest part of the facing or hem inside a cuff or neck-band, from a shirt or night-shirt. The Z spinning is the direction normally found in flax in England from the Anglo-Saxon period onwards, in spite of the natural S-twist of the flax fibre. The unevenness of the thread in the finer fabric (b) is not unusual, and seems at all periods to have been an acceptable characteristic in respectable quality linen.

Wallpapers

by Jean Hamilton

Fragments from 'stratified' wallpapers were recovered from the hall, chamber over hall, stairway, parlour, parlour chamber, and back parlour, and were examined for dating purposes. Only one piece, from the parlour, proved to be of intrinsic interest.

1. Woven trellis and quatrefoil flower. Green/blue. Print from wood blocks, *c.* 1820. This paper is the earliest and is particularly interesting as it is stamped on the back with a framemark. The framemark was an Excise Duty stamp introduced in 1786 and in use until the abolition of the tax in 1836. Comparatively few of these stamps have survived, and in this case, unfortunately, the section on the far right end of the frame, where the date should be found, is missing. However, the last two numbers could be read as (18)21, which is likely in view of the style of the pattern, and secondly because the mark is accompanied by the stamp of a London firm (V)incent and W(the rest torn). The name Vincent and Woollams, paperhanging manufacturers, occurs in the 1820 London directories.

Details of the remaining papers, ranging in date from *c.* 1840-1850 to the 1930s, can be found in the site archive.

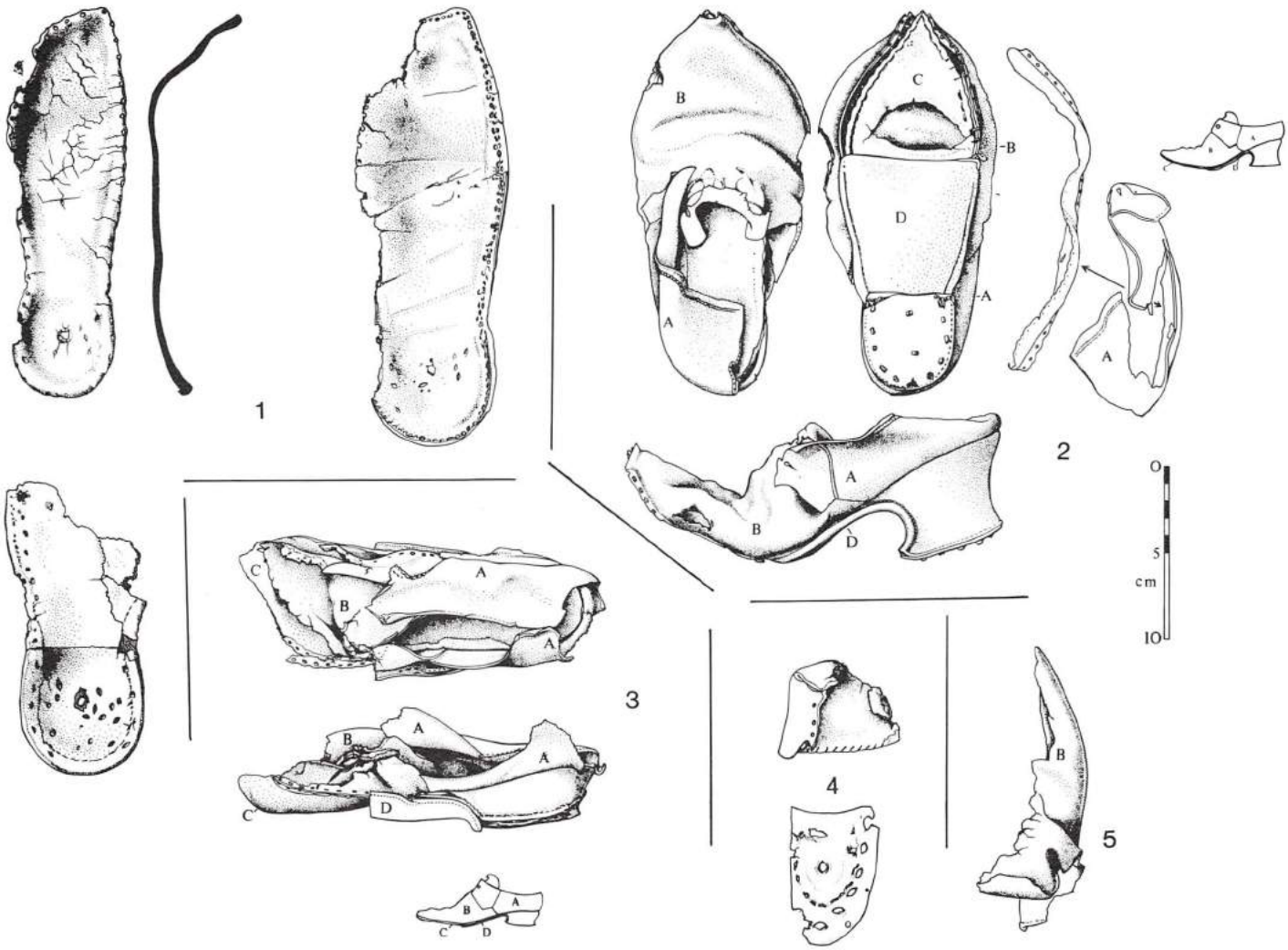


Fig. 9 Leather shoes from Ashmans.

Documentary History

The first mention of Ashmans, in the extant court rolls of Woodham Walter manor, dates from 1626 when, after the death of his father, Edward, Abraham Peirson was admitted to the customary tenement called Little Ashmans, a croft called Pyes, two crofts called Great Ashmans and Heights, containing 8 acres and 3 roods in East Mead.[2] Edward Pierson had been assessed for the Lay Subsidy of 1596.[3] In 1637 Abraham was given licence to fell 20 trees an a neighbour was also given permission to fell a similar number for his own use and that of Abraham Pierson.[4] The property passed through a succession of owners, none of whom appear in the parish records and so probably lived outside the parish. In 1714 the farm was sold to Edward Raven, yeoman.[5]

The Raven family first appear in Woodham Walter records in 1662, when William Raven, Edward's father, was assessed on two hearths.[6] In 1671 he was assessed on three hearths.[7] He died in 1672 but his wife Anne lived until 1719.[8] She had inherited a neighbouring property from her brother in 1678, when it was described as 'two crofts, Clapscroft alias Hookes Garden and Patchcroft and one rood in the occupation of Abraham Hodson and the freehold land — the two Bowers fields and Wood Field containing 15 acres'.[9] In addition to farming Ashmans and his mother's land, Edward Raven was renting Tobits, an adjoining property, by 1724.[10] It seems probable that the Raven family were living at Ashmans at least from 1714 and possibly as tenants from an earlier date.

Edward's granddaughter Mary, wife of Richard Bulley, inherited the property in 1765. Seven years later she and her husband obtained permission from the manor court to fell more trees.[11] Mary died in 1779 shortly after the birth of her ninth child, and John two years later. The detailed inventory of the Bulley's belongings, made when Samuel Bulley applied for letters of administration, lists the following rooms: the back parlour chamber, the fore chamber (parlour chamber), the middle chamber (hall chamber), the back parlour, the fore parlour, the parlour closet, the pantry, the kitchen (the hall), the buttery, the brewhouse, and the back chamber (dairy chamber).[12] The utensils listed in the buttery and brewhouse give no indication as to which was the later dairy. However, the quantity of

items suggests the dairy was known as the brewhouse at that time. A bathstove is included in the fore parlour and a coal grate and smoke jack in the kitchen. Crops from 50½ acres are listed and nine acres were fallow. Livestock included four cows, three calves, 46 sheep, 30 lambs, four cart horses, a saddle horse and a 'hobby' (pony), two sows and two pigs. John, the eldest son, inherited the farm and lived in the house with one or two female servants until his death in 1840.[13] During his ownership of the farm Curling Tye Green diminished in size as neighbouring owners 'enclosed parcels of waste' adjoining their properties.[14] The farm continued in the ownership of the Bulley family but was leased to tenants. In 1851 Thomas Aldham farmed 80 acres and employed seven men. Ten years later, James Woodward was tenant, farming 40 acres with the aid of a man and a boy. In 1871 John Bulley, aged 45 and farmer of 52 acres, was living in the house with his wife and their two children, aged three years and seven months, a thirteen-year-old nursemaid and a general servant.

In 1880 the lengthy ownership of the Raven/Bulley family came to an end and the farm was sold to W. H. Bygrave of Earls Cottage (now The Shrubbery). It was leased to the Ratcliff family who purchased the property in the early years of this century, and the house was occupied by their farmworkers until the late 1960s.

Discussion[1]

The sherds of 13th-century pottery found under the floors, together with the finding of three possible stylobates, suggest a building existed on or near the site of Ashmans at that date. No documentary evidence has been found to confirm this.

A date towards the beginning of the 16th century is suggested for the cross-wing by the use of barefaced soffit tenon joints in the first floor, the minimal tension bracing, mainly on the inside of the building, and the unglazed windows. The roof of the cross-wing is elm and was probably renewed when the chimneys were built. Originally, the upper room was open to the roof, as it had upper and lower collars and no tie-beam to the central truss. As the garret rooms were not included in the 1781 inventory they were probably installed after this date.

The house underwent a major renovation when the brick chimneys were built. Whilst the fossilised form and some elements of an earlier hall block may remain there is little dating evidence for this. It seems more likely that this section of the building was completely rebuilt using some of the old materials.

The complementary positioning of the stack, stair and entrance door in conjunction with the glazed stair window and the design of the landing/hall chamber roof truss demonstrate these were all part of the same project. The similar chisel cut carpenter's marks on some timbers of the crosswing, the front wall of the main block, and on the trusses of the two roofs, also point to the work being done at the same time. In addition, the date of the bricks; the side purlin roof; glazed windows to the main rooms; the diminished haunched tenons with pendant soffits, of the vertical section joists of the floor over the hall; and the almost complete lack of bracing are indications of an early 17th-century date for the main block. The entry in the court rolls for licence to fell trees in 1637 and the date of the hidden rose farthing token, 1637-9, suggest an even narrower date range for the rebuilding programme, i.e. 1637-40.

The tradition of concealing shoes as a good luck talisman on the occasion of building operations (Swann 1969) suggests that building work may have taken place at some time during the early 18th century, the mean date of the shoes found in the cavity between the chimneystack and wall. However, all that can be said with any confidence is that some degree of modernisation was undertaken by relathing (with thick riven laths) and plastering the hall ceiling and walls, and the parlour ceiling.

The crosswing extension, outshots and initial reduction to the parlour hearth can be ascribed to 1772 when the Bulleys applied for a licence to fell timber. Narrower laths and bricks 8½-8¾″ × 4″ × 2½″ were used for the work. Artefacts from the 13th to mid-18th centuries were sealed below the flooring. It is evident that the crosswing had been extended and the outshot built prior to 1781 from Richard Bulley's inventory. Except for the garret rooms and the 19th-century division of the parlour and chamber, the list matches exactly the rooms in the building as it was before the recent rebuilding. The exterior of the house was lathed and plastered completely when the crosswing was extended, concealing the timber-frame.

At least three periods of 19th-century building activity can be detected. Firstly, the front wall of the main block was heightened and re-roofed, probably *c.* 1829, on the evidence of the gully tile. In the middle of the century, the parlour and room above appear to have been divided into two, the stairs recased and fireplaces constructed in some of the bedrooms. Finally, about 1869, when John and Marianne Bulley were living in the house, the partition in the parlour was removed, a new fireplace and new windows, including the French windows, were installed. The owner brought to the author's attention a row of cottages in Cherry Garden Lane, Maldon, which have decorative features round the windows similar to those at Ashmans. These cottages do not appear on the Tithe map of 1838,[15] but are on the 6″ Ordnance Survey map of 1873.[16]

At the beginning of the 17th century, the larger farms in Woodham Walter, i.e. the majority of the freeholds, the demesne farm and new farms made from the medieval deer park, were still viable units. However, the smaller farms of 25 acres and less, most of which were copyholds, were becoming uneconomic and during the century were amalgamated or were incorporated with the larger farms. On amalgamation, the redundant farmhouses were demolished or converted into accommodation for farm workers. Ashmans and Anne

Raven's inheritance, with some of the disparked land rented from the Fytche family, made a viable unit.

This process, with the formation of even larger units, continued throughout the 18th and 19th centuries. As the old houses decayed the farm workers were rehoused in small cottages in the village, where the large sites of earlier houses were being redeveloped (Ryan forthcoming). Only the larger farmhouses survived as such and a number of these were rebuilt. They have been identified with the houses listed in the Hearth Tax Assessment of 1671 as having five or more hearths. Of the 17 houses with three or four hearths only Ashmans, The Bell, The Warren House and Oak Farm (Woodham Walter Hall) have survived. The last two of these were built in the 17th century as accommodation for the warreners of the Fytche estate. Ashmans is, therefore, of particular interest for it is the only house of a pre-1600 small farm unit to survive in the parish.

By the mid-19th century Ashmans had, once again, reached the limit for economic survival. Several tenant farmers occupied the property but none remained for long. In 1871, when Samuel Ratcliff leased the farm, the land became part of the Ratcliff family's large agricultural operation, and the house was used to accommodate farmworkers.

Modern agricultural practices require even fewer farmworkers and so Ashmans became redundant. As a listed building, the house could not be demolished and it was eventually sold. Now, like the majority of farmhouses in the area, it is the home of a family whose livelihood is urban rather than rural-based.

Conclusion

The recording of Ashmans was undertaken under rescue conditions by one of the authors (PMR), who at that time had no previous experience of, or training in, the recording of vernacular architecture. External readers considered the quality of the original record to merit more detailed publication than might be strictly necessary on purely academic grounds. The combination of detailed documentation and architectural record enabled correlations to be made between structural and social/economic history. Furthermore, it is hoped that the report may be seen as a case study for other untrained recorders.

The investigation of standing structures has, particularly within the last two decades, seen increasing use of below-ground archaeology to elucidate the complete history of a building. This two-pronged approach has been most commonly employed on church sites (Rodwell and Rodwell 1977) and more recently on late and post-medieval country houses (Drury 1983; Drury and Gow 1984). Rarely however, has this approach been used on domestic post-medieval structures, principally because of the large numbers and the range of potential sites involved. Certainly the purely archaeological aspects of the Ashmans site were not fully appreciated at the time. The Department of the Environment's resurvey of Listed Buildings should provide a database for the selection of domestic structures for recording and/or excavation prior to refurbishment or other development. It is ironic to think that, if Ashmans had been destroyed, it is likely that merely a scatter of tile, brick and pottery would have been recorded by archaeological methods alone.

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Bibliography

Copeland, R., 1982 — *Blue and White Transfer Printed Pottery* (Aylesbury, Shire Album 97).

Cunningham, C. M. 1982 — 'The medieval and post-medieval pottery' in Drury, P. J., 'Aspects of the origin and development of Colchester Castle', *Archaeol. J.* **139**, 358-80.

Cunningham, C. M., 1985a — 'A typology for post-Roman pottery in Essex', in Cunningham, C. M. and Drury, P. J., *Post-medieval sites and their pottery: Moulsham Street, Chelmsford,* Counc. Brit. Archaeol. Res. Rep. **54**, Chelmsford Archaeol. Trust Rep. **5**, 1-16.

Cunningham, C. M., 1985b — 'The pottery', in Cunningham, C. M. and Drury, P. J., *Post-medieval sites and their pottery: Moulsham Street, Chelmsford,* Counc. Brit. Archaeol. Res. Rep. **54**, Chelmsford Archaeol. Trust Rep. **5**, 63-78.

Draper, J., 1984 — *Post-Medieval Pottery 1650-1800* (Aylesbury, Shire Archaeology).

Drury, P. J., 1983	"'A Fayre House, Buylt by Sir Thomas Smith': the Development of Hill Hall, Essex, 1557-81", *J. Brit. Archaeol. Ass.* **136**, 98-123.
Drury, P. J., forthcoming	'The later Saxon, medieval and post-medieval pottery', in Rodwell, K. A. and Rodwell, W. J., *Rivenhall: Investigations on the villa, church, and village 1950-1977,* Counc. Brit. Archaeol. Res. Rep., Chelmsford Archaeol. Trust Rep.
Drury, P. J. and Gow, I. R., 1984	*Audley End Official Guide,* H.M.S.O.
Garner, F. H. and Archer, M., 1972	*English Delftware* (London, Faber and Faber).
Hurst, J. G., Neal, D. S. and Van Benningen, H. J. E., 1986	*Pottery Produced and Traded in North-West Europe 1350-1650* (Rotterdam Papers VI).
Pearce, J. E., Vince, A. G. and White, R., 1982	'A dated type series of London medieval pottery. Part one: Mill Green Ware', *Trans. London Middlesex Archaeol. Soc.* **33**, 266-298.
Ryan, P., forthcoming	*Woodham Walter*
Swann, J. M., 1969	'Shoes concealed in buildings', *Northampton Museum and Art Gallery Journal,* **6**, 8-9.

Notes

1. Records for Woodham Walter have only survived from the late 16th century onwards.
2. Woodham Walter Court Roll 1626, (ERO D/DSu M86).
3. Lay Subsidy 1596, (PRO E179 111/511).
4. Woodham Walter Court Roll 1637, (ERO, D/DSu M86).
5. ERO D/DA T708.
6. Hearth Tax Assessment 1662, (ERO Q/RTh 1).
7. Hearth Tax Assessment 1671, (ERO Q/RTh 5).
8. Woodham Walter Parish Register, (ERO D/P 101/1/2).
9. ERO D/DA T70.
10. ERO D/Dw T227/5.
11. Woodham Walter Court Roll, (ERO D/DDSu M84).
12. Inventory of Richard Bulley 1781, (ERO D/ACWb 163).
13. Census Returns 1821, 1831, (ERO D/P 101/18/3-4).
14. Woodham Walter Court Roll, (ERO D/DSu M85).
15. ERO D/CT 411.
16. Essex, Sheet 54, surveyed in 1873-4.

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The Witham hoard of 17th-century tokens and George Robinson the issuer

by R. H. Thompson and Janet Gyford

Summary

Fourteen hoards containing the tokens of a single issuer have been recorded. The largest of these has been in the Colchester and Essex Museum since 1936, and consists of tokens of George Robinson in Witham, 1669. Its history is taken back to 1870 and Hedingham Castle, where L. A. Majendie had over 200 Robinson tokens, and 30 or more of John Freeburne junior in Witham, 1667.

George Robinson (died 1673/4) was probably son of William Robinson, grocer (died 1669). The still on the tokens may indicate a specialisation in distilling, and the letter D identifies George's wife Dorcas (died 1694), whose will is printed in an appendix; it mentions a white deal box, which might have contained the hoard of tokens. Robinson connections with the following Witham addresses are documented, in the hope of tracing the descent of the hoard: 7, 74-78, 113-15, and 117-23 Newland Street.

Analysis of the 150 hoard specimens in Colchester reveals details of their production. Two obverse dies, and two die positions, identify three consecutive groups of tokens. Their weights range widely, and the three weight-ranges are very different, yet all have a similar minimum weight.

An attempt was made recently to bring together details of those hoards of seventeenth-century tokens which have been confined to the product of a single issuer.[1] That seventeenth-century tokens were a circulating medium is left in no doubt by the existence of mixed hoards from different issuers and different localities,[2] by the denominations and other legends on the tokens, and by proclamations and local ordinances against them.[3] Hoards which contain the tokens of only one issuer, therefore, would appear to have been formed by that issuer. Such tokens are likely never to have been put into circulation, or, if any had been issued, they were subsequently taken back for future use, or redeemed for silver. An 'issuer hoard', as one may term it, takes us back to that short period when the tokens circulated, the third quarter of the seventeenth century; it may direct us to a location in which they were part of a tradesman's working capital; and it should take us close to the condition of the tokens when they were produced.

To the nine hoards already listed several additions can be made. *Cambridge,* ?Market Hill, within living memory of 1964: a 'large bag' of John Finch's undated token (BW[4] Cambridgeshire 44) from Cambridge, Market Place (as Market Hill was once known)[5], in the possession of Messrs Mackintosh & Sons Ltd., who traced their origins to 1688 and William Finch.[6]

Fordham (Cambs.), Fordham Moor, *c.* 1977: five specimens ofa 1666 token issued jointly by Mary Kent of Soham and John Kent of Herringswell (Norweb[7] 480), in what appeared to be the remains of a purse, the tokens forming a mass since separated.[8] Fordham lies between Soham and Herringswell. This cannot be considered an 'issuer' hoard.

?Thirsk (N. Yorks.), before 1900: over 80 specimens of Robert Bell's 1664 Thirsk token (BW Yorkshire 349).[9]

?Wapping (London Borough of Tower Hamlets), some years before 1987: about ten specimens of the undated token issued by Edward Fish at the Sun in Wapping (BW London 3296).[10]

Yoxall (Staffs.), before 1961: some specimens of Zachariah Lightwood's 1671 Yoxall halfpenny (BW Staffordshire 103).[11]

Of these fourteen hoards, the largest on which we have specific figures is the Witham hoard, consisting of tokens reading GEORGE ROBINSON around a still on a masoned base, armed left, reverse IN WITHAM 1669 around $_{G}{}^{R}{}_{D}$. In the bibliography of coin hoards[12] it is recorded as having been deposited in 1669, found in 1936, and as containing 170 tokens. On investigation, however, one of these pieces of information turns out to be questionable, and the other two wrong. An apparently real discovery becomes a crock of gold at the end of a rainbow. Hopes of identifying George Robinson's premises thereby are disappointed, and initial expectations frustrated of using the hoard for the purposes of attribution; for the George Robinson token, though placed in Essex in 1889 (BW Essex 351), was stated in Williamson's 1891 Addenda to be claimed for Wytham in Berkshire (now Oxfordshire), the name Robinson being, it was said, of constant occurrence in the registers of Cumnor mother church, Wytham's independence of Cumnor notwithstanding. This statement was repeated in Gilbert's Essex list;[13] and Wytham was mentioned as a possible attribution by Seaby,[14] but rejected by West[15] because of the supposed 1936 hoard. The claim probably originated with Williamson's Berkshire editor, Lt-Col. Barzillai Lowsley, for his 1899 sale included for Wytham, Berks.,

one token transferred from Witham, Essex.[16] Likewise his son, Col. Herbert de Lisle Pollard Lowsley, put George Robinson to Wytham in his 1936 sale.[17] Ralph Nott, who bought Lowsley's collection, placed specimens in both counties; and so did the Norwebs, who bought Nott's. Fortunately, for publication of the Norweb specimens[18] there had been a single Robinson find in about 1972 less than twelve miles from Witham at Bardfield Saling, found under his thatch and published by Mr K. E. Cullum.[19]

The Witham hoard is now in the Colchester and Essex Museum, and numbers 150 specimens. They are accompanied by an old label on card, recognised as being from the typewriter of H. W. Poulter, and reading as follows:

HOARD of WITHAM TOKENS 1669

This Hoard of un-issued tokens
is the only token hoard that
has been found in this country.
The tokens were issued by George
Robinson of Witham, possibly,
form[*sic*] the still on the obverse, a
distiller.
The use of tokens came in between
1660 and 1670 when the Government
of the time issued no small coins
and tradesmen issued a small coin-
age of their own in order to give
change.

(The years should be 1649 and 1672, and corporations should be mentioned as issuers).

One of the two sources for the entry in the bibliography of coin hoards is a 1965 report on the Museum by the Curator[20] which mentions that 'A somewhat unusual hoard comes from Witham where a quantity of unused tokens of George Robinson . . . were found in an old building, presumably his shop'. However, in 1985 Mr Clarke concluded that his note was in error in mentioning a provenance. The other source is Mr J. L. Wetton's 1969 account[21] of the finding of the hoard of about 170 'by a workman demolishing an old shop in Witham, Essex, in 1936'. This was taken, Mr Wetton wrote in 1985, from an explanatory card accompanying the tokens, which were all together in a bowl (although one must wonder whether he had also absorbed the 1965 report). The typewritten label, however, mentions neither shop, nor place of finding, nor date. Two reports at the time of acquisition in 1936 mention that the hoard 'numbers 169 specimens', but are uninformative on the circumstances of discovery.[22]

In fact the tokens were not acquired locally but were purchased from a Bristol dealer. On 21 February 1936 M. R. Hull, the Colchester curator, wrote to Charles Dixon, buyer and seller of coins etc., for information about the tokens he had recently bought at Messrs Glendining & Co.'s London saleroom. The auction in question was a miscellaneous sale on 22 January 1936, in which lot 225 consisted of some nineteenth-century tokens and 'Seventeenth-century tokens of Witham, Essex (169)'. There is nothing to suggest that these were not all of George Robinson. On 24 February Dixon enclosed two for inspection, adding 'I bought them on trust without seeing them'. Two days later he replied to an enquiry about his lowest price 'I shall be pleased to accept for the lot, about 160, three pence each', i.e. a total of about forty shillings. After a meeting of the Museum Committee H. W. Poulter wrote to Dixon on 26 March 'I am instructed to make you an offer of 30/- for the collection of tokens'. On 27 March Dixon replied 'Re Witham tokens there are 163 in all, a few may be missing, I send them for your inspection and approval, and shall be glad to accept thirty shillings for them'. Dixon was told on 22 April that the Committee had decided to purchase the Witham tokens, and was sent payment on 21 May.[23] From all this it is unclear how many tokens the Museum actually purchased. The hoard does not appear in the accessions register for 1936, 1937 or 1938, so the reduction of the hoard from 169 specimens to 150 cannot be pinpointed; although Dixon's words *a few may be missing* should be remembered in this connection.

The source of lot 225, we have been told, was Messrs W. S. Lincoln & Son, coin dealers who had ceased trading in 1931; and indeed, Lincoln are noted as the purchasers (for £1.10*s*.) of the following lot in a Sotheby sale on 23-26 November 1925:[24]

362. A Find of Seventeenth Century Tokens, of Witham, Farthings of George Robinson, 1669 (203) and of John Freeburne, Junior, 1667 (7), *all fine* 210.

This lot fell in the part of the sale headed 'Catalogue of coins, medals & tokens, an important general collection, the property of Monsieur Feuardent, of Paris'. Feuardent will have been a member of the important Paris coin dealers Rollin & Feuardent, founded in 1834, and joined in 1859 by Félix Feuardent (1819-1907), who left the business to his sons Antoine (d. 1937), Georges (d. 1934), and Robert (d. 1966).[25] It should, however, be noted that the presence of Rollin & Feuardent in London as coin dealers from 1886 to 1913, while throwing no further light on the hoard, may cast some doubt as to whether it reached Colchester by way of Paris as well as London and Bristol.

The Witham hoard has thus swollen to 203 tokens of George Robinson. The seven of John Freeburne junior must belong to yet another 'issuer' hoard; for no business, family, or religious connection is apparent between Robinson and Freeburne to suggest that their tokens ever formed a single hoard. The association of these two groups, and the improbability of more than one large group of George Robinson tokens, make it virtually certain that they were in Essex in 1870; for in that year L. A. Majendie published in *The East Anglian* an Essex token omitted from an earlier list, and added[26] 'I have over two hundred of George Robinson's (of Witham) tokens, and some thirty or more of John Freebourne, of the same place'.

The writer was Lewis Ashhurst Majendie (1835-1885), of a family of Huguenot origin; born in Dunmow where his father was vicar; M.A. Oxon., student of Lincoln's Inn; succeeded his uncle in 1867 at Hedingham Castle and in the Lordship of the Manor and Patronage of the living of Hedingham. Excavations he conducted at the castle testify to archaeological interests. In 1870 he married Lady Margaret Lindsay, second daughter of the 25th Earl of Crawford, the great book collector. From 1874 to 1878 he was M.P. for Canterbury. Latterly he spent much time in France for the sake of his health, and died of 'softening of the brain'. Thereafter his son was at Hedingham Castle until 1939.[27]

The Majendie papers are now in Essex Record Office (ref. D/DPr), where they are in course of being catalogued. They include an 1858 diary of Lewis Majendie, and various personal accounts, but no mention of Witham tokens has been found so far. The history of the hoards for the present cannot be taken back beyond 1870. Ultimately, however, they must have come from Witham.

George Robinson the issuer

In the time of George Robinson, Witham was a small town of perhaps 1,200 people. He rented a house in the middle of the main street, Newland Street, sometimes also known as High Street (Fig. 1). In this he both lived and worked, in accordance with the usual practice of the time. The street served as both the market place and as the main road from London to Colchester and Norwich. It was a post town, though the privilege of dealing with the postal staff and their horses moved from one inn to another at different times. In addition to these older activities of trade and transport, the manufacture of 'New Draperies' was very important to Witham in the seventeenth century. The erratic fortunes of this industry therefore affected all the town's residents, even those like George Robinson who had no known direct connection with the cloth trade.[28]

George's occupation is not named in any of the records found so far. He was probably the son of William Robinson, a Witham grocer who died in 1669. A brief summary of what is known about William follows, in

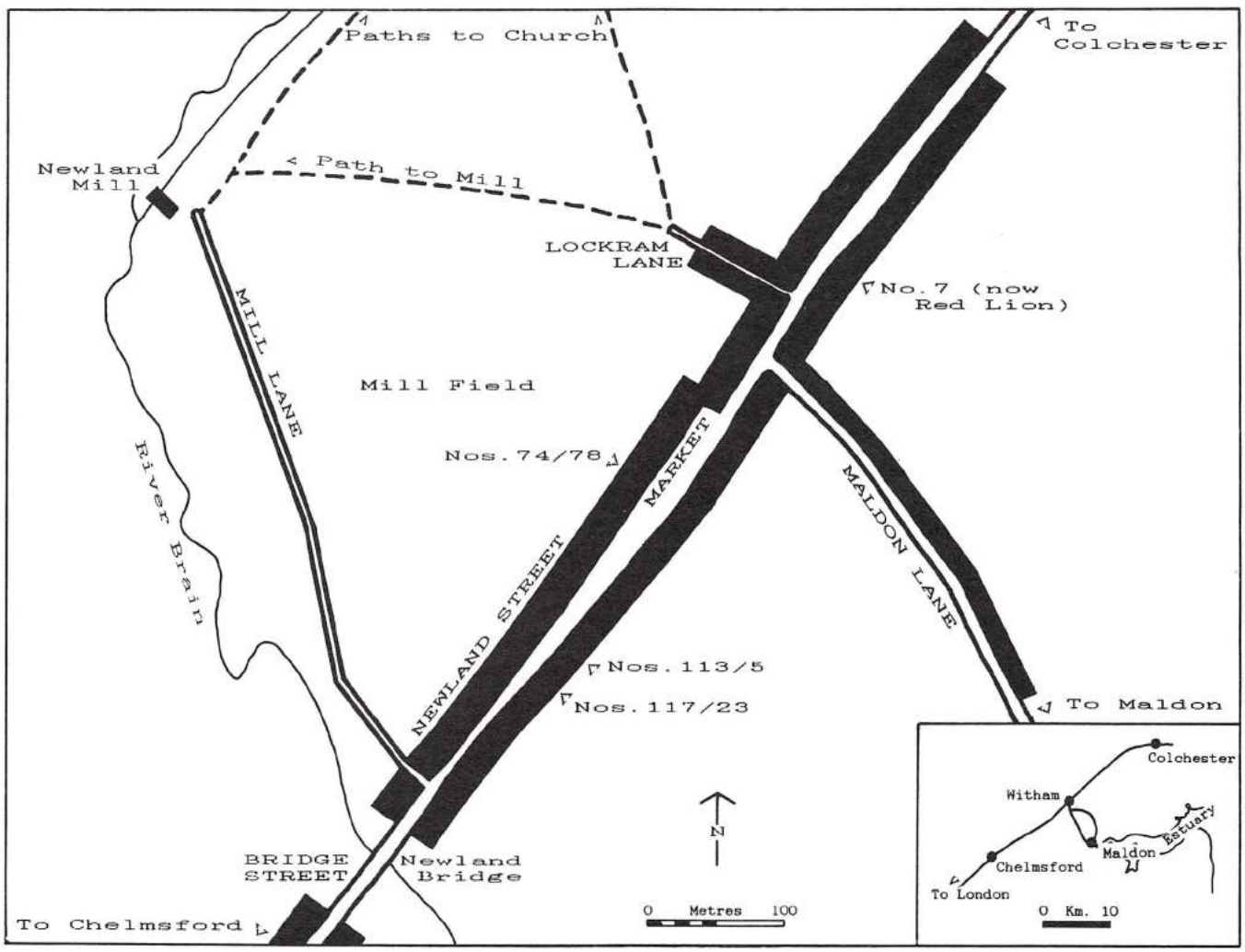

Fig. 1 Sketch map of the Newland Street area of Witham *c.* 1669. Main built-up areas are shown in solid black, and buildings associated with George Robinson are indicated by their modern street numbers.

order to indicate the position of the family in Witham life. He left no will and it is not known exactly where he lived.[29] He seems to have been a respected member of the community, in spite of having been reported in 1651 for 'contemptuously' breaking some of his measures in Witham market place in front of the examiner, rather than let them be tested.[30] In 1644 he had been parish surveyor, and he was called upon to witness and probably write a considerable number of documents, particularly wills. He witnessed fifteen Witham wills between 1634 and 1669, in two of which he had an additional role as trustee.[31] The signatures of George and William together appear as witnesses of a bond in a bastardy case in 1664.[32] William did have an older son, another William, but he had moved away to become a cordwainer in Dover; he inherited the freehold of a Witham building that his father had owned as an investment, but sold it shortly afterwards.[33]

In the absence of William junior, George may well have taken over the father's Witham business interests after his death in 1669. This is of course the date when George's tokens were issued. It was also at about this time that he became the occupant of a five-hearth building rented from Joan Skingley.[34] It was on the site of the present numbers 74/78 Newland Street, fronting onto the wide part of the street where the market was concentrated. Like many traders he also occupied three or four acres of land; his was in Mill Field which lay behind his house.[35] This could have been for a variety of purposes — growing food, keeping horses, or merely to sublet at a profit.

If George was indeed a grocer like his father, his business could have been very varied, the term being associated with 'engrossing', namely increasing the value of, goods in general. The specific association of grocery with food is relatively recent. The appearance of a still on George Robinson's tokens may of course indicate some specialisation in distilling. The Distillers' Company of London, chartered in 1638, had in fact been an offshoot of the Grocers' Company, though stills are shown on the tokens of a considerable variety of tradesmen as well as distillers and grocers.[36] Distilling did have medical associations, but the drinking of spirits was also increasing.[37] In this connection it is interesting that before George took over his Newland Street building, it had been occupied by Edward Lord, an innholder, and known as the King's Arms, previously the Swan; in 1661 there had been a plan to put up an inn sign for it in the market place.[38] Minor inns seemed to come and go frequently in this period, so this is no guarantee that George's business was also connected with innkeeping, but it is a possibility, particularly if he took over fixed equipment such as the type of still shown on the tokens.

George died in 1673/4, so he lived for only four years after William; he did not leave a will. The fact that his three sons were then all under seven years of age suggests that he was still quite young. Probably for this reason, he appears less in surviving documents than does William. But nonetheless he was one of two parish overseers of the poor at the time of his death, and was distinguished in the parish register by the description 'Mr Robinson'.[39] One of his successors as tenant of the Newland Street building was Thomas Scales, another grocer.[40]

George's widow was Dorcas, who survived him by twenty-one years, until 1694. Her christian name accounts for the 'D' which appears on the tokens with the initials of George.[41] As his house had been rented, she did not inherit any freehold property. But in 1675, two years after his death she bought two contiguous tenements in Newland Street from Edward Shakerley, a Witham butcher, on the site now occupied by number 113/115 Newland Street. She lived in part of some of them of them and rented out the rest of the space.[42] Between 1680 and 1687 there is also a reference to a '— Robinson junior' living in a cottage now part of the Red Lion Inn in Newland Street; the relationship of this person to the family, if any, is not known.[43]

Unlike her husband, Dorcas did make a will, in 1693/4. She was able to sign it herself; the device on her seal may be a pestle and mortar. The details of the will suggest that she maintained a comfortable and indeed elegant lifestyle (see appendix).[44] How this was supported financially it is not possible to say. It may have been by income from rents, money from her own side of the family, wealth inherited from George, or a combination of all three. Particularly noticeable were the various clothes that she singled out for special mention and left to female relatives; they were a 'greene moie heare' [i.e. mohair] coat, a 'silke Riding Gowne', a 'riding hood', a 'black crape Gowne', a 'blacke sattin' coat, a 'gowne with blacke satting stripe', and a 'moie heare' gowne. Also mentioned are 'two new paier of shoes' and 'two paer gloves one black silke and the other white'. She had several looking glasses in which to admire the clothes. Her funeral was to be paid for out of her 'gold that is better than three pounds, and six Rings'.

Only two of George and Dorcas's three sons survived her after 1694; the elder was another George, the younger was Reuben. She left them £10 and £40 respectively, and one of her two freehold tenements each. The younger George, by then twenty-seven years old, had married Sarah Pool of Wickham Bishops four years before, and had already built a stable and a shop (probably a workshop), on ground belonging to one of the tenements before his mother died.[45] He was a 'cowper' or cooper; making barrels would have been a logical occupation for the son of a distiller. In fact a description of London tradesmen a few years after this describes the work of 'the Iron Cooper' in these terms; 'this is a class of smiths employed in making Iron hoops for the large Vessels belonging to Brewers and Distillers, is a laborious and not very profitable Branch of that numerous Craft. Their Wages is like that of the other Classes'.[46]

George the younger was the recipient of a very unusual bequest from his mother, in addition to the

building and the money. He was to have 'a white deale box and all in it, he haveing the keye of it in his owne possession (Appendix). It is very tempting to speculate that this might have contained the hoard of his father's tokens with which this paper is concerned. There is some evidence that small orders of tokens were indeed supplied in boxes by the London makers, together with the 'stamps' or dies, so the box mentioned in the will may have been the original one in which the tokens had been first sent to Witham.[47] When George senior had died in 1673 the use of tokens had only just been banned, so he may well have thought it worth keeping some of his own together, in case further changes made them useful. By the time of Dorcas's death in 1694 this was no longer likely and they could have had a role as family heirlooms, which were not named because of their dubious legal status.

Attempts to follow the younger Robinsons forward in time, together with the possible possession of the hoard, have not so far reached very far. Reuben kept his part of Dorcas's tenements until 1721, but George, who had inherited the box, sold his part after five years, in 1699.[48] He had several children baptised in Witham between 1694 and 1707; he eventually died in 1730/1; his burial entry in the parish register is the source of the information about his being a cooper. His widow Sarah died in 1739. Their oldest son was yet another George, who married Elizabeth Burchall in Witham in 1721.[49] In 1720 either this George or his father was mentioned as tenant of part of some buildings on the site now occupied by numbers 117/123 Newland Street.[50] After this the Robinsons are 'lost', though more research in the neighbouring area might add more information.

The fact that the hoard stayed together for so long makes it seem possible that it was forgotten at some stage, and left in a building for some time. So there follows a brief survey of the history of the Witham buildings known to be relevant to the Robinson family (Fig. 1). The most relevant are those occupied by George the issuer and his son and grandson of the same name; the last two being the oldest boys in their families are the most likely to have inherited the hoard, and the son did inherit the white deal box.

74 to 78 Newland Street (site of shops now Rumbelow, Richards, and Michelle)

This is the site of the building rented from Joan Skingley by the George Robinson who issued the tokens. He had his business there between William's death in 1669 and his own in 1673/4. It was referred to as a five-hearth building in the Hearth Tax returns. After three or four changes in ownership and occupancy, the building was divided into four dwellings some time between 1721 and 1751, and another tenement was also built in the yard. The division of the main building into four continued until just before 1780, in which year it was said that it had been 'lately pulled down and rebuilt by Robert Barns now owner and is now divided into two dwellings now unoccupied'; Barns was described in a later Directory as a 'gentleman'. The term rebuilding was sometimes used merely to describe alterations. But the present two buildings on the site are said to date from the 18th century, so it seems probable that in this case the knocking down of the old was complete. Although the two new parts began in separate occupancy, they were combined between 1827 and 1896 as the premises of the Butler family of grocers and drapers and their resident assistants. They were then divided into two shops again, and one is now further divided.[51]

113/115 Newland Street (now the part of the Co-op south of King's Chase)

This is the site of the two tenements purchased from Edward Shakerley by Dorcas Robinson, George's widow, in 1675, and left by her to her two sons in 1694. The southern one, now 115, was inherited by Reuben, and was the one which Dorcas herself had shared with a Mr and Mrs Foxton; it seems probable that it survived until about 1930 when it was replaced with a new building by the Witham Co-op Society, who had bought it in 1907. However, the northern tenement, now 113, which was left to George junior, is the most relevant one, as it was he who may have inherited the tokens. He sold the building in 1699 and in 1705 it was 'known by the sign of the Cattern Wheel'. Sometime between 1717 and 1731 it was divided up into three or four tenements.

In 1736 these came into the hands of the Pattisson family, then drapers and mercers in Witham, who continued to rent the property out to tenants. During the following hundred years the Pattissons became solicitors and gentlemen, with widespread holdings of property in Witham. In the 1840s William Henry Pattisson 'pulled down' the two of the tenements that fronted onto Newland Street, and built Pelican Place or House in their stead (the pelican being the Pattisson family crest which can still be seen on the front of this building). Following the spectacular bankruptcy of Jacob Howell Pattisson in 1859, the building came to various owners until the Witham Co-op Society bought it in 1914 and incorporated it into their shop.[52]

117/123 Newland Street (now in various occupancies, between the Co-op and 'The Gables')

This adjoins the site discussed in the last paragraph. In the mid-seventeenth century the area had been used as a Tenterfield for stretching and drying finished cloth. George Robinson's son or grandson is referred to as occupying one of three tenements on the site in 1720, and 'now or late' living there in 1732; it is not known which part of the site his particular tenement was on. By 1732 the two cottages and cider vault that still stand in the yard behind, had been added; it is not certain whether they were there when the George Robinson lived on the site or not. By 1749, two of the front buildings, probably the ones now 117 and 119, had been rebuilt in their present imposing style; as far as is known they do not contain any traces of the earlier construction. The building now 121/123 probably

escaped with only a refronting in the eighteenth century, as it is said now to be a seventeenth century building with an eighteenth century front.

Thus if a George Robinson lived either in 121/3, or in one of the cottages over the cider vault at the back, it is just possible that some of the structure in which he lived survived until Majendie's day and until the present. There is no way of knowing whether he did live in those, or in the section demolished for the rebuilding of 117/9. All the 'surviving' parts were owned by the Pattisson family from 1813 to 1859 (the Pattissons are discussed above in connection with the neighbouring building). An Eliza White was the owner between 1859 and 1874 when the buildings were purchased by Dr William Gimson Gimson, who had his surgery nearby at 129 Newland Street. They remained in the Gimson family into the 20th century.[53]

7 Newland Street (now the Red Lion Inn)

There is a rather mysterious reference to a '— Robinson junior' occupying part of this building between 1680 and 1687. George Robinson's children would have been too young to be householders at this date, but at present no other Robinson family is known in Witham at the time. The building was then a cottage. By 1715 it had become part of the Black Boy Inn, and by 1800 was known as the Red Lion as it is now (the names Red Lion and Lion were earlier used by other inns in Witham). The building has survived very much in its 17th century form, part dating from as early as the 14th century. However, at the moment the connection with George Robinson is too tenuous to make it of much relevance in tracing the history of the tokens.[54]

In summary, this survey of the buildings shows that nearly all the most relevant buildings were knocked down and rebuilt between the time of the Robinsons and 1870, which was when the hoard 're-appeared' in Lewis Majendie's collection. The main exceptions are numbers 121/3 Newland Street which escaped with a refronting, the cottages behind it, and number 7 Newland Street, now the Red Lion. These are buildings where occupation by one of the George Robinsons themselves is unproven. This makes it fairly unlikely that Majendie himself would have obtained the hoard from a find in one of the Robinson buildings. But possibly one of his predecessors did, so the building information is included here in case it becomes relevant to any future research about the hoard's history.

Analysis of the hoard

While all of the 150 tokens at Colchester have the same reading, two varieties occur which may be distinguished thus:[55]

A1 (= Norweb[56] 1429). Still above E·RO. (Plate I, top)

B1 (= Norweb 1430). Still above RON. (Plate I, centre)

The letters A and B identify different obverse dies. The reverses are all from the same die (1), which was made with a narrow N punch as on obverse A, whereas a wide N occurs on obverse B. (This also has a different G, R. S and still from obv. A.) Die A was therefore the original obverse to reverse 1, and die B subsequently replaced it; flaws across one of the letters E on nine specimens, and across G and E on a further seven, are probably evidence of obverse A breaking up. The presence of strikings from two successive obverses, implying some lapse of time in the formation of the contents, emphasises that the hoard derives from the issuer.

Most of the A1 die-pairing exhibit a die-axis of 360°, that is, when the coin is held vertical with the obverse upright and turned on a vertical axis, the reverse also is seen to be upright. All 51 of the B1 die-pairings exhibit an axis of 90°, and so do eighteen of the 99 A1 pairings. All the flawed examples of obverse A mentioned above are to be found among those eighteen, so, to that extent at least, A1 at 90° followed A1 at 360°. One may

Plate I Witham tokens of George Robinson: top, obverse A and reverse I; centre, obverse B and reverse I; bottom, obverse and reverse of a specimen with a 'curved clip', which is evidence of a circular blank cutter.

therefore discern two breaks in the production of George Robinson's tokens, the first marked by the dies re-set in a different relative position, and the second marked by replacement of the obverse die. It is a matter of interpretation as to whether these constitute two issues (distinguished by the obverse die), or three. In either case, the number of specimens of the first issue (81 or 99 plus however many have been lost) would be some indication either of the level of stock at which a further order was felt to be necessary, or of the extent to which the tokens were subsequently redeemed for silver.

Other observations on the hoard include the following.

Filled dies (2 specimens), in which incuse areas of the die had become filled with dirt, grease, or metal filings, and caused a blank area on the struck coin;[57]

Off-centre striking (20), from which it may be concluded that there was no collar to hold the blank centrally between the dies;

Double-striking on both sides (1), so that a struck coin had shifted between the dies, then was struck again;

Flip-overs (1), in which a struck coin turned over and then was re-struck between the dies;

Double-striking on obverse only (1), the reverse being well struck up, so a struck coin must have adhered to the reverse (?lower) die and was struck again, the obverse die falling in a different position owing to some play in the press;

Deformed flans (15), one with splitting across the circumference of the deformation (apart from these the tokens all have approximately the same diameter);

Straight clips (2), in which a blank was cut out too near the edge of the strip of metal, the metal of the tokens being in appearance copper, but actually perhaps a low-zinc brass;[58]

Curved clips (8), produced by overlapping cuts from a circular cutter for the blanks (Plate I, bottom).

Potentially the most valuable information to be drawn from the hoard is that on weight. Even though tokens were of base metal, it has been shown that the Bristol City farthings were struck to a standard weight.[59] Moreover, private token issuers in Wiltshire were indicted at Quarter Sessions for uttering farthings or halfpence which were worth no more than half their nominal. value.[60] To most users of tokens their weight was doubtless a matter of indifference, but to issuer and producer the weights would at least have affected the ratio between the cost of production and the value of the output. It is therefore important to take up the opportunity to record the weights of a large quantity from a single issuer.

The 150 specimens were weighed to two decimal places of grams on a Mettler PE 200 balance in the Colchester Museum Resource Centre. The results are listed below in the three groups identified. Tokens with 'curved clips' are included since these defective blanks were not rejected before striking, and so must be assumed to have been of acceptable weight.

(i) A1 at 360°: 1.83, 1.76, 1.68, 1.62, 1.55, 1.52, 1.50, 1.49(3), 1.46, 1.45, 1.44, 1.41, 1.34, 1.33, 1.32, 1.31, 1.30, 1.29, 1.28(2), 1.27, 1.25, 1.24(3), 1.23, 1.22, 1.21(3), 1.20(4), 1.18, 1.14, 1.11, 1.10, 1.07, 1.06(2), 1.05(2), 1.04(2), 1.03, 1.02, 1.00(3), 0.99, 0.97(2), 0.95(4), 0.94, 0.93(2), 0.92, 0.91, 0.90, 0.88(3), 0.86, 0.83, 0.82(3), 0.80, 0.79, 0.73, 0.71, 0.68, 0.67(2), 0.59.

(ii) A1 at 90°: 1.34, 1.30, 1.28, 1.27, 1.22, 1.16, 1.13, 1.03, 1.01, 0.99, 0.97, 0.86, 0.75(2), 0.74, 0.70, 0.67, 0.58.

(iii) B1 (at 90°): 1.09, 1.06(2), 1.00(3), 0.99(2), 0.96(2), 0.93, 0.92, 0.91, 0.90(4), 0.89, 0.88(2), 0.85(2), 0.84(3), 0.81, 0.79(4), 0.78(5), 0.77(2), 0.76, 0.75(2), 0.74, 0.73, 0.71(3), 0.70(3), 0.61, 0.52, 0.50.

These weights may be summarised in Table 1.

Table 1

	Numbers	*Mean*	*Median*	*Standard Deviation* (Σ^{n-1})
(i) A1 at 360°	81	1.12	1.07	0.27
(ii) A1 at 90°	18	0.99	0.99/1.01	0.25
(iii) B1 at 90°	51	0.83	0.81	0.13

The range of weights is wide, presumably in part as a consequence of the rolling process. The average weights of Bristol farthings were found with the use of histograms, but interpretation of these Witham weights raises new problems which must be left for future consideration. It may be observed, however, that group (iii) appears to have been more tightly controlled than the others, with the heaviest weight at 1.09g, whereas group (ii) goes up to 1.34g with seven out of eighteen pieces heavier than 1.09g. Group (i) is heavier again, up to 1.83g, with fourteen out of eighty-one coins heavier than anything in group (ii), and forty out of eight-one heavier than group (iii). Yet these three very different ranges all have their lightest pieces between 0.5 and 0.6g (approximately 7¾ to 9¼ grains). It looks as though there might have been a minimum weight below which the struck coins or the unstruck blanks were scrapped by the maker.

George Robinson's tokens can be assumed to be farthings. If for the sake of argument the median weights of groups (i)-(iii) were taken to represent the original averages, they would imply nominal values per pound avoirdupois of 8s. 10d., 9s. 5½d., and 11s. 8d. respectively. These amount to a significant difference in the total manufacturing cost, but at present it is not known whether this would have been to the benefit of the manufacturer, or to his customer's benefit, or shared between them.

Finally, the Witham hoards may be summarised.

?Witham (Essex) no. 1, before 1870: 203 specimens of George Robinson's 1669 Witham token (BW Essex 351; Norweb 1429-30), in the possession of L. A. Majendie of Hedingham Castle, of which 150 are now in Colchester and Essex Museum.

?Witham (Essex) no. 2, before 1870: thirty or more specimens of John Freeburne junior's 1667 Witham

token (BW Essex 347; Norweb 1426), then in the possession of L. A. Majendie of Hedingham Castle.

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Appendix

Transcript of E.R.O. D/ACW 22/14, original will of Dorcas Robinson of Witham, Essex, written 1693/4, proved 1694.
(for registered copy see D/A CR11/76)

I Dorcas Robinson of Wittham in the County of Essex widdow being of sound and perfect memory praised be god doe make this present writting to be and Contayne my last will and Testament in manner and Forme Following:

Imprimis I give and bequeath to my Eldest son George Robinson the dweling house and yard which James Boyton live in and have in his possestion in Wittham in the County of Essex aforsaid: and I doe also give my son George Robinson the ground which the shope and stable stand upon which my son George built him selfe he makeing a way into them out of the yard of that yard which the aforesaid James Boyton hold: and he takeing away all other doores which now lead into the ather orchard and there to be nether dore nor light into that orchard I doe also give to my son George Robinson the sume of ten pounds which is in the hands of my sister Numan which I order to be paid him six mounth after mine desceace I doe Also give my son george a white deale box and all in it: he haveing the keye of it in his owne possess[i]on I doe also give my son George six peuter disshs three Brase potts: three skillet: and on kettele the medle one: and a paer of Candell sticke and one d[r]ippin pan and one puater tanker and that faedther bed which ly in the passage and one warmeinig pan the old one and I give him one of the largeth looking glases and black scarfe and blacke hoode to my son george wife.

Itam: I give to my you[n]ger son Ruben Robinson all ather of my houseall Goods and I doe also give my son Ruben Robenson the now dwelling house which I my selfe and Mr Foxstone live in with the yard and the Furder orcherd now is in the occupation of Mr. Foxstone and I doe alsoo give my son Ruben the sume of Forty pounds which is in the hands of my sister numan of Hasteed in the County of Essex and if my two sons george and Ruben shall die without heirer of there body then my will is that the yards and houss shall goe to my Brother J[ohn] Hawker Cheldrens.

Itam I give my Gold which is better then three pounds and six Rings which I ould have goe toward my Fiunerell:and I doe give my Brother J[ohn] Hawker and his wife twenty shillings apeace to by them a Ring: and my sister Hawker I doe give her my Greene moie heare [mohair] Cote and my silke Riding Gowne and I doe give my Cosen Frances Hawker my blacke Crape Gowne.

Item I give my sister numan my blacke sattin Cote and two new paier of shoes to my Cosen Mary and Margerit numan.

Item I doe give to Elezebeth Clarcke widdow a gowne with blacke satting stripe and two paer Gloves one blacke silke and the other white.

Item I give Mary Albery my moie heare [mohair] gowne and the gowne and staye which I now ware.

Item I give to gooddy Beckwith my Riding hood and all the Cotes which I now ware.

and I doe likewise order and apointe my debt to be paid and Rest of my Funerall and all thing Eelse to be discharged by my son Ruben Robinson From the goods which I gave him beffore mention.

and my will is to make my Brother J[ohn] Hawker whole exceckuter to this my last will and tastament and I Impower him to give them the things which are before giveng by me this my will and tastastoment made [th]e First day of February in the fift yeare of the Rainge of king William and Queene Mary where unto I have set to my hand and seald and delived in the present of us 1693/4.

Wittnes
Thomas Foxton
Ann Foxton
Jeames boyting
[all signed]

Dorcas Robinson
[signed]

[probate 14 June 1694]

Notes

1. C. D. Daines and R. H. Thompson, 'A hoard of St Neot's "lace-making" tokens from Eynesbury', *British Numismatic Journal*, 55, 1985, pp. 164-8.
2. For example, 21 halfpenny tokens from Peterborough and eleven places in Lincolnshire, also a Queen Mary groat, found in Spalding in 1917. T. W. Townsend, *Seventeenth-century Tradesmen's Tokens of Lincolnshire: the Issuers*, Lincoln, 1983, p. 58.
3. The 1672 royal proclamation 'for making current His Majesty's Farthings and Halfpence of Copper, and forbidding all others to be used', is conveniently available in C. Wilson Peck, *English Copper, Tin and Bronze Coins in the British Museum 1558-1958*, 2nd edn., London, 1964, pp. 605-6, and in *Seventeenth-century Economic Documents*, edited by Joan Thirsk and J. P. Cooper, Oxford, 1972, pp. 680-1.
4. George C. Williamson, *Trade Tokens issued in the Seventeenth Century . . .; a new and revised edition of William Boyne's work*, 2 vols., London, 1889-91; cited as 'BW'.
5. P. H. Reaney, *The Place-names of Cambridgeshire and the Isle of Ely*, Cambridge, 1943, p. 47; but the latest record is *le Marketplace* in 1356. Possibly John Finch's MAR:KET PLACE is more a description than a name.
6. Kenneth A. Jacob, 'Trade tokens and local history', *Amateur Historian*, 6(2), winter 1964, pp. 55-61, [2]pls. (at p. 60); I. D. Brown and Michael Dolley, *A Bibliography of Coin Hoards of Great Britain and Ireland 1500-1967*, London, 1971, ER7.
7. *Sylloge of Coins of the British Isles, 31: The Norweb Collection, Cleveland, Ohio, U.S.A.: Tokens of the British Isles, 1575-1750, Part I: England: Bedfordshire to Devon*, by R. H. Thompson, London, 1984.
8. Ex inf. Revd. Ron Dyer, Eynesbury.
9. Glendining, 8-9 April 1981, lot 319; Michael Dickinson, *Seventeenth-century Tokens of the British Isles and their Values*, London, 1986, p. 15; P. J. Preston-Morley in *Numismatic Chronicle*, 148, 1988, p. 282.
10. Seen by Mr Philip Mernick in the hands of a dealer.
11. E. A. Watkin, 'Staffordshire tokens and their place in the coinage of England', *North Staffordshire Journal of Field Studies*, 1, 1961, pp. 1-25, pls. i-ii (at p. 2).
12. Brown and Dolley (above, note 6). ER13.
13. William Gilbert, 'The token coinage of Essex in the seventeenth century', *Transactions of the Essex Archaeological Society*, new series, 13, 1914, pp. 184-99, 267-80; 14, 1915, pp. 1-15, 146-57 (at p. 155).
14. 'A guide to the token coinage of the 17th century: Essex', [editors P. J. Seaby, M. E. Bussell], *Seaby's Coin and Medal Bulletin*, nos. 512-15, 1961, pp. 10-14, 57-63, 102-6, 140-3 (at p. 143, n. 64).
15. Vincent West, 'Berkshire seventeenth-century tokens', *Numismatic Circular*, 84(7/8), July/August 1976, pp. 270-2.
16. Sotheby, 3-4 May 1899, lot 3.
17. Sotheby, 20 April 1936, lot 84.
18. *Sylloge of Coins of the British Isles, 38: The Norweb Collection, Cleveland, Ohio, U.S.A.: Tokens of the British Isles, 1575-1750, Part II: Dorset, Durham, Essex and Gloucestershire*, by R. H. Thompson, London, 1988, nos. 1429-30.
19. K. E. Cullum, 'Some Essex tokens', *Essex Countryside*, 23(221), June 1975, pp. 42-3.
20. D. T-D. Clarke, 'Numismatics in the Colchester and Essex Museum', *Numismatic Circular*, 73(6), June 1965, p. 129.
21. J. L. Wetton, *Seventeenth-century Tradesmen's Tokens*, Newcastle upon Tyne, 1969, p. 17.

22. *Essex County Standard,* 2 May 1936, p. 9, col. 1; *Essex Review,* 45, 1936, pp. 180-1.
23. Correspondence in the Colchester and Essex Museum, in the 'history' file for the Witham hoard, kindly made available with the hoard and a balance by Mr D. T-D. Clarke and Mr Martin Winter.
24. We owe this reference to the systematic catalogue searches of Mr Michael Dickinson. An annotated copy of the catalogue is in the library of the Royal and British Numismatic Societies.
25. Jean Lafaurie, 'La Revue Numismatique à 150 ans', *Revue Numismatique,* vi[e] série, 28, 1986, pp. 7-50, pls. i-ii (at pp. 49-50).
26. L. A. Majendie, 'Essex tokens', *East Anglian,* 4, 1869/71, p. 240. We are indebted to Mr Peter Preston-Morley for this reference.
27. *Essex County Standard,* 31 October 1885; Frederic Boase, *Modern English Biography,* [1st edn. reprinted], London, 1965, ii. col. 705; *Burke's Genealogical and Heraldic History of the Landed Gentry,* 18th edn., London 1965-72, iii. 602. Burke errs in giving 1857 as the date of L. A. Majendie's succession (*Gentleman's Magazine,* new series, 4, July/Decemberr 1867, p. 689). He published his excavations in the *Transactions of the Essex Archaeological Society,* 4, 1869, pp. 240-3: 'The plan of Hedingham Castle'.
28. Outline taken from J. Gyford, *Witham 1500-1700,* forthcoming.
29. E.R.O. D/A CW15/269, Will of Ann Barnard, 1650, and P.R.O. PROB 11/248/317, Will of Hugh Parson, weaver, 1655, describe William Robinson as a grocer.
    E.R.O. D/P 30/1/1, Witham parish register.
30. E.R.O. Q/SR 349/23 and 24.
31. E.R.O. Q/SR 322/54 and 55.
    E.R.O. D/A CW15/269, Will of Ann Barnard, 1650.
    P.R.O. PROB 11/248/317, Will of Hugh Parson, weaver, 1655.
32. E.R.O. D/P 30/15.
33. E.R.O. D/DBw M28, Court roll, Manors of Newland and Chipping, courts for Newland in 1677 and 1680 (property later known as no. 68.
34. E.R.O. Q/RTh 1, 5, 8/9 and 9/7, Hearth Tax returns, 1662, 1671 and 1673. George Robinson's position in the lists in 1671 and 1673 indicates that he took over from Edward Lord who was there in the 1662 returns, and this is confirmed by the manor records.
    E.R.O. D/DBw M28, Court roll, Manors of Newland and Chipping, court for Newland in 1659 (property later known as no. 34; present address derived from later manor records).
    E.R.O. D/DBw M63, Rental of Manors of Newland and Chipping, 1680, property no. 32 (later known as no. 34).
35. E.R.O. D/DBw M63, Rental of Manors of Newland and Chipping 1680, properties no. 140, 164, 165 (later known as nos. 160, 201, 202).
36. C. Webster, *The Great Instauration: Science, Medicine and Reform 1626-1660,* London, 1975, pp. 253-4; Norweb Collection, photographs of tokens bearing stills which also name a trade: Distiller 4, Grocer 2, Brewer 1, Cheesemonger 1, Tobacconist 1.
37. P. Clark, *The English Alehouse: a social history 1200-1830,* London and New York, 1983, p. 211.
    R. Campbell, *The London Tradesman, being a compendious view of all the trades, professions, arts, both Liberal and Mechanic, now practised in the Cities of London and Westminster,* London, 1747, reprinted Newton Abbot, 1969, pp. 265-7.
38. See note 34.
    E.R.O. D/DBw M28, Court roll, Manors of Newland and Chipping, courts for Newland in 1659 and 1661.
    P.R.O. PROB 11/290/208, Will of Jeremiah Skingley, 1658.
39. E.R.O. D/P 30/1/1, Witham parish register.
    E.R.O. D/P 30/18/3.
40. E.R.O. D/DBw M70, Rental, Manors of Newland and Chipping, 1705, property no. 34.
    E.R.O. Q/SR 448/272 gives Thomas Scales as a grocer.
41. E.R.O. D/P 30/1/2, Witham parish register.
42. E.R.O. D/DBw M28, Court roll, Manors of Newland and Chipping, court for 1675 (property later known as no. 23; present address derived from later manor records).
    E.R.O. D/Dw M63, Rental of Manors of Newland and Chipping, 1680, property no. 21 (later known as no. 23).
43. E.R.O. D/DBw M63, Rental of Manors of Newland and Chipping, 1680, property no. 91 (later known as no. 94; present address derived from later manor records).
    E.R.O. D/DBw M28 and M29, Court rolls, Manors of Newland and Chipping, courts for 1680 and 1687 (property later known as no. 94).
    E.R.O. D/DBw M66, Rental of Manors of Newland and Chipping, 1686, property no. 94.
44. E.R.O. D/A CW22/14, Will of Dorcas Robinson, 1693/4 (proved 1694).
45. E.R.O. T/R 168/16, Great Totham parish register.
    E.R.O. D/A CW22/14, Will of Dorcas Robinson, 1693/4 (proved 1694).
46. E.R.O. D/P 30/1/2, Witham parish register, gives occupation of George Robinson at his burial in 1730/1.
    R. Campbell, *The London Tradesman, being a compendious view of all the trades, professions, arts, both Liberal and Mechanic, now practised in the Cities of London and Westminster,* London, 1747, reprinted Newton Abbot, 1969, p. 265.
47. H. J. F. Swayne, *Churchwardens' accounts of S. Edmund and S. Thomas, Sarum, 1443-1702, with other documents,* Wilts. Record Society, 1896. Page 225 gives a payment for 'brasse tokens and for a box to put them in and Two steele stamps 18s. 2d.'. This relates to a communion token of 1651, identifiable as the work of David Ramage, and struck in London.
48. E.R.O. D/DBw M68, Instructions for the court, Manors of Newland and Chipping, 1699, p. 18.
    E.R.O. D/DBw M34, Court roll, Manors of Newland and Chipping, 1721.
49. E.R.O. D/P 30/1/1 and 30/1/2, Witham parish register.
50. E.R.O. D/DBw M33, Court roll, Manors of Newland and Chipping, 1720 (property later known as no. 32; present address derived from later manor records).
    Deeds of Witham Co-operative Society premises in private hands, packet no. 205.
51. See note 34.
    Also E.R.O. D/DBw M31, M34, M43, M44, M39, M40, M41, M42, M141 and M142, Court rolls and books, Manors of Newland and Chipping, entries from 1712 to 1930 (property no. 34).
    Survey report, re List of buildings of special architectural or historic interest, Urban District of Witham, Department of the Environment, 1971.
52. See notes 42 and 45.
    Also E.R.O. D/DBw M30, M72, M73, M43, and M49, Court rolls, books and rentals, Manors of Newland and Chipping, entries from 1705 to 1788 (property no. 23). Deeds of Witham Co-operative Society premises in private hands, packets nos. 201 and 204.
53. See note 49.
    Also E.R.O. D/DBw M43, M44, M39, M40, M41, M42, M140, M141 and M142, Court rolls and books, Manors of Newland and Chipping, entries from 1733 to 1932 (property no. 32).
    Survey report, re List of buildings of special architectural or historic interest, Urban District of Witham, Department of the Environment, 1971.
54. See note 43.
    Also E.R.O. D/DBw M43, M44, M39, M40, M41, M42, M140, M141 and M142, entries from 1732 to 1931 (property no. 94).
    Survey report, re List of buildings of special architectural or historic interest, Urban District of Witham, Department of the Environment, 1971.
    E.R.O. D/DE1 T170, Deeds including the Black Boy/Red Lion, 1715 to 1812.
55. Gilbert (above, note 13) first distinguished two varieties. His no. 407, 'As last, but the still is smaller and the letters are spaced further apart', applies to obverse A as regards the size of the still; the letters are problematical.
56. *SCBI* 38 (above, note 18).

57. This doubtless accounts for the three roses instead of four on the reverse of Eileen Judson, *The Lives and Wills of Essex Token Issuers, incorporating 'A Re-listing of the Seventeenth-Century Trade Tokens of Essex'*, [Little Bardfield], 1987, 351a (= A1). A specimen of B1 with the reverse in that state is illustrated by Dickinson (above, note 9), plate i, and our Plate I, centre, has nearly reached that state. In Judson 351a 'R' should be corrected to 'S'; and for still 'handle' read 'arm'.
58. M. B. Mitchiner and others, 'The chemical compositions of English seventeenth-century base metal coins and tokens', *British Numismatic Journal*, 55, 1985, pp. 144-63.
59. *SCBI* 38 (above, note 18), pp. xxvi-xxxii.
60. E. G. H. Kempson, 'Indictments for the coining of tokens in seventeenth-century Wiltshire', *British Numismatic Journal*, 43, 1973, pp. 126-31.

Postscript

At a symposium on Techniques of Coin Production, held at the British Museum in September 1988, it was suggested that the minimum weight common to all three groups of George Robinson tokens derives from the minimum distance to which rollers for the strips of metal were or could be closed together. See R. H. Thompson, 'Mechanisation at the seventeenth-century London mint: the testimony of tokens', to be published in *Metallurgy in Numismatics*, vol. 3.

Essex Archaeology and History **20** (1989), 143-146

Antiquaries in conflict: Philip Morant versus Richard Gough

by W. Raymond Powell

Philip Morant's *History of Essex* was published between 1763 and 1768.[1] The preface to the final volume, dated 2 January 1768, breathes great satisfaction with a long and arduous task finished at last. It ends by expressing the author's 'Acknowledgements and Gratitude to the great Author of my Life and Happiness, who hath enabled me to go through this and other laborious Employments.' Having thus thanked God, Morant goes on: 'I must beg leave to add that if the World is benefited by my Labours the chief Praise is due to my only Patron good Bishop Gibson.'

The pomposity of Morant's style can be accepted by the modern reader as a period piece, even as an embellishment to his great work. Some of his contemporaries, however, were inclined to puncture the balloon. In 1758 John Clubbe (1703?-73) rector of Whatfield in Suffolk, published anonymously *The History and Antiquities of the Ancient Villa of Wheatfield,* a satire on antiquaries, and especially on Morant, whose *History and Antiquities of Colchester* had appeared in 1748.[2] Whatfield is only 15 miles from Colchester, where Morant, also a clergyman, spent much of his life, and Clubbe probably knew him personally. *The History of Wheatfield* was well calculated to provide an hour's diversion for gentlemen who did not take life as serously as Morant did, and it went into several editions. The tone is set by the dedication, to a fictitious patron, a nobleman whose name was indicated only by four asterisks. 'My Lord, I venture into the ocean of antiquities in confidence of your Lordship's humanity and great judgement; relying on the former to hold me up, if you see me sinking; and on the latter to distinguish me from the many logs, and drowned puppies, bobbing up and down upon the same element; and upon both for your excuse of this presumption.'[3] The book does not seem very amusing today, but it can raise an occasional smile, particularly when poking fun at antiquaries who mistake guesswork for proof in trying to explain the origins of personal and place-names. "There are but two names remaining in the *Villa* of Roman extraction: the first is the *Rusill* family, probably descended from that fop *Rusillus* recorded by Horace; but it is much departed from all idle taste of essences and perfumes.'[4]

Even if Morant had been the most modest and unaffected of men, his *History of Essex* would no doubt have provoked the hostility of those who envy great achievements. The first attack appeared only a few months after the *History* was published. The writer was Richard Gough, a man half Morant's age, and very different in character and upbringing.

Morant (1700-70), who came from a family of decayed gentry in the Channel Islands, had a conventional Anglican education at Abingdon school and Oxford before taking holy orders. Dr Geoffrey Martin sums him up well: '. . . Conservative in the Protestant tradition, mistrustful of fervour, mild in manner but unswerving in conviction.' Except for two years as chaplain to the English church at Amsterdam Morant spent all his working life as a parish priest in Essex, mainly at Colchester. Learned and sound as a scholar, he was brilliant as an editor — if brilliant is a quality that can be fittingly applied to editors.

Richard Gough's father had been the captain of an East Indiaman who rose to be a director of the East India Company, and late in life married the daughter of a wealthy London brewer.[5] Richard was a precocious child, educated by private tutors under the eye of a doting mother, who in 1747, when he was 12 years old, paid for printing his first book, *The History of the Bible, translated from the French.* He spent four years as a fellow commoner of Corpus Christi College, Cambridge, studying hard, but debarred as a strict Presbyterian from taking his degree. During his years at Corpus he was 'very shy and awkward, and much the joke of his fellow collegians; and hardly ever stirred out of college but with his tutor.' In later life his manner became easier, and we are told that 'his conversation was always lively, often with a pleasant flow of humour.'

On going down from Cambridge in 1756 Gough embarked on the first of a series of topographical tours which during the next 20 years took him to most parts of England, and produced a greatly enlarged edition of Camden's *Britannia* (1789). While still at college he had also planned a detailed guide and bibliography of local history, and the first edition appeared in 1768 under the title *Anecdotes of British Topography.*[6] Gough gave a copy to the Society of Antiquaries in February 1769, which suggests that the book was published late in the previous year, and probably a few months after Morant's *Essex.* Gough had been elected a Fellow of the Antiquaries in 1767, and in the same year became a regular correspondent of the *Gentleman's Magazine.* He would eventually rank as one of the most distinguished antiquaries of the 18th century, but in 1768 he was still a young man on the way up. *Anecdotes of British Topography* was his first important book, and he obviously intended it to make his name, without being much concerned for the feelings of others.

Richard Gough was a subscriber to Morant's *History of Essex,* and had studied it closely. His comments on the first part, covering Chelmsford and Witham

hundreds, are expressed in an unpublished paper entitled 'Critique of Morant's *History of Essex*'.[7] He stresses the importance of field work in local history. One should describe the face of the county, and the monuments, whether of earth or brick or stone, as well as informing the reader who built them. 'Recluse and sedentary antiquarians find it much easier to arrange materials put into their hands than to ramble about the country and examine every remain of antiquity.' Such work admittedly requires much time, and one wishes 'that the most diligent collectors were more forward to oblige the world with their labours; yet the study of antiquity suffers by nothing so much as by productions hurried into the world.' Buildings and other monuments should be studied not only because of the information they provide but because they are more likely to disappear than written records 'carefully laid up in libraries and offices.' Gough refers contemptuously to the author who quotes other men's theories, e.g. on the location of Roman towns, and who 'without stirring out of his study to measure real distances, sits torturing imaginary ones.' To all these matters, he says, Morant 'has betrayed the grossest inattention in the arrangement of the valuable material put into his hands.' Gough goes on to criticise Morant for failing to acknowledge his great debt to the collection of those materials, especially Ouseley, Holman, and Thomas and Nicholas Jekyll, and for failing to include full lists of parochial clergy, incorporating those of Richard Newcourt. The manuscript ends with a few notes of corrections and additions to Morant.

It is clear from Gough's 'Critique' that he considered Morant a pompous, sedentary and lazy pedant, climbing on other men's shoulders. When he committed his views to print he was much more cautions, though scarcely less offensive. His *Anecdotes of British Topography* contains a two-pronged attack on Morant. In the Introduction he mentions Nathaniel Salmon's unfinished *History of Essex,* which had appeared about 1740. Salmon, he says, 'as his last shift to live, set about a survey of Essex, and to the collections made by others added his own industry and conjectures. However extravagant these last may appear, I am sorry to be obliged to say that his unfinished account of this county, of which so much might be said, is the best extant.'[8] In these words Gough contrived to insult Morant without naming him. The final volume of Morant's *History* may not have been in print when Gough's *Anecdotes* went to press, but Gough had subscribed to the earlier volume. He almost certainly knew that completion was imminent, and that Morant's work was designed to supersede that of Salmon. Later in the *Anecdotes,* in the section on Essex, he returns to the charge. The section starts with a summary of the work done by the antiquaries of the 17th and early 18th century whose collections eventually came into Morant's hands. Referring again to Salmon's *History* he says that it was thought by many to be 'too contracted and superficial' and that after his death the collection he had used, with others, were put into the hands of Philip Morant. Those words, on their own, might be thought favourable to Morant, but Gough dispels that impression by adding the following footnote: 'Such as it is I wish he [Salmon] had lived to finish it, or that his republisher [Morant] had made as good use of such valuable materials as *he* would have done, and followed his method of inserting the epitaphs in the respective parishes, as well as in other particulars.'[9]

In his *Anecdotes* Gough omitted his charge that Morant had failed to acknowledge his debt to Ouseley, Holman, and the Jekylls. Morant did, in fact, make that acknowledgement in the preface to volume I of the *History of Essex.* But there was one of Gough's criticisms to which he was more vulunerable. That also appears in the footnote to the *Anecdotes.* Morant did not mention Nicholas Tindal or his works.[10] Gough was referring to Tindal's *History of Essex,* two numbers of which were published in 1732 before the author abandoned the project. Morant had known Tindal intimately. In 1722, as a young man newly ordained, he travelled down from London on the Chelmsford coach to take up his post as curate to Tindal, then Vicar of Great Waltham. Almost immediately Tindal, with Morant's assistance, embarked on a translation and continuation of Paul de Rapin's *History of England.* Morant remained at Great Waltham for 10 years, and his help was acknowledged in Tindal's preface to Rapin. In 1732 he witnessed Tindal's contract for the *History of Essex,* so he knew well what was projected there. As Tindal's research assistant Morant must have learned a great deal from him, and although Tindal's venture into Essex history did not get very far it provided a specimen for Morant, and was directly useful for the parishes it covered, in which Morant seems to have based his accounts largely on those of Tindal. It is thus strange that Morant made no acknowledgement of his debt to Tindal in either of the prefaces to his *History of Essex.* In some notes which he made in 1768 or 1769 he mentions Tindal dismissively as follows. 'Want of encouragement, especially Mr Tindal's being engaged in the new folio edition of Rapin's *History,* took him from this work [i.e. the *History of Essex*]. As he had begun it, 'twould have been too bulky and tedious, and would not have been comprehended in less than 6 or 7 quarto volumes.'[11] Those words are included in the draft of a review intended for publication, but they were omitted from the final version. One has the impression that Morant was by 1768 no longer on good terms with Tindal. Tindal and his two sons were subscribers to Morant's *History of Colchester* (1748), but none of them subscribed to his *History of Essex,* though they were all living at the time of its publication.[12] Morant's association with Tindal had continued at least until 1751, when he edited the summary of Rapin's *History.* In the same year Tindal achieved a spectacular success. He had dedicated the second folio edition of Rapin's *History* to Frederick, Prince of Wales, who thereupon presented him with a

gold medal. Frederick, father of George III, may not have been the worthless creature depicted by Horace Walpole and Lord Hervey,[13] but his raffish reputation would have been distasteful to the straitlaced Morant, who probably regarded Tindal's medal with contempt.

If, as seems likely, Morant had fallen out with Tindal some time between 1751 and 1763, when the first part of the *History of Essex* was published, that may explain his failure to acknowledge his debt to Tindal. It is tempting to speculate further, on the possibility that Richard Gough's criticisms of Morant may have been prompted in some way by Tindal. Gough and Tindal may well have met not only as antiquaries, but in London's maritime community. Gough's connexion, through his father, with the East India Company, has been mentioned. Tindal, who had served in the Royal Navy, was for many years chaplain to Greenwich hospital.

Morant did not allow Gough's criticism to pass unchallenged. In June 1769, a few months after the appearance of the *Anecdotes of British Topography,* he attacked Gough in an anonymous review of that book, published in the literary journal, the *Monthly Review.* The first draft of Morant's review is preserved among his papers in the Essex Record office.[14] It includes one or two remarks, omitted from the final version, which betray Morant's resentment of Gough's treatment of his own work. 'The surmise of a preference of N. Salmon's *History* to the other lately published (in the preface, p.ix and the book, p.161, note g) must by all unprejudiced persons be reckoned false as well as injurious. But of that let the world judge by comparing them together.' The draft also refers sarcastically to Gough's point about the omission of epitaphs. 'It is a great grief to him that the epitaphs are not inserted. To his consolation let him know that the epitaphs, with a description of the arms around them, are ready for the press.'

Morant's review of the *Anecdotes,* in its final form, as published, is much shorter than the first draft. It does not mention Gough's criticisms of Morant's *History,* but describes and emphasises the importance of that work as superseding all previous attempts at a complete history of Essex. Its treatment of Gough's book is equally clever. Morant affects a judicial tone, makes several serious criticisms, and damns by faint praise, while careful not to give himself away by excessive venom. 'Such a work as the present, if *carefully* executed, might doubtless be of great utility: but that the *Anecdotes* are so, cannot, perhaps be truly said. For the author seems to have drawn them up, rather, in a hurry; to have chiefly copied title pages, frequently (so far as appears) without examining the books themselves; and what is worse, not always to have taken the trouble of procuring the necessary information, even when it might have been readily had. Thus no notice has been taken of the late survey of the county of Derby . . .' 'Some pieces here inserted, are very unworthy of being preserved and transmitted to posterity: as the silly stories of witchcraft (p.201) and many other places; the appearance of the Devil (p.252); the raining of wheat (p.495); account of Ann Jeffries, fed six months by fairies (p.127); and he even stoops so low as to mention (what he himself calls) *'a dirty story'* (p.237).[15]

About half Morant's review of the *Anecdotes* is devoted to a detailed examination of the Essex section of the book, taken as a specimen. It points out several errors, for example the statement that William Holman had published a history of Hinckford hundred, and it carefully inserts the fact that Morant's *History* 'is now lately completed, in two volumes, folio.' Morant gives Gough a condescending pat on the back for including references from periodicals, and ends up urging him to 'be at pains of throwing out the rubbish and entering somewhat further into the different views and merits of such writers as he may think proper to retain, in his next edition.'

Morant followed up his review of the *Anecdotes* by sending Gough a long private letter, dated 5 Sept. 1769, pointing out the errors in the book and replying to Gough's criticisms of his own work. The writer states that the *Monthly Review* for June had anticipated several of his strictures. Since Morant himself had written the article in the *Monthly Review* this seems a disingenuous remark. The letter provides useful information concerning the dispersal of the Holman manuscripts, and on the cartularies of Essex monasteries. Morant defends his omission of epitaphs, 'the costly monuments of wealth and pride', at some length. 'How few of them are worth publishing. The difficulty . . . is this. Either the best of them are to be printed or they must all be printed. If they are all printed the world will be loaded with a great deal of trash; as epitaphs of butchers, coach drivers etc. of whom nothing more is said than that they lived so many years, and died. Those in churchyards should also be printed, as well as those in churches. And if only select ones are printed, the descendants of those butchers etc. will complain that their families have not had justice done to them and that the work is imperfect.' Morant adds that full details of the Essex epitaphs are in his possesion. To have inserted them in his *History* would have 'swelled the book immeasurably' and they will be better in a volume by themselves, to be published by and by. He goes on to say that the epitaphs included, in Salmon's *History* are inaccurate and incomplete, and that Salmon greatly miscalculated the length of his book. He then lets fly with the words originally intended for his review of the *Anecdotes,* indignantly rebutting Gough's stated preference for Salmon's *History* to his own, and ending 'but of that let the world judge.'[16]

Gough's reply to Morant came in a brief cool, letter dated 11 October 1769. He professed satisfaction that Morant agreed with him about the utility of epitaphs, by his intention of publishing them, suggested that Morant should also add full lists of Essex incumbents, and left the world to judge the comparative merits of Salmon and Morant as well as the merit of the *Anecdotes.*[17]

Morant died in 1770, only a year after that last letter, but Gough revived their controversy 10 years later, in

the second edition of his *Anecdotes*, which appeared in 2 volumes under the shorter title *British Topography*. 'Mr Morant, not content with omitting to collect many interesting particulars in each article of his history, has left out large parcels of the materials already collected to his hand.' Gough went on to cite examples of Morant's omission of information already published by Tindal, for Braintree, Raine, Stebbing, Felsted, and Panfield.[18] That seems to have been the last word in the controversy. Gough lived on until 1809, when Morant's grandson noted: 'on 19 March died at Enfield, after a long succession of severe epileptic fits, Richard Gough esq., well known in the literary and antiquarian world.'[19] Nicholas Tindal had died at a great age in 1774. Unlike Morant and Gough, he left sons to carry on his name, and the statue of his great-grandson, Sir Nicholas Tindal (1776-1846), chief justice of the common pleas, is a familiar landmark in the centre of Chelmsford. Yet Morant's fame is the most enduring. His *History of Essex* has been in constant use for over two centuries and the world has judged it more kindly than did Gough. It was a great and strenuous achievement, and one does not find it difficult to forgive the note of complacency that creeps into his introduction to the final volume. 'I can look back' says Morant, 'with inexpressible satisfaction upon a life not spent in Idleness or Indolence, or in fruitless Amustments, but in a constant Endeavour to do all the Good in my power.'

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Footnotes

1. For a recent assessment of Morant see G. H. Martin, introduction to P. Morant, *History and Antiquities of Essex* (repr. 1968).
2. For Clubbe see *D.N.B.* His *History of Wheatfield* was included in his *Miscellaneous Tracts* (Ipswich, 1770 or 1771).
3. J. Clubbe, *Misc. Tracts*, i, p.iii.
4. *Ibid.* 57.
5. For Gough see *D.N.B.*
6. A second edition, in two volumes, was published in 1780 as *British Topography*.
7. B. L. Egerton MS. 9382, ff. 179-206.
8. *Anecdotes*, p.ix.
9. *Ibid.* page 161 and note g.
10. *Ibid.* note e.
11. E.R.O., D/DCm Z19, ff. 291-3.
12. For Tindal see *Essex Review*, ii. 168-79; *D.N.B.*
13. *D.N.B.* s.v. Frederick Louis; cf. B. Kemp, 'Frederick, Prince of Wales', in *Silver Renaissance*, ed. A. Natan (1961), 38-56.
14. *Monthly Review*, x1 (1769), 455; E.R.O., D/DCm Z19, f. 291-3.
15. This last item was: '*The Mayor of Wigan: a Tale, &c.* By Hilary Butler. 1760. [A dirty story, poorly told.]' All the items quoted by Morant were retained by Gough in his *British Topography* (1780), i. 429-30; 532; ii. 253; i. 273; 503.
16. J. Nichols, *Literary Anecdotes of the 18th century*, ii, 705; for a draft see E.R.O., D/DCm Z19, f. 294.
17. Nichols, *op. cit.* ii. 709: dated draft in E.R.O., D/DCm Z19, f. 289.
18. R. Gough, *British Topography*, i. 347.
19. E.R.O., D/DGn Z19, f. 289v.

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Essex Archaeology and History **20** (1989), 147-156

The work of the Essex County Council Archaeology Section, 1988

Edited by A. Bennett and P. Gilman

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 the larger excavations can be found elsewhere in this volume (p. 00–00).

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: Sue Holden (Figs. 1–3, 6–7), Alison McGhie (Fig. 4), Roger Massey-Ryan (Fig. 5), and Dave Stenning (Fig. 8). Full details of all sites can be found in the County Sites and Monuments Record.

Shoeburyness, unprovenanced
Nigel Brown

Two sherds of Neolithic pottery were identified during cataloguing, by P. Sealey, of the large collection of Bronze Age pottery in Colchester Museum. The sherds were loaned to the Archaeology Section for recording.

Fig. 1.1 Body sherd, tempered with ill-sorted flint grits, exterior and core red brown, interior grey brown. The exterior is decorated with rows of twisted cord impressions.

Fig. 1.2 Rim sherd, tempered with ill-sorted flint grits, exterior and core red brown, interior grey brown. The interior is decorated with rows of twisted cord impressions. This decoration is carried over the top and exterior of the rim, above an undecorated concave neck.

The decoration of these sherds and the form of the rim are appropriate to Late Neolithic Peterborough Ware. They are not marked with an accession number, but were found on a card with other pottery 'from Shoeburyness'. Assuming this provenance is correct, they are the first sherds of Peterborough Ware to be identified from South-east Essex.

Finds: C.M.

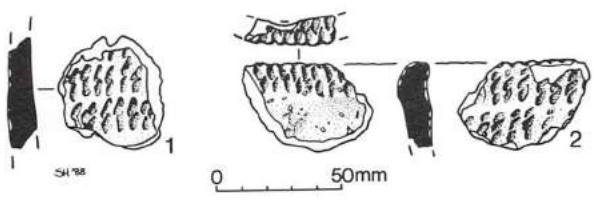

Fig. 1 Neolithic pottery from Shoeburyness.

Great Waltham, Broads Green (TL 61-142)
Nigel Brown

The field west of the Late Bronze Age (LBA) settlement recorded in the Autumn of 1986 (Brown 1988) was fieldwalked and revealed that the settlement spread into this field. The southern part of the field was stripped of topsoil in the Autumn of 1987 but it was impossible to recognise any subsoil features. Only a scatter of LBA flintwork and pottery was recovered from the stripped surface. In the Spring of 1988 topsoil was removed from the nothern part of the field. This time recognition of subsoil features was possible over an estimated 70% of the area. Several features were recorded and allocated numbers continuing the 1986 sequence (Fig. 2).

A large pit (F45) was interpreted as a clay quarry. It lay within an artificial hollow visible in the north-east corner of the field prior to top soil stripping. Numerous fragments of fired clay and misfired brick from the feature and scattered across the surrounding stripped surface, indicate the clay was used for brickmaking, the bricks being fired close by. Artefacts recovered from F45 indicate a 19th-century date.

A second large feature (F46) recorded in the quarry section appeared to be a clay filled hollow in the chalky boulder clay.

Two oval steep sided pits (F47 and F49) were similar to those recorded in 1986. F49 produced a large quantity of burnt flints (4.04 Kg). A single large posthole (F48) and two stakeholes (F50 and F51) were also recorded. These features produced LBA flintwork and pottery including a plain flattened rim (Fig. 3.1) and part of a hooked rim jar (Fig. 3.2), indicating a date broadly contemporary with the features recorded in 1986.

The scatter of features recorded in 1988 may represent a slight shift of settlement over time. However they may be more strictly contemporary with the features recorded in 1986, perhaps representing a functionally distinct part of the site. Features 47, 48 and 49 contained numerous charcoal flecks and fragments of burned sandstone. None of the pits on the 1986 site contained such large quantities of charcoal (except the cremation pits). This together with the numerous fire cracked flints from F49 indicates considerable burning in the vicinity of these features. It may be that cooking took place in this area of the site, the burnt flints perhaps being discarded pot boilers.

Kelvedon, 102 High Street (TL 81-68)
Roland Flook

Two small trenches were excavated in advance of

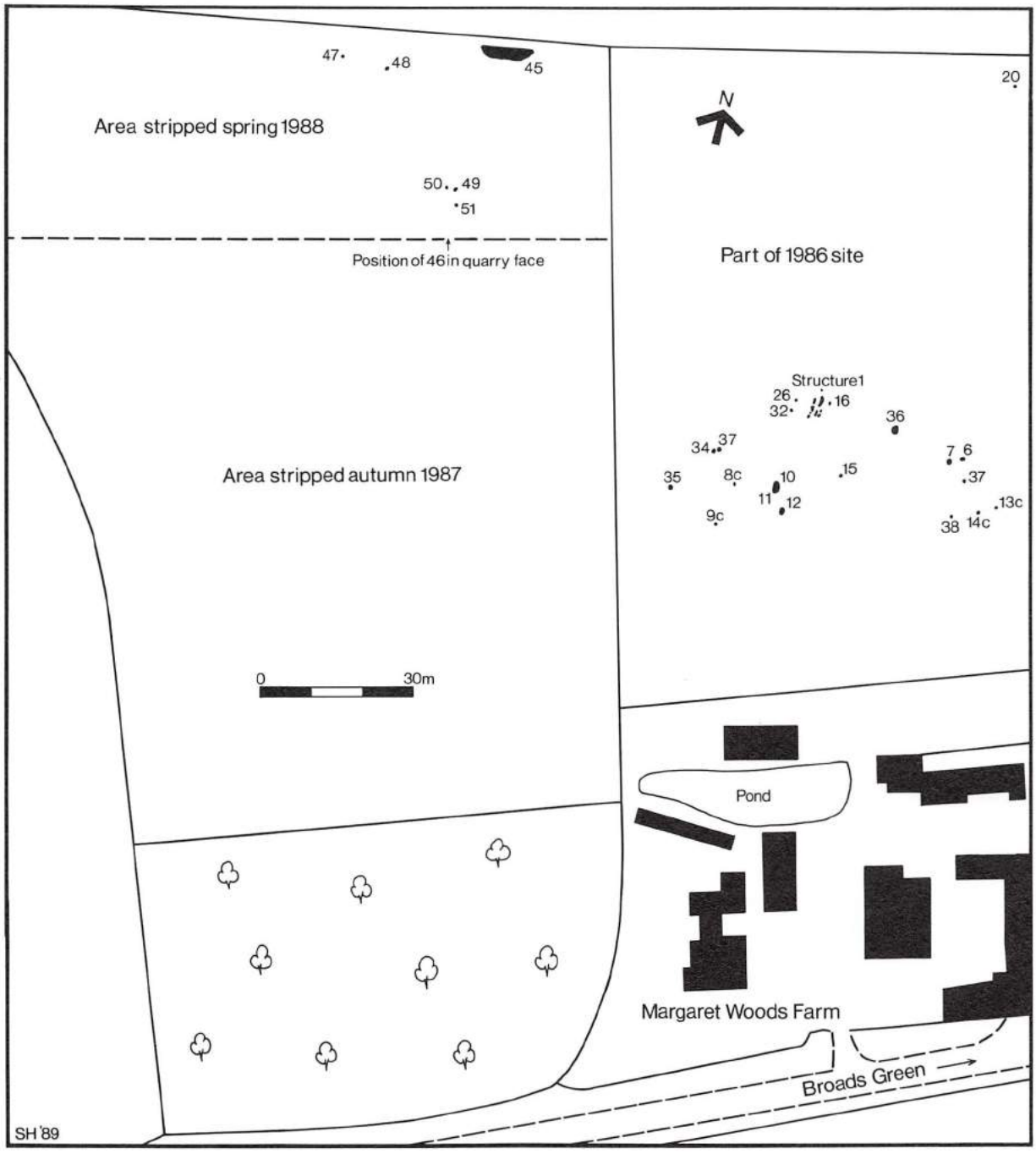

Fig. 2 Great Waltham — site location.

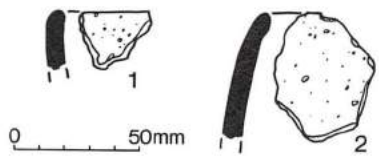

Fig. 3 Great Waltham — Late Bronze Age pottery.

redevelopment, in an attempt to further define the limits of the Roman settlement of *Canonium* (Fig. 4). The trenches were *c.* 30 m south-east of the High Street and *c.* 40 m north-west of the edge of the Roman town as postulated by Rodwell (1988, Fig. 40, p. 53). The earliest finds were a few sherds of pottery, dating from the 1st century B.C. to the 1st century A.D. but no prehistoric features were found. The only possible Roman feature was a ditch (15) in Trench 2, with three Roman pottery sherds in its fill. All other features were of post-medieval or undetermined date.

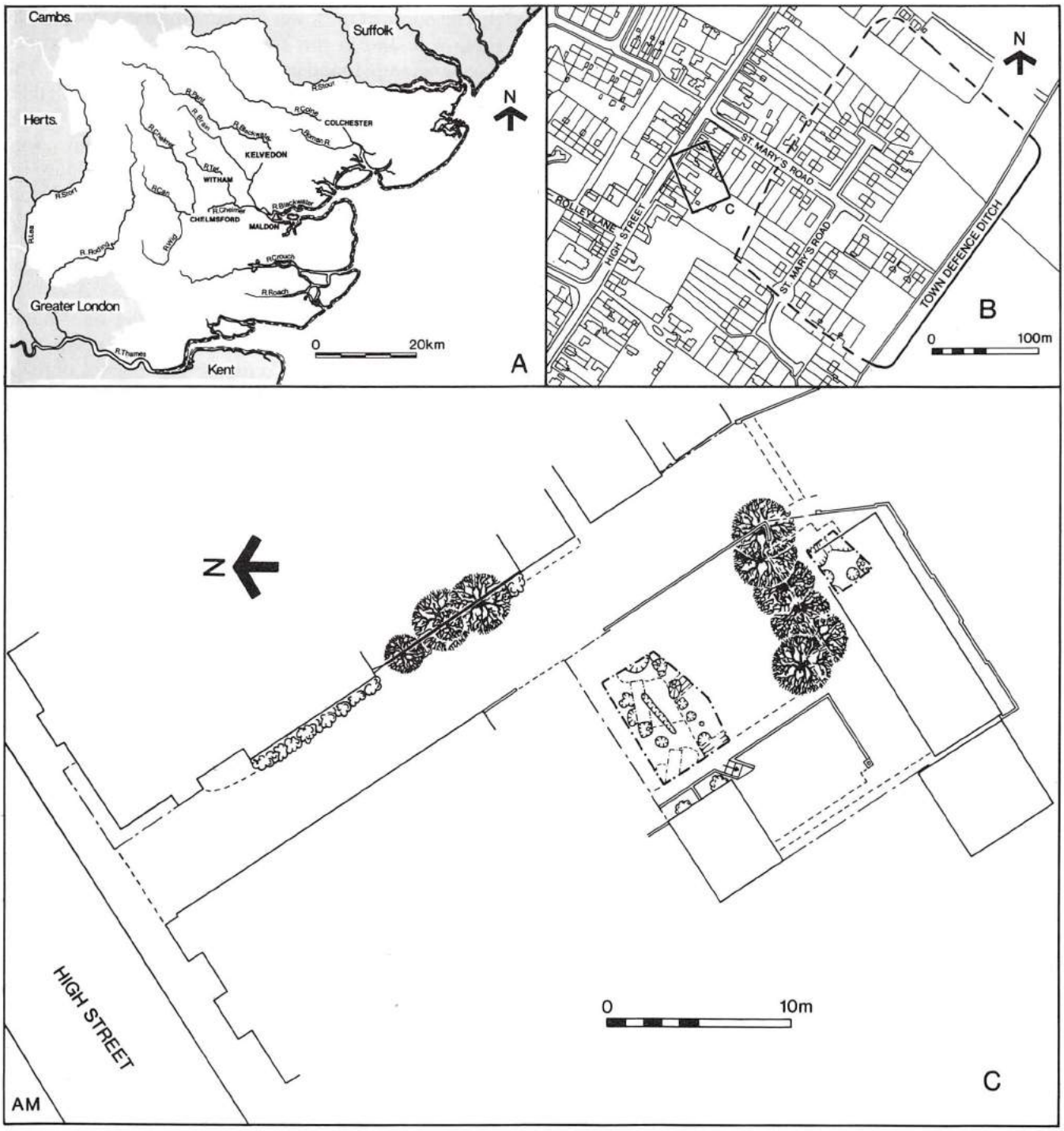

Fig. 4 Kelvedon — 102 High Street.

The meagre quantity of finds makes dating and phasing uncertain, but, apart from the possible Roman ditch there seems to have been little activity on the site until post-medieval times. This may be seen as negative evidence in support of Rodwell's proposed north-west limit to the Roman settlement.

Heybridge, Old Laundry (TL 80-19)
David Andrews
A watching brief at this site, between Holloway and Crescent Roads, not far from the site excavated by Drury in 1972 (Drury and Wickenden 1982; Wickenden 1986) revealed no traces of ancient occupation, although the site was very disturbed.

Little Waltham (TL 71-81)
Alison Bennett
It was noted that a field ditch, from TL 70301270 to TL 70521288, was being re-excavated with a mechanical digger. Because of its proximity to Scheduled Ancient Monument, Essex No. 189, the unexcavated part of the

Little Waltham Iron Age settlement (Drury 1978), a site visit was arranged to examine the exposed sections. However, the only features observed were land drain trenches at intervals along the length of the ditch.

Alphamstone, Parish Church (TL 83-10)
David Andrews
Human bones were found when a brick drainage channel along the north wall of the nave was removed and the level reduced. The wall, apparently of mortared flint but now rendered, seems to have been built on a foundation of sandy clay with gravel laid in a trench. The neatly stacked bones formed part of this foundation. Many individuals were represented. Presumably this was charnel from graves disturbed when the church was built. No doubt this was regarded as a place of particular sanctity for their reinterment. The nave wall is thought to be 12th century. The presence of this charnel indicates that this was not the first church on the site, but as a Roman building is thought to lie partially within the churchyard (V.C.H. 1963, 35), this is not entirely surprising.

Asheldham, St Lawrence's Church (TL 90-51)
David Andrews
The topmost stage of the tower was inspected prior to refacing. This is above the level of the flint band noted by RCHM (1923, 3) and corresponds to Drury and Rodwell's phase 6 (1978, 143), the final build of the tower. This stage was constructed entirely of septaria, so decayed that it could not be repointed, and has been replaced in brown flint. The fabric included peg tile, Roman tile and what might be a few medieval bricks in the septaria masonry. The limestone quoins, apparently original, are cut on the diagonal and are not properly keyed into the septaria masonry.

Belchamp Otten, St Ethelbert and All Saints Church (TL 84-14)
Carl Crossan
A lidless medieval stone coffin was uncovered by the digging of a drainage trench outside the north-west corner of the church. The coffin, of Barnack stone, measured, externally, 2 m long × 0.32 m high, tapering in width from 0.76 m at the head (west end) to 0.34 m at the foot. The west end had an integral circular head recess with a bevelled surround. Otherwise, the coffin was plain hewn, as was the external face at the west end (the only face to be fully exposed). The coffin contained two sets of skeletal remains:

A. Adult skeleton, skull placed within the head recess. Apart from the right humerus, which lay in its natural position relative to the skull, the articulated remains extended along the north side of the coffin, beside burial B. The bones of the lower leg were displaced toward the south side and in this region a group of 21 iron nail fragments were found in the upper fill of the coffin. The lack of wood remains and of any obvious pattern in their distribution makes interpretation difficult. However, the nails seem to represent some form of intrusion, disturbing the lower leg bones. There was evidence for other, probably unrelated disturbances around the skull and ribs.
B. Adult skeleton, occupying the south side of the coffin. Except the legs, which were articulated and fully extended, the remains were in a disordered state with the fragmented skull tucked between the right upper arm and mid/lower spine of burial A. The pelvis, also fragmented, lay alongside its left femur and, perhaps significantly, beneath the right femur of burial A.

It is likely that burial B was the primary interment, dislodged at a later date to accommodate A. This would explain the curious position of the pelvis of B in relation to A. An alternative possibility is that neither burial is contemporary with the coffin.

This find should not be associated with an impressive decorated Barnack stone coffin lid displayed inside the church. This ornamented lid, and its coffin, were found in the mid-1960s and the earlier coffin lies beneath the lid in the floor of the chancel (information from Mrs Howard, wife of the then incumbent). In any case, the dimensions of the lid do not correspond with those of the excavated coffin.

Great Burstead, Church of St Mary Magdalen (TQ 69-92)
David Andrews
Redecoration of the interior of the church revealed traces of wall paintings which cover the entire wall of the south aisle and south chapel. Scenes identified so far seem to include St Mary and St Michael weighing souls, datable to the 14th century, and apparently contemporary with the construction of the aisle; a St Christopher (medieval); and a representation of a curtain at the east end of the south chapel (? early 16th century). It is hoped to restore the paintings in their entirety.

Great Yeldham, The Old Rectory (TL 73-124)
David Andrews
During landscaping in the garden, at least eight burials were found, some of immature individuals. This southern part of the garden is in fact very close to the church, something not immediately apparent because of dense undergrowth. Presumably the churchyard once extended further in this direction, and was at some time encroached upon by the rector. A late medieval date is possible for the burials.

Halstead, Chapel Hill, The Old Rectory (TL 83-81)
David Andrews

Building work in the grounds of the Old Rectory uncovered a corbel with a grotesque head and other carved stones. The discoveries may be associated with a chapel of the Holy Trinity. According to Holman, this was first mentioned in a deed dated 14 Henry IV (Fowler 1923, 111). Inspection of the foundation trenches revealed a large pit cut into the natural clay and containing much building debris which must be waste from the building of the nearby Holy Trinity Church (*c.* 1844). This included unusual buff or pinkish sandy tiles, which were apparantly used for the spire; slender stone shafts; and dressings in white brick or terracotta.
Finds: private possession.

Maldon, St Mary's Church (TL 80-78)
David Andrews

A test pit measuring about 1.2 m square at the surface was excavated at about 3.5 m from the south door, to attempt to sample any archaeological remains that might exist on the site and to give some idea of the subsoil for building purposes. A feature, possibly a ditch, was revealed cut into the natural, aligned north-south and extending out of the test pit. A rim of St Neots-type ware cooking pot was recovered from the top of, or just above, the fill and this may be dated to the 10th–11th centuries. The feature would seem therefore to antedate the existing church or else date from the initial phases of its use.

There was a uniform, well mixed, clay loam above the natural extending up to the topsoil. This contained oyster shell, human bone, pegtile and building debris, and 27 potsherds ranging in date from the 2nd–19th centuries. The recovery of a few sherds of Roman pottery gives some support to the idea that St Mary's is on or close to a Roman site. Two intact 18th–19th century burials were found and charnel both above and below these burials indicated perhaps 6–10 disturbed inhumations in the area of the test pit, showing intensive use of the churchyard.

Pleshey, The Street (TL 61-12)
Deborah Priddy

A watching brief was carried out at Butlers on the northern frontage of The Street. This property is bounded on its western side by a slightly curving ditch, now filled in. The ditch may be the line of the northern bailey of the castle, which has been postulated on the basis of small scale archaeological investigations in the village over a number of years (Priddy 1988). Storm damage uprooted a large tree on the line of the ditch, revealing brickwork. This was part of a wall at least 2.2 m long and continuing further to the east along the base of the bank. This appeared to be sealed at its western end by another brick structure previously noted by Pat Ryan (Pers. Comm.). Samples of the brick were dated to the 15th–17th centuries by Mike Wadhams of the Conservation and Historic Buildings Section. Interpretation of the brickwork is impossible on the present evidence but it could represent agricultural buildings, of medieval date or reuse of medieval materials. Finds consisted of two rimsherds of 13th-century greyware, one sherd of 19th-century spongeware, and one fragment of, almost certainly, Roman lava quern.

Purleigh, Purleigh Mount (TL 80-1)
David Andrews

The area of the postulated bailey east of the scheduled Mount was levelled to create a dry, firm area for exercising horses. No archaeological features of any antiquity were observed. Notable among the few artefacts were a number of pieces of Roman tile pressed into the surface of the natural yellow-brown clay. Medieval and post-medieval pottery was also found. Using Cunningham's typology for Essex pottery (1985, 1–2) this comprised 8 sherds of medieval greywares (fabric 20) and 7 of post-medieval red earthenwares (fabric 40), and a sherd of white salt-glazed stoneware (fabric 45). Two crudely made rims in fabric 20 are illustrated, from a bowl or perhaps a jar (Fig. 5.1) and from a jug (Fig 5.2), the collared part of the rim, which curves out apparently for the beginning of a lip, probably being made of an applied strip of clay. These look to be late 12th or early 13th century in date. Also present was a neckless cooking pot rim of the sort generally assigned to the 14th century. Sinced the pottery seems either to date from the 12th–14th or the 18th–19th centuries, it could be argued that the absence of archaeological features is the result of truncation of the stratigraphy. In short, nothing was found that added to previous interpretations of the Mount, the most acceptable being that it was an adulterine castle (Priddy (ed.) 1982, 125), and the impression gained was that the main phase of medieval occupation was short-lived.
Finds: private possession.

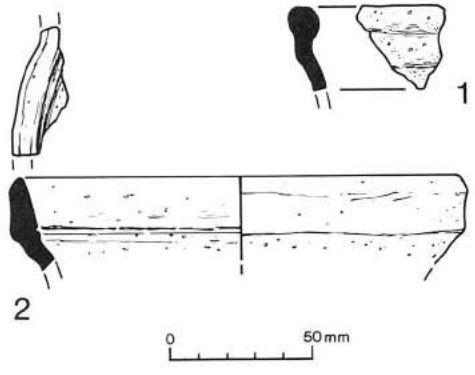

Fig. 5 Medieval pottery from Purleigh.

Rivenhall, St Mary's and All Saints Church (TL 81-2)
David Andrews
Examination of two cracks either side of the east window disclosed the reveals of a window aperture wider than the existing one. The infill between these reveals and the existing east window is of red brick and clearly dates from the insertion of the present window in 1839. The base of the window is about 2.6 m above the floor level, well above the level of the existing cill. This is consistent with the high reredos visible in a watercolour of the church interior in 1935 (Rodwell and Rodwell 1986, plate XXXIIa). This was a window of some size, having been 4.23 m wide and in excess of 4 m high, extending above the existing plaster ceiling. Whether the reveals are those of the original window of the 14th-century chancel, or are to be associated with the curious double light window represented on watercolours of 1835 (Rodwell and Rodwell 1986, plates XXVIII and XXXIIa), is uncertain, but the unusual plaster on the reveals makes the latter seem more probable.

Saffron Walden, Little Walden, Cloptons
Carl Crossan
Traces of a revetment composed of substantial horizontal timbers were noted during inspection of dredging work on a large ditch, probably a moat which extends across the north side of the *c.* 15th-century farmhouse. Irregularities in the surface of the adjacent open field coincide with the location of a group of outbuildings shown on the Chapman and André map of 1777.

Springfield, All Saints Church (TL 70-84)
David Andrews
The east-west foundation trench, closest to the church, of an extension to the parish room was inspected but no features were visible nor artefacts recovered. Subsidence pointed to the existence of one deep grave.

To the north of the church there is a wide boundary ditch, possibly of considerable antiquity.

Stock, All Saints Church (TQ 69-19)
Alison Bennett
Observation prior to the building of an extension to the church and of two drainage pits revealed no evidence of graves or archaeological features. Nor were any artefacts recovered.

Castle Hedingham (TL 73-1)
Pat Ryan
A Nuremberg jetton was found during patio works, near the church. It is the work of Hans Krauwinckel, one of the foremost manufacturers of the Nuremberg casting counter industry. He was first recorded in 1586 and died in 1635 (Eklund 1978).

Nuremberg: diam 21 mm; observe — three crowns and three lys arranged alternately round a rose within an inner circle, legend — Roman lettering, HANS KRAVWINCKEL IN NV:; reverse — reichsapfel within a double tressure of three curves and three angles set alternately within an inner circle, legend — Roman lettering GOTES REICH BLIBT EWICK, an annulet. Finds: in private possession.

Henham, St Mary the Virgin Church (TL 52-4)
David Andrews
The removal of a reredos dating from the 18th–19th centuries, painted with the Creed, the Lord's Prayer and the Ten Commandments, revealed the same texts painted on the wall. Closer examination revealed traces of an earlier painting of the same texts written somewhat larger. Such texts came to be written up in churches subsequent to the injunction of 1547 which ordered the destruction of wall paintings, which the religious reformers held to be idolatrous. In 1603 it was ordered that the Ten Commandments were to be set up at the east end of every chancel (Benton 1945, 336). Benton cites a visitation of 1633 which recorded that the sentences of scriptures on the walls of Henham church needed renewal, but he was unaware that these examples had survived. The style of the writing suggests a late 17th–18th century date. They are in a very poor condition, partly due to the state of the plaster and partly because of subsidence of the window infill onto which the central portion is painted. The restored reredos will hide them from view once more.

Weald County Park, Belvedere Mount
Alison Bennett
Inspection of a pit dug for an 'Armada' beacon on the summit of the Belvedere Mount showed that the fabric of the top part of the mound consists of brickearth including natural flints and broken brick. A sample of this brick was dated by Mike Wadhams of the Historic Buildings and Conservation Section to the second half of the 17th century.

Aerial survey 1988
W. Wall
The programme of aerial reconnaissance in central and north-west Essex continued, with seven flights during June–August. Despite another poor summer, several new cropmarks were observed and the more interesting of the season's new sites are described here. However, in general, cropmark definition was poor, and the new discoveries will serve mainly as a guide to future reconnaissance. It is interesting to note that even in a

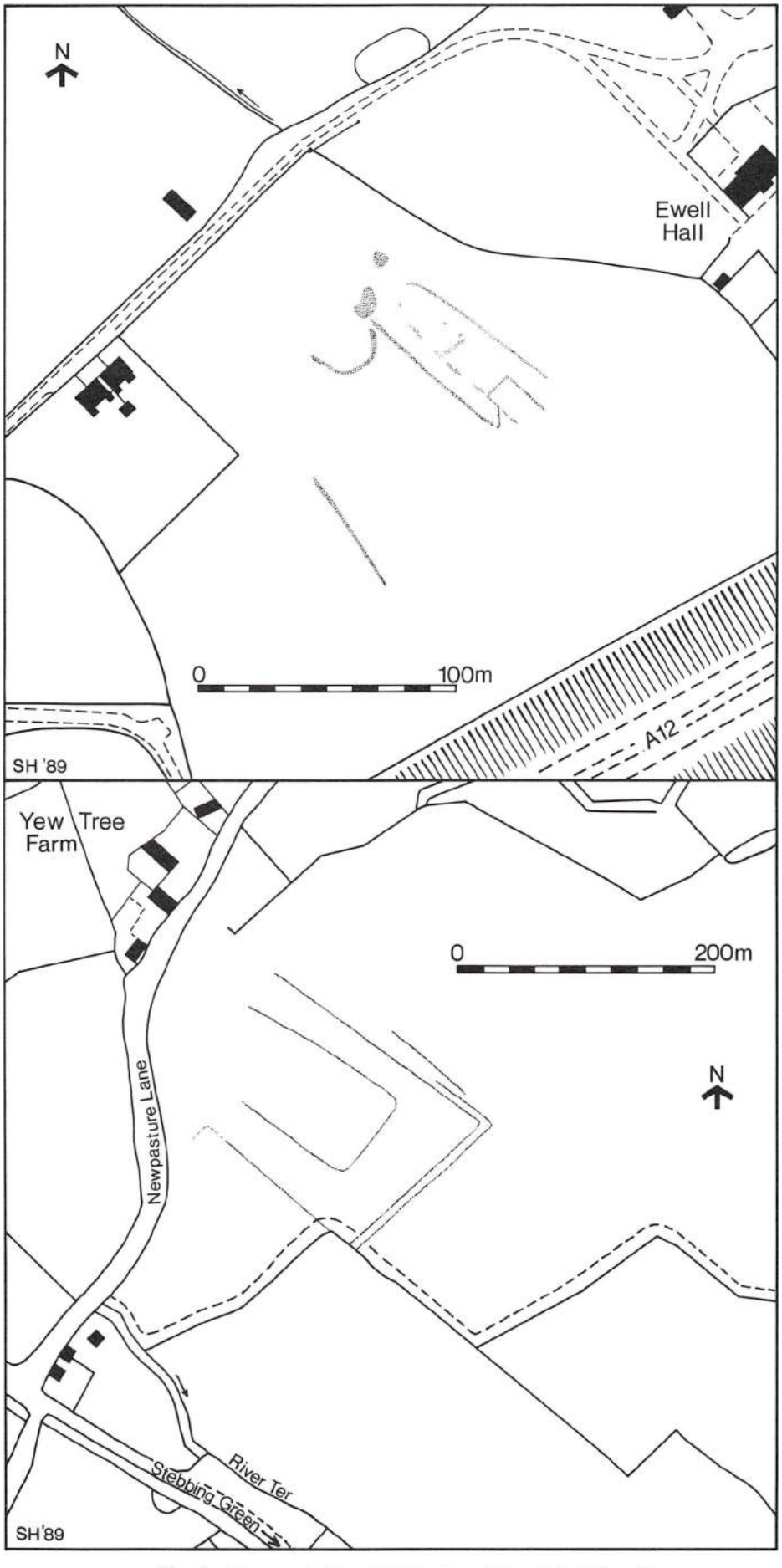

Fig. 6 Cropmark sites at Kelvedeon (1) and Stebbing (2).

poor year, new sites were located on the boulder clay plateau of north-west Essex. Recent programmes of both aerial and terrestrial survey, the latter as part of the Stansted project have shown this area to have a far greater density of sites than was once thought.

The photographs from which these results are drawn were all taken by ECC staff; no new sites were accessioned to the SMR from other sources, as funding for this backlog plotting, provided in previous years by R.C.H.M.(E.), was not available this year.

Kelvedon (TL 81-186)
Two enclosures 100 m South-West of Ewell Hall, Kelvedon (Fig. 6.1) seen as dark cropmarks in ripening cereal in mid-July. The site lies in the valley of the river Blackwater, between the river and the A12 trunk road. The first enclosure is rectilinear and rather narrow, *c.* 30 m wide by *c.* 80 m long, although the true length is unclear as the cropmark fades out to both the North and South. An oblong feature at the South end has two distinct, straight sides with a square corner between, suggesting a building about 10 m wide. There may be another to the North, though this is very patchy indeed. Some large "blockmarks" beyond the Northern end of the enclosure are probably geological in origin. To the West is a curving cropmark which comes within a metre of the first enclosure without joining it. Again, the exact nature of this second cropmark and its relationship to the first is obscure, since both appear to run into a blank area in the North of the field. An isolated linear feature about 70 m South-West of the main complex may also be connected in some way.

Stebbing (TL 62-120)
A double-ditched enclosure 200 m South-East of Yew Tree Farm, Stebbing Green, showing as a very slightly darker outline in a ripe cereal crop in early July (Fig. 6.2). The crop also appears beaten down slightly over the ditches, having perhaps grown taller here. The site lies on boulder clay and slopes gently to the South-West, towards the river Ter, which rises nearby. Roman villas are known, one to the South-East, near Boxted Wood, and one to the North-West, with the present site lying between them.

The enclosure is aligned North-West/South-East, with three sides showing more or less clearly, but fades out to the North-West, where the fourth side might be expected. The South-East and North-East sides are double-ditched, and the corner between them is almost a right angle. The South-West side shows as a single

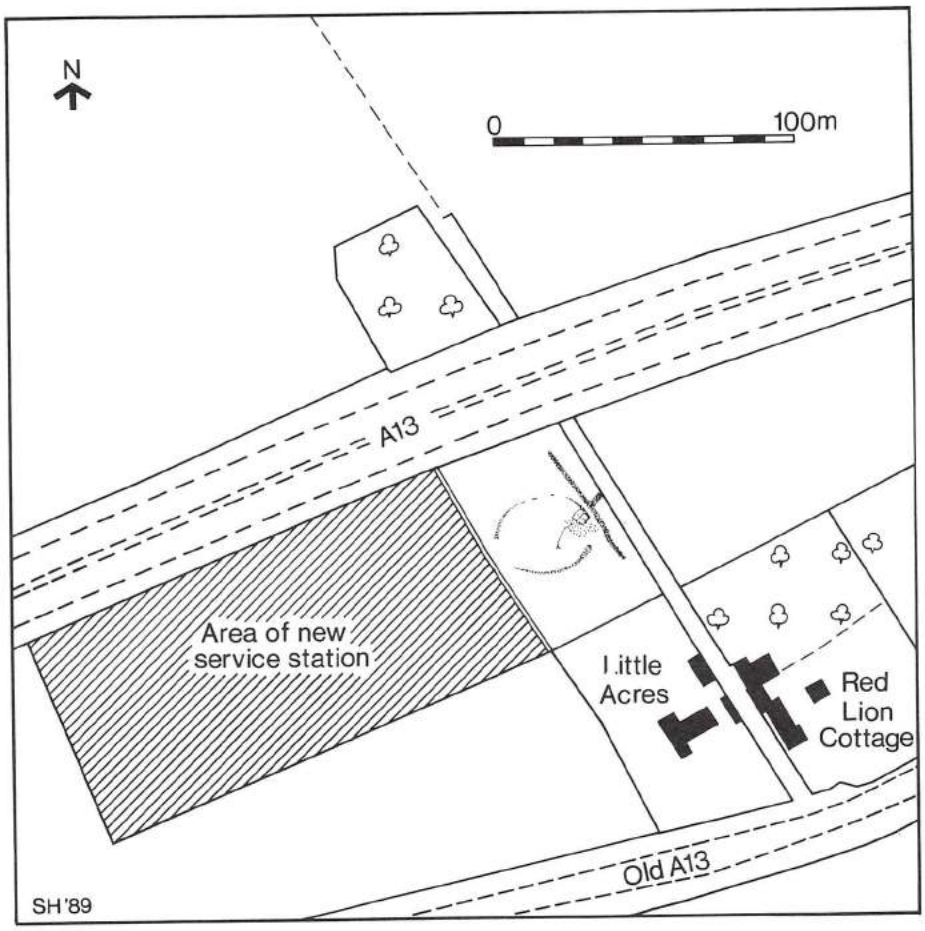

Fig. 7 Cropmark enclosure at Thurrock.

ditch, but since it appears to continue the line of an adjoining field boundary, it may be unconnected with the enclosure. Assuming that it does mark the South-West side, the enclosure then has a width of 140 m. Since no fourth side is apparent, the length is uncertain, but the North-East side is at least 200 m long. From these measurements, the area enclosed is 2.8 ha. There seems to be a subsidiary enclosure within the first, showing as a single outline on three sides, again fading out to the North-West. This appears to be oblong and on a slightly different alignment from the main enclosure. It is 70 m wide and at least 140 m long which would give a minimum area of *c.* 1 ha.

The assessment of Essex enclosures referred to above also deals with rectilinear enclosures (Priddy and Buckley 1987, 74). Of those mentioned in the appropriate size category (1–4 ha), the enclosure at Gosbecks, Colchester, appears to resemble the site at Stebbing most closely. This is a trapezoidal enclosure of *c.* 1.3 ha, with a double-ditched trackway on two sides. It also has a subsidiary enclosure, but outside the main area. Excavation at Gosbecks has produced pottery suggesting a pre-Roman origin for both enclosures (Priddy and Buckley 1987, 71).

A similarity of form between two enclosures does not mean they are contemporary, and an unexcavated cropmark must surely be regarded as undated. Nevertheless, in the case of the Stebbing enclosure, it is interesting to note its relationship to known Roman villas nearby. If it proved to be pre-Roman, one might see it as the forerunner of these later sites. As with all this year's sites, further work is needed, but in this case, terrestrial, rather than aerial survey is likely to be more profitable.

Thurrock (TQ 68-116)

A circular enclosure near the Old Red Lion, Horndon, noted as a dark cropmark in the parched grass of a paddock in early August. The area next to the paddock is being developed as a service station beside the new route of the A13 trunk road; the old A13 runs along the Southern edge of the map (Fig. 7). A rather oblique aerial photo, combined with a faint cropmark, makes accurate plotting of this site difficult. There are also some features which may be quite recent: the very distinct linear feature on the East side of the paddock runs parallel to the field boundary and may be contemporary with it. There is also a confused area on the East side of the complex with a rectangular feature containing a cross-shaped mark: this is difficult to interpret. Nevertheless, apparently underlying everything, there is the cropmark of a circular enclosure

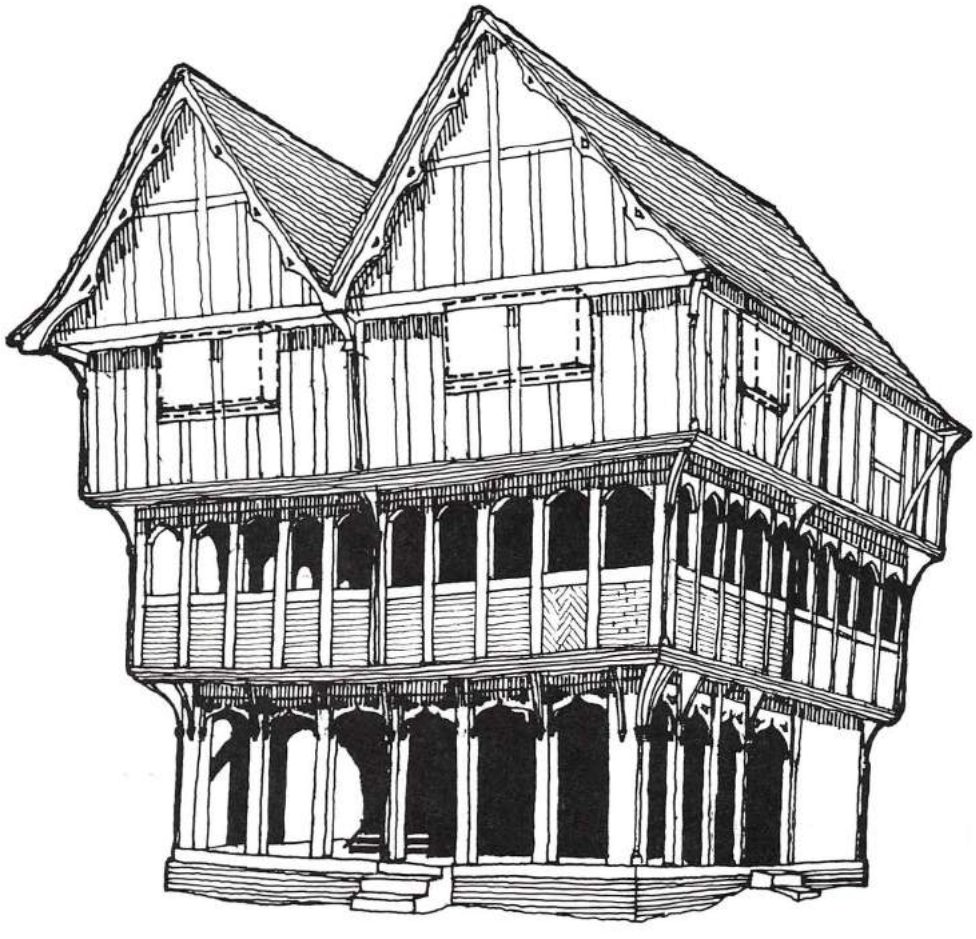

Fig. 8 Reconstruction of Thaxted 'Guildhall' (not to scale).

with a diameter of about 25–30 m; the slightly oval outline of the map may be the result of error in plotting from an oblique photograph.

Essex enclosures, both as cropmarks and excavated sites have been the subject of recent study (Priddy and Buckley 1987). Circular enclosures were the only enclosure form which could be readily classified by form and size (Priddy and Buckley 1987, 72). Enclosures of 30–40 m diameter form several groups in this classification, sub-divided according to the presence and arrangement of causeways. Unfortunately, it is very difficult to say whether this enclosure has causeways or not: the apparent gap in the Northern edge may be due to the faintness of the cropmark here, whilst to the West the enclosure runs under a hedge or garden border (not shown on the map), which masks the extreme Western edge. However, there may be a genuine entrance in the South-East, where the enclosure ditch does appear to terminate abruptly.

Historic Buildings
Dave Stenning

Thaxted 'Guildhall' (TL 63-1)

Thaxted's famous 'Guildhall' is an enigmatic building which has been subjected to numerous alterations. Opinions are divided as to its date and original function, as a result of the seeming abundance of contradictory evidence. The reconstruction drawing (Fig. 8) has been based on the surviving fabric and on a close examination of old photographs. However, it is possible, using the same basic data to propose a number of alternative 'reconstructions', each with its own particular merits. This particular thesis assumes an original construction date in the mid-16th century and the reuse of some earlier fabric. Efforts to promote an earlier date must inevitably depend on an alternative 'reading' of the clues. It is suggested that Thaxted 'Guildhall' remains an intriguing mystery, one that is worthy of further research.

Abbreviations see p. 170.

Bibliography

Benton, G. M., 1945 — 'Wall paintings in Essex churches. Post-Reformation inscriptions: the Creed, the Lord's Prayer, the Ten Commandments, and sentences of scripture', *Trans. Essex Archaeol. Soc.* New Ser. **23**, 331–50.

Brown, N., 1988 — 'A Late Bronze Age settlement on the boulder clay plateau: excavations at Broads Green 1986' *Essex Archaeol. Hist.* **19**, 1–14.

Cunningham, C. M., 1985 — 'A typology for post-Roman pottery in Essex' in Cunningham, C. M. and Drury, P. J., *Post-Medieval Sites and their pottery: Moulsham Street, Chelmsford*, Counc. Brit. Archaeol. Res. Rep. **54**, Chelmsford Archaeol. Trust Rep. **5**, 1–16.

Drury, P. J., 1978 — *Excavations at Little Waltham 1970–71*, Counc. Brit. Archaeol. Res. Rep. **26**, Chelmsford Excavation Committee Rep. **1**.

Drury, P. J. and Rodwell, W. J., 1978 — 'Investigations at Asheldham, Essex. An interim report on the church and the historic landscape', *Antiq. J.* **58**, 133–151.

Drury, P. J. and Wickenden, N. P., 1982 — 'An Early Saxon Settlement within the Romano-British small town at Heybridge, Essex', *Medieval Archaeol.* **26**, 1–41.

Eklund, O. P., 1978 — *The Counters of Nuremberg* (extracted from *The Numismatist* Vol. 39, 1926).

Fowler, R. C., 1923 — 'Essex Chapels' *Trans. Essex Archaeol. Soc.* New Ser. **16**, Part II, 104–121.

Priddy, D. (ed.), 1982 — 'Work of the Essex County Council Archaeology Section, 1981', *Essex Archaeol. Hist.* **14**, 111–132.

Priddy, D., 1988 — 'Pleshey Castle — the northern bailey: the excavations at the village hall site, 1987', *Essex Archaeol. Hist.* **19**, 166–175.

Priddy, D. and Buckley, D. G., 1987 — *An Assessment of Essex Enclosures*, E. Anglian Archaeol. **33**, 48–82.

Rodwell, K. A., 1988 — *The Prehistoric and Roman settlement at Kelvedon, Essex*. Counc. Brit. Archaeol. Res. Rep. **63**, Chelmsford Archaeol. Trust Rep. **6**.

Rodwell, W. J. and Rodwell, K. A., 1986 — *Rivenhall: investigations of a villa, church and village, 1950–77* Counc. Brit. Archaeol. Res. Rep. **55**, Chelmsford Archaeol. Trust Rep. **4**.

R.C.H.M., 1922 — *An Inventory of the Historical Monuments in Essex*, Vol. III.

R.C.H.M., 1923 — *A Inventory of the Historical Momuments in Essex*, Vol. IV.

V.C.H., 1963 — *A History of the County of Essex*, Vol. III.

Wickenden, N. P., 1986 — 'Prehistoric Settlement and the Romano-British Small Town at Heybridge, Essex', *Essex. Archaeol. Hist.* **17**, 7–68.

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Excavations in Essex 1988

Edited by P. J. Gilman

This annual report, prepared at the request of the Advisory Committee for Archaeological Excavations in Essex, comprises summaries of archaeological excavation and fieldwork carried out during the year. The longevity of many projects often results in a lengthy post-excavation 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 54 projects were reported to the County Archaeological Section (Fig. 1).

Sites are listed 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. Excavations 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: Sue Holden (Figs. 2 and 3) and Roger Massey-Ryan (Fig. 1). 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, Globe House, Chelmsford. For details of sites in the London Boroughs, contact the Passmore Edwards Museum, Stratford.

Progress in Essex Archaeology 1988

The number of projects (54) is much higher than in 1987 (45). This is in spite of a reduction in the number of excavations associated with the development of Stansted Airport (38-43), and is a measure of the archaeological response necessitated by the continued high level of threat in the county. This response has been assisted, as in past years, by the funding of teams by the Manpower Services Commission: Braintree (4, 5), Chelmsford (6-9), and Stansted. Such funding will no longer be available in future years and, unless other sources of finance are forthcoming, this may well have a detrimental effect on fieldwork in the county. Furthermore, it is now H.B.M.C. policy that developers should meet the cost of archaeological constraints as they do for landscaping and other environmental purposes. As yet it is too early to assess the effect this will have on the funding of archaeological work in the county. However, the Archaeology Section has had some success in obtaining finance from developers. In this context, the increased contribution from the District and Borough Councils is to be welcomed. In particular, the appointment of an Archaeologist in Thurrock is responsible for an increase in the number of projects reported from that District.

Redevelopment, in a variety of forms, continues to be the agent of most site destruction. Apart from Stansted, this is mostly in urban areas, principally large-scale residential developments and road schemes. The major threat to rural sites is from mineral extraction, notably at Goldhanger (19), Great Totham (22), Stebbing (45), and the continued activity at Stanway (44). The number of assessment projects in advance of restoration/management schemes, at Colchester (14), Cressing (16), Great Yeldham (23), and West Thurrock (50, 51), reflects continued awareness of the value of such exercises (Priddy ed. 1988, 260). However, there has been less sign of a corresponding perception on the part of developers of the need for such assessments as an essential precondition of major developments. The number of such projects is a cause for concern and in a number of instances, notably at Maldon (30) and Stansted (41), archaeological resources have been at full stretch to provide a minimum of cover. It is gratifying to note that, at Stebbing, further funding was obtained when what had begun as a watching brief turned into a major excavation.

The major archaeological advances in 1988 were mainly in prehistoric and Roman studies. A Palaeolithic hand-axe and Mesolithic flints were found at the Roman temple at Latton (28) and, intriguingly, one actual Mesolithic feature was discovered at Romford (33). Neolithic finds were recovered from Latton (28), Stansted (38), and Witham (53), and evidence of more permanent occupation continues to be discovered in south-east Essex. At Goldhanger (19), at least one post-built structure was excavated, and a possibly Neolithic enclosure was uncovered at Great Totham (21). Further work on the Hullbridge project enabled the definition of the important Stumble site (25). Inland, work continues on the delimiting of the settlement at Springfield (36). Latton also produced a Bronze Age cremation urn but more substantial discoveries include wells/watering holes at Goldhanger and Great Totham and a possible enclosure at the latter. At Stansted the dating of the Late Bronze/Early Iron Age trackway at the Social Club site (38) has been refined.

For the Early Iron Age notable discoveries include a new fortified settlement at Romford (33) and clarification of the dating of the initial phase at the Witham hillfort (53) to the Early-Middle Iron Age. However, survey of the earthworks at Grimsditch Wood

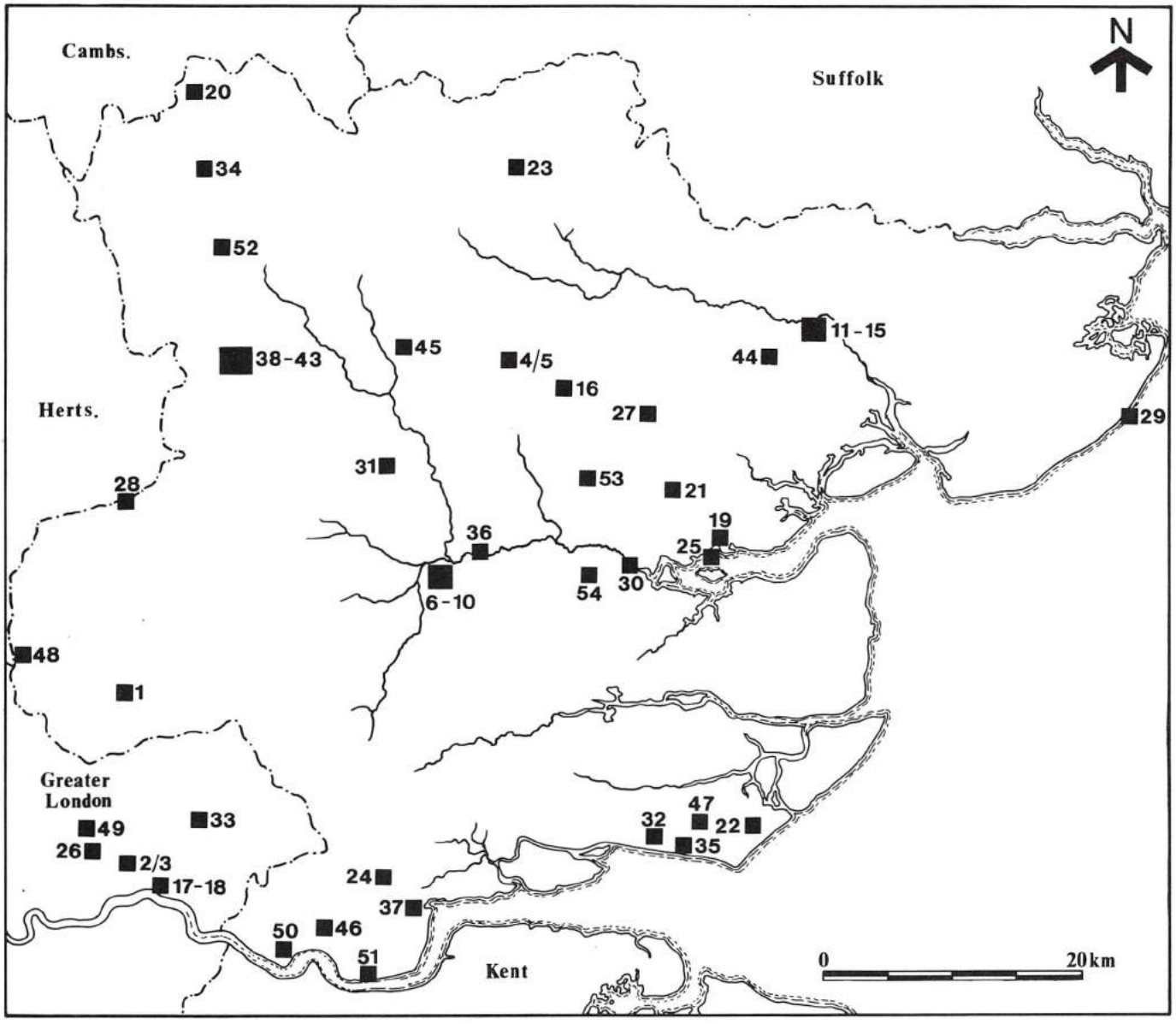

Fig. 1 Location of excavations in Essex 1988.

(34) has cast doubt on their ascription to the Iron Age. Late Iron Age enclosures were investigated at Great Totham and Stanway, and evidence of iron working was found at Ilford (26). A little further votive material was forthcoming at Latton (28). Work by the Maldon Archaeological Group at Maldon (30) provides a valuable opportunity for the study and dating of the Dengie Hundred field system.

This year saw notable advances in the investigation of Roman rural settlement, particularly with the spectacular finds from Stansted (40, 41). Less rich in finds, but equally exciting was the discovery of a possible mill at Stebbing (45). This is one of only two known from civilian contexts in Roman Britain. As for the towns, continued excavations in Chelmsford (6) uncovered the rest of the *mansio* bathhouse. The excavation of neighbouring sites (7, 8), with the results of earlier excavations (Drury 1988), means that a complete tenement has now been investigated. Further excavation in Braintree (4, 5) has produced more information concerning the layout of the Roman town. In Colchester (14, 15) the recording of the town walls in advance of restoration revealed, unexpectedly, that they had been whitewashed originally. The rediscovery of the town's Roman Head Gate (12) was a welcome surprise. At Ilford the Late Roman military structure discovered last year has proved to be larger than was originally thought.

As last year, few early medieval sites were investigated: another possible Saxon building at Barking (2), evidence for metal-working at Great Totham, and the enigmatic finds from Stansted (38). However, the detection of an Anglo-Saxon church at Widdington (52) is a major discovery.

The continued valuable work on medieval rural settlement at Stansted (40, 41, 43) has been complemented by discoveries at Goldhanger (19), Great Totham (21) and Horndon-on-the-Hill (24). The work

at Little Holland (29) provided a rare chance to investigate one of the hall/church complexes which are such a characteristic feature of the Essex landscape. As for monastic sites, the excavations at Barking continue to provide useful evidence and at Colchester (11) remains possibly associated with the Crouched Friary were excavated.

As in previous years, activity in post-medieval archaeology was principally concerned with the remains of the county's defences. Renewed work at West Tilbury (51) promises to shed more light on the development of Tilbury Fort. Survey work around Chelmsford (10) has enabled the recording of what remains from the town's Napoleonic fortifications. Finally, the detailed survey of the outstanding garden earthworks at Woodham Walter (54) is a welcome one indeed, in a county with few surviving earthworks.

1. Abridge, Piggots Farm (TQ 462973)
F. R. Clark, W.E.A.G.
Further investigation of a circular cropmark partly examined in 1987. More ditches with Iron Age pottery were found, but no structural remains.

Previous Summaries: Priddy (ed.) 1983, 163; 1987, 104; 1988, 262.
Finds: P.E.M.
Final Report: W.E.A.G. monograph.

2. Barking, Abbey Road (TQ 439841)
K. MacGowan, P.E.M.
In advance of a road widening scheme, and to investigate part of the Scheduled Ancient Monument, a trench approximately 70 × 7 m and aligned roughly north-south was opened along the eastern side of Abbey Road at its junction with London Road. Removal of a general sealing layer in the northern half of the site revealed a dumped layer of broken, medieval pegged roof tiles, some of which were glazed. Under this tile was a remnant of a wall, approximately 30 m long and about 30 cm wide. In places it survived to a height of 50 cm on trench-built footings of mortared chalk. The footings protruded around 10-15 cm on either side of the wall. The wall itself had an uncoursed ragstone, greensand and flint outer face with a chalk rubble core. The wall is thought to be late 13th or early 14th century in date. At its southern end, the wall had a return running east for 2 m into the eastern limit of the excavation. A trench about 1 m wide was cut through this, approximately 20 m along its its length. The sections of this cut showed the presence of a ditch 1 m wide running below and on the same alignment as the wall. There was no dating evidence for this ditch, but it is much earlier than the wall, which is cut into the ditch backfill.

Removal of the general sealing layer in the south revealed a pitched tile hearth. Much of the tile was also glazed. Butting the hearth was a dish-shaped hollow, approximately 10 cm deep and *c.* 40 cm in diamter, filled with melted lead. Close by were pieces of lead, apparently window cames. The hearth had apparently been in use at the demolition of the Abbey. Similar hearths have been found on previous sites close to this one. Beneath this hearth was a series of five post-holes, about 20 cm wide and 30 cm deep, aligned roughly north-south. To the north of, and aligned with them was a line of fairly closely packed ragstones and Roman tile. The form of building has been seen previously at Barking Abbey Industrial Estate and is thought to be Saxon. Indeed, this 'wall' might be on the same alignment as Saxon buildings on the Industrial Estate site. The ditch under the 13th-century wall may also prove to be Saxon.

Previous Summaries: Priddy (ed.) 1984-5, 123; 1986, 156; 1987, 104.
Finds: P.E.M.
Final Report: P.E.M. Monograph.

3. Barking, Tanner Street (TQ 443847)
K. MacGowan, P.E.M.
The site comprised two plots of land to the north and south of Harbour Road respectively, at its junction with Tanner Street. Tanner Street is close to the centre of medieval Barking and, as its name implies, the centre of the Tanning Industry. However, seven trial trenches on these sites failed to produce any archaeological evidence of either a medieval tannery or a medieval tenement.

Finds: P.E.M.

4. Braintree, George Yard (North) (TL 756231)
M. D. Smoothy, B.D.C.
A small machine-cut trench was excavated north of George Yard in an attempt to confirm the line of Roman Stane Street predicted by Drury (1976, 122). No trace of the road was found. The trench contained three features: two large post-medieval pits at its northern end and a small V-shaped ditch at its southern end. The latter may be prehistoric in date.

It would appear from these results that the course of Stane Street runs further north than previously thought. A larger evaluation, immediately to the west, is planned for 1989 and should establish the position of the Roman road and elucidate any contemporary roadside settlement.

Finds: E.C.C.; to go to B.T.H.C.
Final Report: Essex Archaeol. Hist.

5. Braintree, Sandpit Road (West) (TL 755231)
M. D. Smoothy, B.D.C.
Three trenches (A, B and C) were excavated in advance of redevelopment. Trench A proved to be the most productive, containing features attributable to three separate phases. In Phase 1 (2nd century AD) an east-

west ditched trackway, *c.* 5 m wide, ran across the site. A similar trackway, running north-west to south-west, was excavated in trench B and may form part of the same system.

Phase 2 (late 3rd/4th centuries AD) was represented by two pit groups. A group of large gravel pits at the north end of the site contained domestic refuse and probably relates to a similar group excavated in 1987 east of Sandpit Road. A group of eight large rubbish pits was excavated in the centre of the site. These contained large quantities of domestic refuse, mainly pottery and animal bone. One of the pits produced a fine bronze figurine of a figure seated on a bull. A square, timber-lined well at the southern end of the site could only be partially excavated for reasons of safety.

In the third phase (late 4th century AD) a south-east to north-west trenching ditch cut across the pit group in the centre of the site mentioned above. This ditch continued into trench B, where it cut a south-west to north-east ditch, probably dating to phase 2.

In addition to the features mentioned above, trench B contained a large gravel pit dating to phase 2 and trench C contained a large, shallow clay pit dating to the Roman period.

Following the Roman period the site was abandoned until the later 17th century, when two cess pits and remains of a cobbled yard in trench A indicate buildings fronting on to Sandpit Road. This was followed by the construction of a row of cottages which were demolished during the Second World War.

Previous Summaries: Priddy (ed.) 1988, 262-3.
Finds: E.C.C.; to go to B.T.H.C.
Final Report: Essex Archaeol. Hist.

6. Chelmsford, Mildmay Road (TL 70920620)
P. Allen, S. Wallis and M. Waughman (Adams), E.C.C.

Excavations continued, revealing the *praefurnium* (furnace room), hot bath, *caldarium* (hot room) and *tepidarium* (warm room) of the *mansio* bath house. The bath house was constructed in the middle of the 2nd century, soon after the *mansio*, and was added to a preexisting *laconicum* (sauna). The latter was excavated in 1849 and 1947 (V.C.H. 1963, 67), and again in 1975 (Drury 1988). The hot bath was rebuilt on four occasions, and platforms which would have supported larger water tanks were inserted within the *praefurnium*, incorporating a stair leading down into it. By the middle of the 4th century the walls of the *praefurnium* had collapsed and the room had become no more than an open stoke pit. Nevertheless, after this date a second hot bath was inserted within the *caldarium* and a (?)tepid plunge bath was added to the west, showing that modifications continued to be made through the late 4th century. A series of timber sheds to the south of the bath house probably represent fuel stores. The bath house was systematically robbed after its disuse.

Previous Summaries: Priddy (ed.) 1988, 263; Allen 1988.
Finds: E.C.C.; to go to Ch.E.M.
Final Report: East Anglian Archaeol.

7. Chelmsford, Essex Car Sales, 71-2 Moulsham Street (TL 70700618)
P. Allen and B. Harrison, E.C.C.

Small-scale excavations adjacent to the Godfrey's Yard site (see below), revealed evidence of 1st and 2nd-century yard areas and drains, presumably to the rear of buildings fronting onto the main London-Colchester road.

Finds: E.C.C.; to go to Ch.E.M.
Final Report: East Anglian Archaeol.

8. Chelmsford, Godfrey's Yard, 53-68 Moulsham Street (TL 70750623)
P. Allen and N. Lavender, E.C.C.

Excavations in the yards to the rear of 53-6 Moulsham Street, relate to previous excavations in 1972 (Drury 1988) and 1987. Several late 1st-century hearths and ovens probably related to the posting station of that date identified by Drury. These were succeeded by 2nd and 3rd-century strip buildings fronting onto the main London-Colchester road, arranged to north and south of a ditch marking the boundary between two plots. This makes a total of three plots for the Godfrey's site as a whole. Further evidence was recorded of the late 3rd-century fire, showing that it had affected all three plots.

Previous Summaries: Priddy (ed.) 1988, 263.
Finds: E.C.C.; to go to Ch.E.M.
Final Report: East Anglian Archaeol.

9. Chelmsford, R.A.F. Association Club, Hall Street (TL 70880633)
P. Allen, E.C.C.

Excavations to the rear of 37 Moulsham Street, previously investigated in 1981, revealed a late 1st-century fence line. This marked the southern boundary of a plot occupied by buildings fronting onto the main London-Colchester road, recorded by Turner in 1981. A secquence of pits dating from the 2nd-4th centuries was also recorded.

Previous Summaries: Priddy (ed.) 1982, 133-5.
Finds: E.C.C.; to go to Ch.E.M.
Final Report: East Anglian Archaeol.

10. Chelmsford: map square TL60 and the western half of TL70
Keele Office, R.C.H.M.E.

Ordnance Survey basic scale (1:1250 and 1:2500) map

revision of 150 km^2 covering Chelmsford and an area to the west necessitated fieldwork by the Keele office of R.C.H.M.E. to check the portrayal of archaeological information for the revised mapping.

Of 185 existing records within the National Archaeological Record (NAR), 103 were updated in the field. Where appropriate, surveys were undertaken at the relevant scale, mostly of moated sites and windmill mounds. Several alleged moats were found to be non-antiquities and were recategorised within the NAR. Some were assessed as ornamental or other forms of landscape feature. Three new earthwork sites were discovered, of which two were surveyed: one, a small mill mound; the other, a fragment of the Napoleonic defences around Chelmsford. It is intended that the third site, also part of the Napoleonic fortifications, will be surveyed at large scale (1:1000) during 1989.

11. Colchester, Crouch Street (TL 99122495)
D. Shimmin, C.A.T.

Rescue excavations at a site approximately 200 m outside the south-east corner of the Roman walled town uncovered sparse Roman remains, including, probably, three badly disturbed burials. Medieval remains were more extensive, including the foundations for a large building. This was aligned east-west and was over 10 m wide and at least 12 m long. To the north of the building part of a densely packed cemetery was excavated, with some 20 burials and a large quantity of loose human bone being recovered. The building and the burials were probably late medieval, associated with the Crouched Friary.

Finds: C.E.M.
Final Report: Colchester Archaeol. Rep.

12. Colchester, Head Street (TL 99422499)
P. Crummy, C.A.T.

Part of the east side of the Roman gate was uncovered when the modern pavement and street surfaces were replaced. Several fragments of wall were exposed 0.3-0.5 m below modern ground level. Part of the eastern face survived intact to a height of 0.7 m above the probable original ground surface. The north-east corner and parts of the eastern face were also located. The face was obscured by a thick coating of mortar but sufficient was clear to establish that it was probably built of four courses of tile on top of two of septaria. At its base the wall was offset by 0.2 m and some ?Roman ground metalling butted on to the offset.

13. Colchester, Osborne Street Car Park (TL 99882488)
D. Shimmin, C.A.T.

This site lies approximately 100 m outside the south-east gate of the walled town, in an area where important Roman, medieval and post-medieval remains are expected. The initial area under excavation lies near the St. Botolph's street frontage, and here a series of post-medieval structures has been uncovered. Proximity to a now underground water-course seems to account for the abundance of well-preserved organic material, such as wood and leather.

Finds: C.E.M.
Final Report: Colchester Archaeol. Rep.

14. Colchester, Roman Town Wall (TL 99232512, TM 00202515)
P. Crummy, C.A.T.

A long-term programme for the repair of the Colchester Roman town wall began with the stone-for-stone recording of two sections of wall. The first was the stretch south of the Balkerne Gate and the second (to be completed in 1989) is that part of the wall bordering the Priory Street surface car park. The survey uses photogrammetry as the starting point. The wall has been found to have a slight batter on the outer face, the inner face apparently being vertical. Traces of whitewash were found on the inner face which was exposed in a very small exploratory trench just south of the Balkerne Gate. Examination with an electron microscope revealed at least 25 coats. The ashlar face had been set in *opus signinum* and fake blocks neatly marked out with the tip of a trowel.

15. Colchester, Short Wyre Street (TL 99832510)
P. Crummy, C.A.T.

The Roman town wall was recorded, stone-for-stone and some trenches dug at the base and behind the rear face. As a result, a hitherto-unknown drain arch was found and more traces were noted of lime wash on the rear face of the wall where it had been protected by the Roman rampart. The rear of the drain arch was well-preserved; it projected for a little more than a metre beyond the face of the wall before ending in a neatly-squared off fashion.

Finds: C.E.M.

16. Cressing, Cressing Temple (TL 799187)
R. Flook, E.C.C.

Scattered Roman and other, undatable features were recorded north-west of the main complex of medieval buildings. To the north-east, area excavation revealed what appears to be the periphery of a Roman settlement in the corner of Dovehouse Field. Many features were uncovered, including what may be two phases of the settlement boundary ditch, the remnant of a large cobbled surface or trackway, a small rectangular post hole structure, and a multitude of post-holes, pits and smaller ditches. Finds include a large fragment of a

millstone from a shallow pit.

A test pit in advance of the area excavation revealed that the moat on the eastern side of the site may have originally continued further to the north at least to a point just beyond the north-east corner of the walled garden.

Finds: E.C.C.
Final Report: Essex Archaeol. Hist.

17. Dagenham, Rose Gate (TQ 47889885)
P. Greenwood, P.E.M.

A number of Roman ditches of varying size and characteristics were traced along the line of a trench for a watermain. The ditches were filled with large quantities of Roman tile and brick, including some wasters. The majority of the pottery dates to the 2nd-3rd centuries AD. The quantity and condition of the Roman brick and tile indicates a kiln site. The site is close to where a Roman stone coffin was discovered in 1936 (V.C.H. 1963, 124).

Finds: P.E.M.

18. Dagenham, Wangey House (TQ 476875)
K. MacGowan, P.E.M.

Trial trenches and test-pits were excavated in an attempt to locate the medieval site of Wangey Manor and the 16th-century Wangey House. The southern part of the site had been used for gardens and allotments, completely destroying any evidence of occupation. In the centre and north of the site a ploughsoil was uncovered, with evidence of manuring datable by pottery to the 12th century. Removal of the ploughsoil revealed furrows cut into the underlying natural clay and gravel.

In the eastern part of the site brick and tile drains were found, possibly for early 19th-century outbuildings. The walls showed evidence of severe slumping, the cause of which was found to be two large ditches. They were both aligned roughly east-west, and were *c.* 2.5 m apart. The southernmost ditch was about 1 m wide and 0.7 m deep and had been backfilled in the late 17th or early 18th centuries. The northern ditch was also about 1 m wide and about 1.5 m deep. Two parallel lines of single unfrogged bricks were laid on edge along the bottom and on the sides of the ditch. The backfilling was again late 17th-early 18th century. The function of the ditches remains uncertain but the northern ditch may have had an industrial use.

The results of the excavation indicate that Wangey House lies to the east of the site, but the location of Wangey Manor remains a mystery. An area to the south-east of the site remains to be investigated, and may contain fish ponds.

Finds: P.E.M.
Final Report: P.E.M. monograph.

19. Goldhanger, Chigborough Farm (TL 880081)
M. Waughman, E.C.C.

On the north side of the Blackwater estuary, some 40 acres are to be destroyed by gravel extraction, including a cropmark complex covering 15 acres. Work by a local archaeologist has already produced Neolithic, Roman and Saxon material (Priddy ed. 1988, 265-6). Excavation in 1988 covered about 30 per cent of the threatened area.

Part of the area threatened did not contain cropmarks. However, a significant number of archaeological features were discovered. They included a medieval enclosure, and a rectangular enclosure, measuring at least 85 × 75 m, with Late Bronze Age pottery in its upper fills. Undated groups of post-holes and field ditches were also excavated.

Overall, finds were few, but in the cropmark area they were sufficient to identify an area of Neolithic occupation (3rd Millenium BC) represented by several large, lobed pits and part of at least one rectangular post-built building, which extended beyond the limits of this season's excavation. Part of a further substantial post-built structure remains undated but may well be contemporary. Superimposed on the Neolithic features were a rectilinear pattern of Late Iron Age and early Roman field ditches, and a group of seven Roman graves oriented north-south.

A large Bronze Age well or watering hole was also located in the cropmark area, but had not itself appeared as a cropmark. A complete Deverel-Rimbury bucket urn (1400-1000 BC) had fallen in and broken *in situ* at the edge of the well. The lower fills of the well were waterlogged, with a high organic content, and were extensively sampled for environmental analysis.

Finds: E.C.C.; to go to C.E.M.
Final Report: East Anglian Archaeol.

20. Great Chesterford, Roman Temple Precinct (TL 515436)
T. E. Miller, G.C.A.G.

A site was identified by fieldwalking 50 m south-east of the Temple Precinct. In recent years, the area had been severely disturbed by deep ploughing to a depth of over 0.5 m, making interpretation difficult. The major feature was a 4th-century AD structure, the only remains of which were a number of post settings and patchy remnants of a crushed chalk floor. Evidence of earlier occupation, during the 2nd century AD, was provided by a thin stratum of potsherds, burnt areas, and two ditches. A large pit, similar and contemporary to those found inside the south-west corner of the Temple Precinct in 1985, was found close by.

Previous Summaries: Eddy (ed.) 1979, 103-4; 1980, 42-3; Priddy (ed.) 1984-5, 127-8; 1986, 160; 1988, 264-5.
Finds: with Director; to go to S.W.M.

21. Great Totham, Slough House Farm (TL 873091)
S. Wallis, E.C.C.
Extensive areas were examined of an irregular Late Iron Age enclosure, some 100 m across. Within the enclosure, several round houses, a smaller enclosure and a few pits were excavated. All were Late Iron Age in date. A further enclosure was rectangular, *c.* 30 m east-west × 20 m and consisted of a separate ditch on each side. These were up to 0.8 m deep and looked like quarry ditches for banks. Finds were rare but included a few Neolithic sherds and part of an Early Bronze Age Beaker vessel. A Neolithic date is favoured for the enclosure, with the Beaker a later insertion. No definite features were found within the enclosure.

Outside the Late Iron Age enclosure, two wells were found. One was Late Bronze Age, measuring some 15 m across, and may have been an animal watering hole. Branches and leaf mould were well-preserved in the lower fills. The other well was Roman and had a timber lining. Twelve timbers, up to 1.8 m long and 0.6 × 0.15 m in section, were present. Methods of jointing and signs of the initial working of the wood were recorded. Other discoveries included traces of Late Bronze Age settlement, a pit containing Anglo-Saxon metalworking debris, and parts of a medieval enclosure.

Finds: E.C.C.; to go to C.E.M.

22. Great Wakering, Crouchman's Farm (TQ 944872)
R. Jefferies, S.E.E.A.S.
Only limited work was possible, owing to the quick turnaround of the quarrying. Three ditches were recorded but it was not possible to date them. However, the edge of the main settlement seems to have been reached.

Previous Summaries: Priddy (ed.) 1984-5, 129; 1986, 160.
Finds: with S.E.E.A.S.; to go to S.M.
Final Report: Essex Archaeol. Hist.

23. Great Yeldham, 1-2 High Street (TL 76173810)
C. Crossan, E.C.C.
Recording of a single storey outhouse, possibly a detached kitchen dating to *c.* 1350, involved structural survey and excavation of the floors. In the northern bay, a floor of *c.* 16th-century brick was revealed, and in the southern bay a heavily worn floor of mid-18th century or later brick, one corner of which was raised to form a plinth, possibly for a stove. Both floors overlay a pre-16th century clay surface, which had been burnt in places.

Finds: E.C.C.; to go to S.W.M.
Final Report: Essex Archaeol. Hist.

24. Horndon on the Hill, 1 South Hill Road (TQ 67058315)
J. P. J. Catton, T. M.
Foundations of a timber-framed house which had preceded the present structure were partly examined and planned. Trenching below the timber floor revealed up to 2 m of stratigraphy. Further machining revealed what seemed to be a north-south ditch alignment parallel to the existing main road.

Large quantities of oyster shell, animal bone, stone (including lava quern fragments) and pottery were found. The latter included green-glazed wares and coarse sandy fabrics, possibly dating to the 14th-15th centuries.

Finds: T.M.

25. Hullbridge Project, The Stumble (TL 90140725)
T. J. Wilkinson, E.C.C.
The season began with surface collection from three areas, F, G, and H, which seemed to be exceptionally rich in finds. Area C, originally collected in 1987, was recollected and the resultant density distribution plot, using 1 m squares, proved to be virtually identical to that in 1987. Area C was then excavated, revealing a complex pattern of Early Neolithic post-holes, pits and gullies. The modest, 70 m^2 area exposed seems to include part of at least one building and it is likely that the deep gullies exposed may be part of a building foundation. The lack of alignment of the post-holes with each other or with the deep gullies makes it unlikely that they belong to a single structure. Clearly, Area C is more than just a midden and apparently includes more than one building phase. However, further excavation would be necessary to prove this.

A burnt flint mound of presumed Neolithic date was also partially excavated. Area survey continued with a 1:500 augured survey of the west end of the site. This revealed a pattern of early infilled creeks along which a number of Iron Age structures had been constructed.

The definition of the earlier Neolithic site was successfully undertaken by the excavation of a grid of some 100 small sample pits through the estuarine clay or mud down to the underlying old land surface. This showed that the site covered *c.* 0.75 ha and was subdivided by the network of a creek system which was in defined by means of augering. The absence of Neolithic occupation deposits either within the creek channels or on the slopes of the creeks suggests that these features are post-Neolithic in date and it seems more likely that they were eroded during the Early Bronze Age marine transgression.

Previous Summaries: Priddy (ed.) 1983, 167; 1984-5, 129-30; 1986, 161; 1987, 107.
Finds: E.C.C.
Final Report: East Anglian Archaeol.

26. Ilford (London Borough of Newham), Uphall Camp (TQ 43808500)
P. Greenwood, P.E.M.
Excavations continued in 1988, joining and expanding the areas excavated in 1984 and 1987. A further round house, two pennanular enclosures and two rectangular buildings were uncovered. Evidence for iron-working has now been found in two areas. These features date to the later Middle Iron Age, as did those found in previous seasons. Extension of the area containing the later Roman military ditch indicates a much larger structure than was previously apparent. Much pottery has been found with the completion of the excavation of two round houses and the discovery of the latest one. The earliest finds were two fragments of a Deverel-Rimbury type urn.

Previous Summaries: Priddy (ed.) 1984-5, 128; 1988, 265; Greenwood 1988; Wilkinson 1978.
Finds: P.E.M.
Final Report: P.E.M. monograph

27. Kelvedon, (TL 861188)
R. Flook, E.C.C.
See this volume, p. 00.

28. Latton, Harlow Temple (TL 486123)
R. Bartlett, H. M.
Excavation continued of the courtyard of the temple, east of the Iron Age circular structure found during 1986-7. Two levels of cobbling were found, dating to the 3rd and late 4th centuries respectively. The latter covered two thirds of the site. A large number of post-hole/post pit features were sealed by the earlier cobbling and some contained Late Iron Age-early Roman pottery and metalwork. One pit contained a disturbed Bronze Age cremation urn.

Prehistoric finds included a Palaeolithic hand-axe, Mesolithic flint blades, a Neolithic polished axe, Late Bronze Age and Middle-Late Iron Age pottery. The amount of votive material recovered, mainly Celtic coins, was significantly less than in previous seasons. However, further deposits of iron strips, presumed to be votive, were found within Late Iron Age-early Roman levels.

Previous Summaries: France and Gobel 1985 (1962-71 excavations); Priddy (ed.) 1986, 161; 1987, 107; 1988, 265; Bartlett 1988.
Finds: H.M.
Final Report: Essex Archaeol. Hist.

29. Little Holland, Church and Hall (TM 209166)
D. Andrews and H. Brooks, E.C.C.
See this volume, pp. 74–83.

30. Maldon, Southern Relief Road (TL 847055)
P. Brown, M.A.G.
Observation of the initial road works revealed Roman field or enclosure ditches, which share the alignment of the Dengie Hundred field system. Nearby, a concentration of small pits and post-holes suggests a Late Iron Age round house, *c.* 17 m in diameter. Finds were mainly coarse pottery sherds but also included Samian and South Spanish Amphora sherds, a coin of Domitian, and at least two Roman cremation burials with pottery grave goods. Roman brick and roof tile fragments were also found, but were not plentiful. Fragments of hypocaust box flue tiles included a piece relief-patterned by a known Chelmsford die. This is the first certain example of this technique to be found in the Maldon-Heybridge area. The volume and variety of the finds infer a substantial settlement. Its association with the Dengie field alignment attaches a wider archaeological significance and may provide a key to the site's situation and purpose, perhaps large scale farming or a villa. So far, there are no indications of the site continuing later than the 2nd century AD.

Finds of flint-gritted pottery indicate earlier, prehistoric occupation.

Finds: M.A.G.; to go to C.E.M.
Final Report: Essex Archaeol. Hist.

31. Pleshey, Moat Cottage (TL 665145)
C. P. Clarke, E.C.C.
Excavation of a small site adjacent to the moat of the motte uncovered three pits containing medieval pottery.

Finds: E.C.C.; to go to Ch.E.M.
Final Report: Essex Archaeol. Hist.

32. Prittlewell, Prittlewell Camp
R. Jefferies, S.E.E.A.S.
Preliminary survey of the area north of the main earthwork has revealed ditches and banks extending beyond the known area of the camp. A bank was traced to the east of the known site and a further ditch to the north.

33. Romford (London Borough of Newham), Warren Farm (TL 493892)
P. Greenwood, P.E.M.
Trial trenching of a cropmark site uncovered multi-period occupation, including an early Mesolithic site; an Early Iron Age (6th century BC) fortified settlement, *c.* 100 m in diameter; Late Iron Age-early Roman field systems; and an early Roman road, with a building alongside, leading to an early Roman, and possibly earlier, rectilinear enclosure with up to three parallel ditches. Later remains included several windmills, one certainly medieval; a small medieval settlement,

possibly a single dwelling; and a medieval to modern track, partly overlying the Roman road.

In addition, a quantity of prehistoric flintwork, particularly micro-cores, was retrieved by field walking. Part of the site includes a small area of ridge and furrow currently used as a paddock.

Finds: P.E.M.

34. Saffron Walden, Grimsditch Wood (TL 547406)
Keele Office, R.C.H.M.E.
At the request of Essex County Council Archaeology Section, the reputed Iron Age hillfort within Grimsditch Wood (Fox 1923, 136; Rodwell 1976, 331) was surveyed at large scale (1:1000) by the R.C.H.M.E. The survey showed that all the earthworks can be related to medieval/post-medieval woodland management and do not represent a defensive enclosure.

35. Southend, 269-271 Victoria Avenue (formerly North Street) (TQ 876868)
R. W. Crump, A.W.R.E.
This building consists of a central hall with cross-wings. Sometime during the 18th century it had been divided into two dwellings and a cartway cut through the central hall to provide access to the rear. A survey of the first floor of the south cross-wing was carried out in advance of conversion to living accommodation (the ground floor is currently used for a butcher's shop). This cross-wing consisted of four bays, with a crown post roof. Evidence of former windows was recorded and also for a possible former external staircase or stairturret which gave access to a passage and partitioned room on the south side of the cross-wing. Heavy sooting was noted on the rafters in one of the bays. As there was no evidence that the wing here had been open to the roof, it is probable that this is due to the smoking of meat during the time that the premises has been used as a butcher's shop. Documentary research is continuing but it is suggested that the original hall and cross-wings were built as a yeoman's house between 1450-70 AD, with subsequent alterations, e.g. insertion of the cartway and insertion of windows, in the 18th century.

Final Report: Essex Archaeol. Hist.

36. Springfield, Springfield Lyons (TL 736082)
D. G. Buckley, E.C.C.
An area of Middle Neolithic to Beaker occupation was examined east of the Late Bronze Age enclosure. A number of features were investigated, including a large Middle Neolithic pit (*c.* 5 × 3 m) adjacent to another large pit or well excavated in 1987. Both yielded significant amounts of pottery and flintwork.

Re-examination of the aerial photographs suggests that these pits may form part of an arc of pits or short stretches of ditch delineating the main area of Neolithic occupation. It is hoped to test this hypothesis by limited excavation during 1989.

Previous Summaries: Priddy (ed.) 1982, 142; 1983, 168; 1984-5, 134; 1986, 163; 1987, 108; 1988, 268.
Finds: E.C.C.; to go to B.M.
Final Report: East Anglian Archaeol.

37. Stanford le Hope, Ivy Walls (TQ 693822)
J. P. J. Catton, T. M.
Levelling prior to the construction of a playing field revealed scattered pits and post-holes. Finds included flint-gritted prehistoric pottery, fired clay loomweights and a small amount of worked flint flakes.

Finds: T.M.

Stansted Airport project (Fig. 2)
H. Brooks and W. Wall, E.C.C.

38. Stansted, Airport Social Club (TL 523224)
Further excavation of the double-ditched trackway located in 1987 continued to produce Late Bronze Age/ Early Iron Age pottery. A calibrated radiocarbon date of 640 ± 120 BC was obtained from a pit, which cut one of the trackway ditches, while a pit cut by one of the ditches gave a date of 960 ± 80 BC. A large pit *c.* 5 m in diameter and *c.* 2 m deep, about 10 m south of the trackway, also produced quantities of pottery from the same period. However, there was no evidence of contemporary buildings. Roman features included two substantial ditches and some cremations. Saxon pottery was found in a single large pit and in the top fills of a Roman ditch.

An area of *c.* 3 ha around the site was examined after topsoil stripping for a new airport car park. Surface collection brought to light a fragment of a Neolithic ground axe. The double-ditched trackway could not be traced beyond the site, but it is clear that multi-period occupation extends over much of this new area, which awaits more thorough investigation.

Previous Summaries: Priddy (ed.) 1988, 270.

39. Stansted, Bury Lodge Lane (TL 523226)
A Roman occupation site located by fieldwalking was extended by topsoil-stripping under controlled conditions to *c.* 0.64 ha. Though as yet unexcavated, there are clear indications of two large ditches, enclosing linear and penannular gullies, and other features. The site has already produced large amounts of pottery and tile, suggesting a substantial Roman settlement of some kind. The cremation cemetery at Duckend Farm and Car Park lies some 350 m to the South; future work will explore the possible connections between these sites.

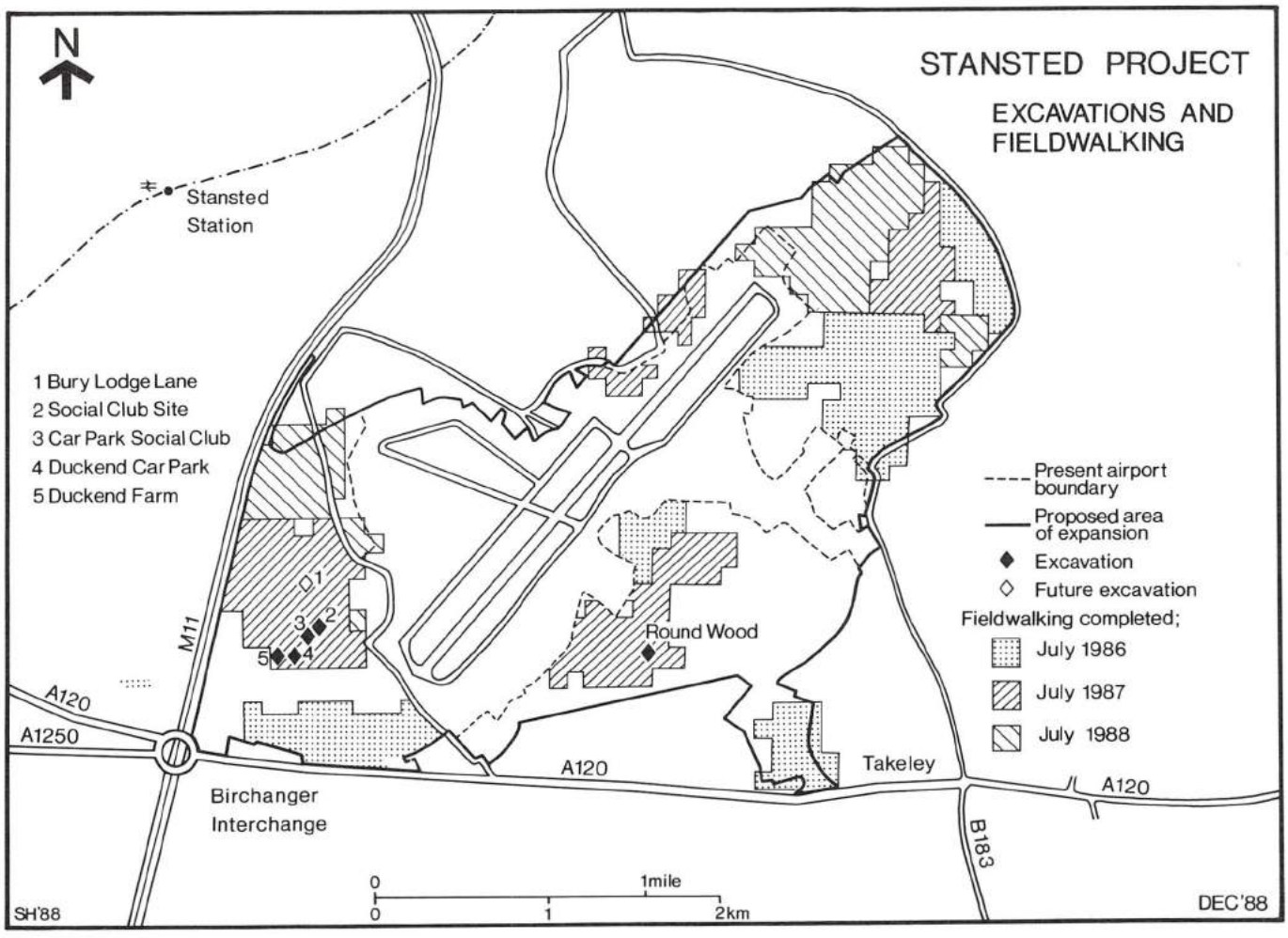

Fig. 2 Stansted Airport. Location of sites.

Previous Summaries: Priddy (ed.) 1988, 270.

40. Stansted, Duckend Farm (TL 521221)
Following discoveries during fieldwalking, topsoil stripping under controlled conditions of an area of *c.* 0.1 ha revealed a complex series of late Roman ditches, cutting through an earlier cremation cemetery (Fig. 3). Fourteen cremation burials were excavated, dating from the Late Pre-Roman Iron Age to the 2nd century AD. Four of these were particularly richly-furnished, one containing several complete pots, bone and bronze fittings for a bridle, and bronze mounts from a casket. A gravel spread may have been the remains of a floor or courtyard of Roman date, or earlier, since it was cut by a 1st-century cremation burial. Part of a small medieval timber building was found in one corner of the site and the Roman features were found to have been cut by medieval and post-medieval ditches.

Previous Summaries: Priddy (ed.) 1988, 270.

41. Stansted, Duckend Car Park (TL 521222)
During July, 1988, an area of *c.* 3 ha contiguous with the Duckend Farm site was stripped of topsoil for a new airport car park (Fig. 3). Features recorded here, under rather hurried conditions, included an extensive system of ditches dating from the Late Iron Age to the late Roman periods, and linking up with those already noted on the Duckend Farm site. Two cobbled areas may have been floors or courtyards, although there was no other evidence of buildings. Further features of the medieval building and ditches from Duckend Farm were also recorded.

However, the most spectacular finds came from a series of over thirty cremation burials, dating from the middle of the 1st century BC to the middle of the 2nd century AD. Whilst some burials were simple, accompanied by one or two pots, several were very rich indeed. The richest contained five bronze vessels, including one very fine engraved, silver-inlaid flagon; five glass vessels, including an exceptional pillar-moulded bowl; eight samian vessels, some decorated with a vine-tendril motif; a colour-coated beaker; an iron knife; a small 'carrot' amphora, perhaps once containing dates or figs; and iron fittings from the burial casket. The cremated bone had been placed in the centre of the casket, on a metal tray. Nearby was another rich burial, interpreted as that of a woman. This contained

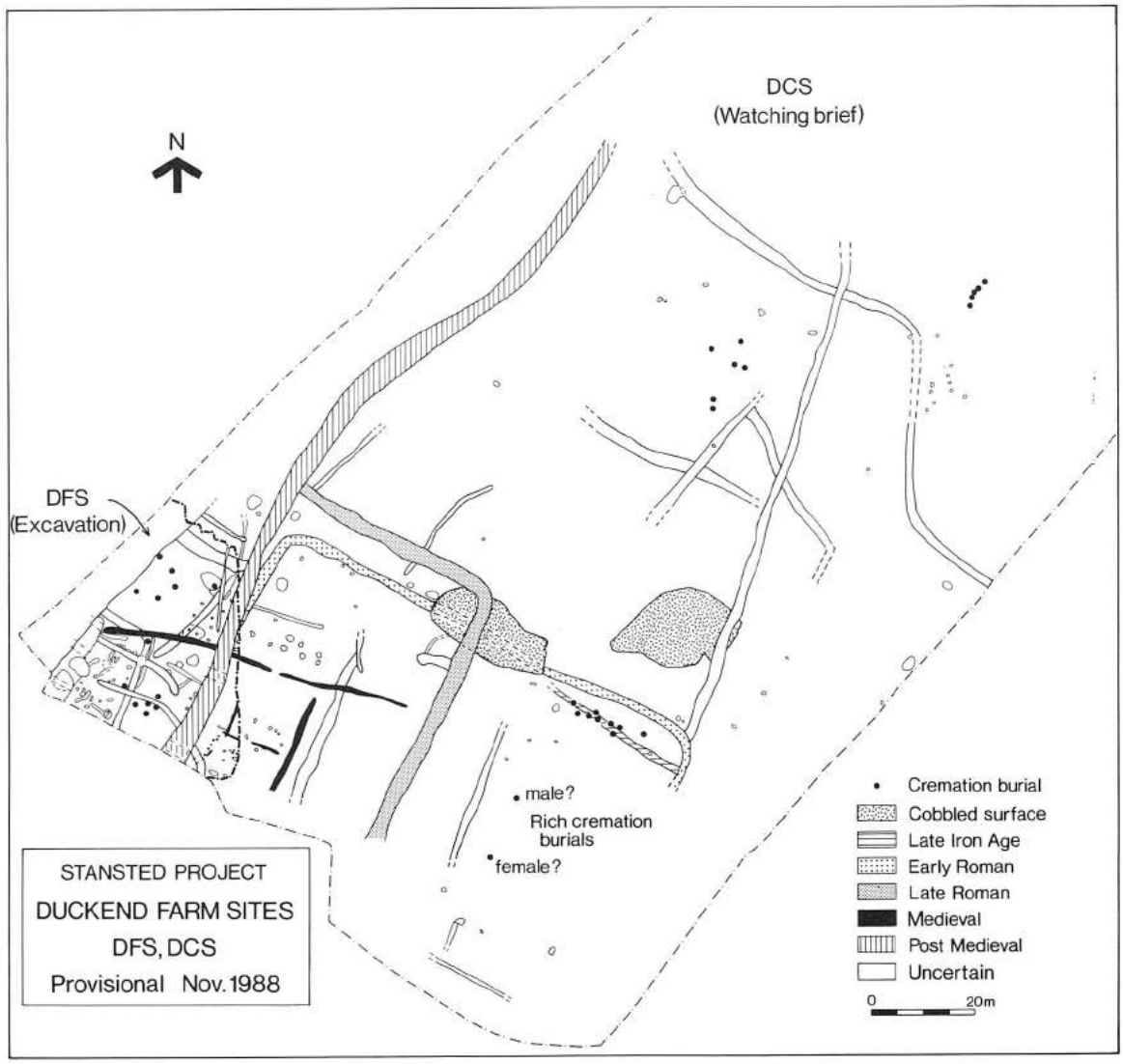

Fig. 3 Stansted Airport. Plan of Duckend Farm and Duckend Car Park sites.

five samian vessels along with other pottery, two glass vessels, bronze jewellery, a pair of sandals and a rectangular mirror. This burial had also been placed in a casket with iron fittings.

The arrangement of the burials in the cemetery, and their relationship to the ditches and other features, is currently being studied; it is hoped that further work will also enable the burials to be linked with a contemporary settlement, perhaps the one awaiting excavation at Bury Lodge Lane.

42. Stansted, Social Club Car Park (TL 522223)
Removal of topsoil for the construction of an additional airport car park allowed an area of some 4.5 ha to be examined, again under less than ideal conditions. Although the area was adjacent to the Social Club site, no trace was found of the late Bronze Age/Early Iron Age trackway noted there. In the south-east corner of the area, about 100 m south of the trackway, were parts of two circular gullies, interpreted as roundhouse foundations. Pottery from there is provisionally dated to the Middle Iron Age.

43. Takeley, Round Wood (TL 543221)
Continued excavation of the medieval settlement found in 1987 uncovered more constructional details of the three timber buildings already located. One was post-hole built, about 7 m wide and 14 m long; a second was 10 m by 15 m, with walls of posts set in foundation trenches, and two rows of massive posts forming aisles down the centre; the third also had aisle-posts, but its walls were defined by trenches with stakes driven into the bottom, perhaps a foundation for a clay or cob superstructure. In a small extension to the South-West were post-holes and slots which may belong to a fourth building. Each building appeared to be surrounded by drainage ditches. Pottery from the site is mainly late 12th/early 13th century and includes fine wares suggesting a fairly high social status. The differences in size and building technique may indicate differences in date, although the impression is rather of buildings with different functions.

Previous Summaries: Priddy (ed.) 1988, 270
Finds: E.C.C.; to go to S.W.M.

Final Report: East Anglian Archaeol.

44. Stanway, Stanway Cropmark Group (TL 95452255)
D. Shimmin, C.A.T.
Rescue excavation in advance of gravel extraction on the western part of this cropmark site, immediately west of the defences of the Iron Age *oppidum,* revealed the ditches of a large rectangular enclosure and uncovered a smaller enclosure to the south. An isolated Late Iron Age cremation in a pottery vessel was recovered from the northern end of the large enclosure. Elsewhere, several prehistoric pits were excavated. A large quantity of mainly Middle-Late Iron Age pottery sherds and a triangular loomweight fragment were found.

Previous Summaries: Priddy (ed.) 1988, 270
Finds: C.E.M.
Final Report: Colchester Archaeol. Rep.

45. Stebbing, Stebbing Green (TL 691232)
O. Bedwin, E.C.C.
A Roman building was found, defined not by masonry footings or by beam slots, but by a spread of rammed clay with chalk. Although badly disturbed by later Roman gullies and by modern ploughing, the building appeared to be rectangular and to measure *c.* 14 × 10 m. Its function was probably a mill, judging by the number of fragments of worked Millstone Grit nearby. Those fragments large enough to give a diameter indicated stones too big to have been turned by hand. A few metres from the building was a shallow rectangular pit, 4.0 × 3.7 m, and 0.3 m deep, on the floor of which was a dark stain forming a rectangular lattice. This is interpreted as the remains of substantial wooden joists forming the support for a (?robbed out) wooden tank. The provisional interpretation is that the pit was used for tanning.

The site seems to have operated in the 3rd and 4th centuries AD, presumably as part of the estate of the Boxted Wood Villa, which lies *c.* 250 m to the north (V.C.H. 1963, 183).

Final Report: Essex Archaeol. Hist.

46. Stifford, Chafford Hundred Development Site (TQ 606795)
J. P. J. Catton, T.M.
Sites were recorded in advance of major landscaping of 17th-20th century sand, brickearth, and chalk quarries for residential development. Top and sub-soil stripping west of Chalk Pit Farm and east of Clockhouse Lane revealed large quantities of waste flint cores and flakes. One polished axe was also recovered.

Post-medieval features included a large circular 19th-century lime kiln in the bottom of Chalk Pit Farm quarry; a brick-built pugging mill dating from the 1920s, positioned close to the brickearth quarry; and a World War II anti-aircraft battery. This was of standard four 3.7" type with fire control room, engine house and magazines constructed in reinforced concrete and rock asphalt waterproof membrane. Barrack accommodation had been removed some time previously, revealing concrete supports for raised floors. The battery was code-named 'N23, Hogg Lane Battery'.

Numerous large hollows were visible in the landscape at a level where chalk out-crops could be seen. Close to one of these, an horizontal cut mine shaft was found. Owing to a serious collapse the plan of the workings can only be surmised, but they may have led back to a deep open cast mine with a working face high enough to tunnel horizontally. No dating material was found, but pick-axe marks suggest that a metal mattock-type instrument was used.

Finds: T.M.

47. Sutton, Temple Farm (TQ 88008830)
R. Jefferies, S.E.E.A.S.
An area 220 × 100 m was investigated, revealing multi-period occupation. A series of Late Iron Age ditches and pits was found. Four rectangular features, each containing a hearth, produced large quantities of Late Iron Age pottery and bone, including dog skulls and pig jaws.

The major feature was a road running east-west across the site. This measured 5.5 m across, had a cambered metalled surface of rammed flint, and was flanked by side ditches. Sealed below the road surface was a Late Iron Age ditch and a hearth/oven. Traces of flimsy buildings were found parallel to the road. Remains of five buildings had been built onto the road surface itself. The construction of foundations for a factory clipped the corner of a Roman building.

Previous Summaries: Priddy (ed.) 1984-5, 133-4; 1986, 163.
Finds: with S.E.E.A.S.; to go to S.M.
Final Report: Essex Archaeol. Hist.

48. Waltham Holy Cross, Waltham Abbey (TL 38170057)
P. J. Huggins, W.A.H.S.
A ditch, thought to be Romano-British in origin, was excavated and checked for a length of *c.* 18 m. The ditch may represent the west side of an enclosure, *Eldeworth* (the old enclosure) (Huggins 1988, 198), shown on a map of *c.* 1600. On the map it is relatively clear on the north, east and south sides. With the excavated ditch, they form a subrectangular enclosure of about 1.6 ha (4 acres) around the present market place.

The chalk foundations excavated to the east of the ditch in 1987 were probably built on this unstable ground

because of the prior existence of the ditch. The theory that they represented a wharf is unlikely as sectioning showed the same general stratigraphy as the rest of the site. Muds would have been expected if the structure had been a wharf. Moreover, a wharf served from a mill tailstream would have presented problems of water level.

Previous Summaries: Priddy (ed.) 1988, 270
Finds: W.A.H.S.; to go to E.F.D.M.
Final Report: Essex Archaeol. Hist.

49. Wanstead, Wanstead Park (TQ 416873)
F. R. Clark, W.E.A.G.
Further Roman ditches and artefacts were found, but no structural remains of the Roman villa.

Previous Summaries: Priddy (ed.) 1986, 164; 1988, 271.
Finds: P.E.M.
Final Report: W.E.A.G. monograph.

50. West Thurrock, St Clement's Church (TQ 593773)
J. P. J. Catton, T.M.
Open trenching around the perimeter of the church, to ensure drying out of the foundations, uncovered once more the circular 12th-century nave (Clapham 1915, Milton 1984). The nave was revealed on the north, west and south sides and consisted of loose flint nodules of *c.* 1 m depth; topped by 25 cm of mortared flint; two courses of Roman bonding tile layed flat, the upper being staggered back 3 cm; diagonal bonding tiles 25 cm deep; and then mortared flint nodules again to a recordable height of 30 cm. The whole was rendered from the upper tile course. On the west side, a small area of glazed tiles on the inside of the circular nave were recorded, of yellow and black glazes in a ?chequered pattern. One fragment of a slab with an indent from a monumental brass was recovered from the trench south of the tower. The brass had not previously been recorded and is now inside the church. The circular nave has been consolidated and is now displayed to the public.

Finds: T.M.

51. West Tilbury, Tilbury Fort (TQ 651755)
P. J. Moore, P.E.M.
The bank of the covered way and outer moat in the south-east corner of the fort were investigated, using slit trenches. As in previous excavations on the northern side of the fort (Wilkinson 1983), the dearth of datable finds presents problems in identifying building phases throughout the excavations.

The pre-fort marsh surface was identified under the covered way but was seen to have been removed from the area intended for the outer moat leaving a grey clay as the ground surface. A linear depression in this clay may have been for delineating the moat. The first moat edge was created by the building up of a clay platform, upon which the bank rests, but the drop in slope was accentuated in places by the excavation of material from the moat bottom. Within the moat, a series of features was found, including pits, ditches and linear wooden structures. Subsequent silting of the moat may have been at least partially behind the reasons for building up the platform and bank even further. The bank consisted of dumped layers of clay with interfaces of rubble, domestic rubbish and shells, on a platform of horizontal clay layers.

In the late 19th century there were major works on the covered way, with the construction of a brick wall and the building up of the bank until level with the wall. As the gap between the bank and wall varied considerably, it suggests that the alignment of the earlier bank was slightly different from that of the later wall. However, because of the depth of stratigraphy within the bank and platform (*c.* 3 m), it was impossible to identify and excavate the earliest activity on the inner side of the bank.

The wall of the late 19th-century covered way extended northwards along the southern bank of the salient of the *place-d'arme,* but no further, while in its northern bank an earlier brick wall was excavated which corresponds to a late 18th-century plan of the fort. It had been demolished and the bank outside it partially removed, apparently to facilitate the placing of five large gun emplacements along the southern bank of this salient, as shown on a mid-19th century plan.

Finds: P.E.M.
Final Report: Possibly Post-Medieval Archaeol.

52. Widdington, Priors Hall (TL 537318)
B. Kerr, and N. Smith, H.B.M.C.
Recent work on the Hall, formerly known as Stone Hall and reputed to be 13th century in origin (R.C.H.M. 1916, 346-347), has established that it incorporates a substantial stone building of Anglo-Saxon date. The building appears to have been a two-celled structure. The western cell survives as the east end of the present Hall, and measured 11.50 m east-west by 6.40 m north-south, with mortared flint walls. Limited stripping of the external render at the north-east corner uncovered long-and-short quoins of limestone, probably Barnack stone (Plate I). Examination of the east gable wall revealed a blocked round-headed doorway 1 m wide and 2.30 m high, with long-and-short jambs, square projecting imposts and irregularly shaped voussoirs. These details confirmed the Anglo-Saxon date of the building. Within the present roof space, a small round-headed window was located in the east gable; although blocked, it may originally have been double-splayed.

The present extension at the east end of the Hall incorporates a stub of thick flint walling, and

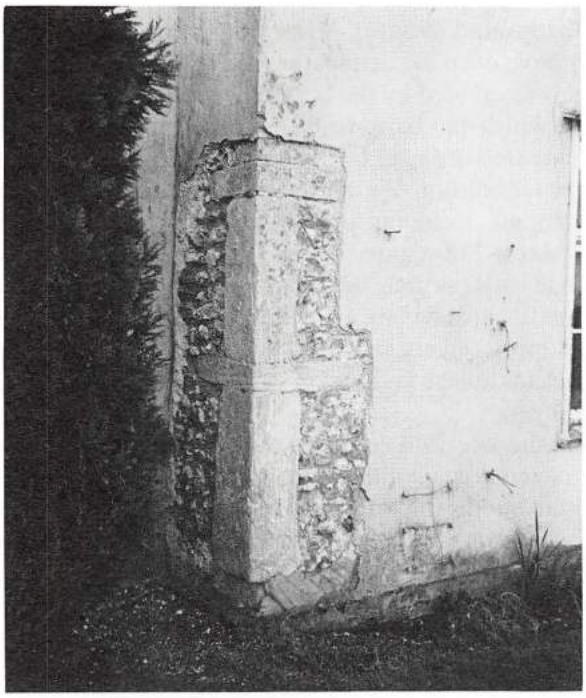

Plate I Long-and-short quoins at the north-east corner of Prior's Hall, Widdington (Photo: Dave Stenning).

investigation showed this to be firmly bonded with the flint fabric of the building. Small-scale excavation at a distance of 4 m from the east gable located a robber trench on the same alignment as the projecting wall, showing that the western cell, of which this formed the north wall, extended at least this far.

It seems most likely that this building was a church, perhaps associated with the pre-Conquest manor which was granted to the Abbey of St Valery in Picardy after 1066. Further details of the building may be recovered when the render facing of the north wall is repaired in the Spring of this year. Although doors and windows have been cut through the Anglo-Saxon walls, a substantial part of the western cell should have survived.

53. Witham, Chipping Hill (TL 819151)
R. Flook, E.C.C.

In advance of development, two areas were excavated at the site of the Iron Age hill fort. A series of trenches was dug in the area between the river, the base of the hill, and the railway line to the east. These located the defensive ditch of the fort, which measured 9 m across and at least 3.2 m deep (not bottomed). Pottery from layers cut by the ditch and from the later infill and activity sealing the infill of the ditch, brackets its use between the Early and Middle Iron Age.

Within the fort a small trench on the south-west lip of the hill revealed a two-stage earth 'dump' rampart sealing a buried soil. This in turn overlay a series of cut features, one of which produced a small quantity of Neolithic Grooved Ware pottery. No pottery was recovered from the rampart itself, but Early Iron Age pottery was recovered from within and immediately below the buried soil.

Finds: E.C.C; to go to C.E.M.
Final Report: Essex Archaeol. Hist.

54. Woodham Walter, Woodham Walter Hall (TL 81260636)
Keele Office, R.C.H.M.E.

During the course of fieldwork in 1987 to check archaeological input to revised Ordnance Survey mapping of the Danbury area, the site of the 16th-century Woodham Walter Hall was investigated. Although it was previously recorded as a moat, the work revealed that this feature formed part of an extensive layout of outstanding garden earthworks contemporary with the Hall's principal period of use. In addition to fulfilling mapping obligations, the R.C.H.M.E., at the request of Essex County Council Archaeology Section, carried out a detailed analytical field survey of the earthworks at large scale (1:1000) in early 1988.

Abbreviations

A.W.R.E.	A.W.R.E. (Foulness) Archaeological Society
B.D.C.	Braintree District Council
B.M.	British Museum
C.A.T.	Colchester Archaeological Trust
C.E.M.	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.M.	Harlow Museum
H.B.M.C.	Historic Buildings and Monuments Commission (English Heritage)
M.A.G.	Maldon Archaeological Group
P.E.M.	Passmore Edwards Museum
R.C.H.M.(E.)	Royal Commission on the Historical Monuments of England
S.E.E.A.S.	South-East Essex Archaeological Society
S.M.	Southend Museum
S.W.M.	Saffron Walden Museum
T.M.	Thurrock Museum
W.A.H.S.	Waltham Abbey Historical Society
W.E.A.G.	West Essex Archaeological Group

Bibliography

Allen, P., 1988 — 'Excavations of the *Mansio* Bath House, Chelmsford, 1987-1988', *Essex J.* **23**, No. 2, 27-33.

Bartlett, R., 1988 — 'Excavations at Harlow Temple 1985-87', *Essex J.* **23** No. 1, 9-13.

Clapham, A. W., 1915 — 'The Church of St Clement, West Thurrock', *Trans. Essex Archaeol. Soc.* New Ser. **13**, 53-60.

Drury, P. J., 1976 — 'Braintree: Excavations and Research, 1971-76', *Essex Archaeol. Hist.* **8**, 1-143.

Drury, P. J., 1988 — *The mansio and other sites in the south-western sector of Caesaromagus*, Counc. Brit. Archaeol. Res. Rep. **66**, Chelmsford Archaeol. Trust Rep. **3.1**.

Eddy, M. R., (ed). 1979 'Excavations in Essex 1978', *Essex Archaeol. Hist.* **11**, 101-110.

Eddy, M. R., (ed). 1980 'Excavations in Essex 1979', *Essex Archaeol. Hist.* **12**, 39-50.

Fox, C., 1923 *The Archaeology of the Cambridge Region.*

France and Gobel 1985 *The Romano-British Temple at Harlow.*

Greenwood, P., 1988 'Uphall Camp, Ilford', *Essex J.* **23**, No. 1, 19-20.

Huggins, P. J., 1988 'Excavations in the Market Place, Waltham Abbey, Essex, 1981: The Moot Hall and Romanao-British occupation', *Essex Archaeol. Hist.* **19**, 196-214.

Milton, B. H., 1984 *Four Church Excavations in Essex,* Essex County Council Occas. Pap. **4**, 1-14.

Priddy, D., (ed). 1982 'Excavations in Essex 1982', *Essex Archaeol. Hist.* **14**, 133-145.

Priddy, D., (ed). 1983 'Excavations in Essex 1982', *Essex Archaeol. Hist.* **15**, 163-172.

Priddy, D., (ed). 1984-5 'Excavations in Essex 1983-4', *Essex Archaeol. Hist.* **16**, 123-139.

Priddy, D., (ed). 1986 'Excavations in Essex 1985', *Essex Archaeol. Hist.* **17**, 156-165.

Priddy, D., (ed). 1987 'Excavations in Essex 1986', *Essex Archaeol. Hist.* **18**, 104-113.

Priddy, D., (ed). 1988 'Excavations in Essex 1987', *Essex Archaeol. Hist.* **19**, 260-271.

Rodwell, W. J., 1976 'Coinage, Oppida and the Rise of Belgic Power in South-Eastern Britain', in Cunliffe B. W. and Rowley R. T. (eds.) *Oppida in Barbarian Europe,* Brit. Archaeol. Rep. Supp. Ser. **11**, 181-367.

R.C.H.M., 1916 *An Inventory of the Historical Monuments of Essex,* Vol. I.

V.C.H., 1963 *A History of the County of Essex,* Vol. III.

Wilkinson, P., 1978 'Uphall Camp', *Essex Archaeol. Hist.* **10**, 220-1.

Wilkinson, P., 1983 'Excavations at Tilbury Fort Essex', *Post-Medieval Archaeol.* **17**, 111-62.

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Archaeological Notes

Red Hills at New Hall Farm, Little Wigborough
by M. R. Eddy

This note describes some new red hill sites identified from aerial photographs in the County Planning Department's collections. The sites appear as dark 'blobs' on the photographs, and subsequent examination on the ground revealed traces of red-hill materials wherever they had been cut by drainage trenches or recently ploughed.

The newly identified sites appear to form 3 distinct groups (shown as A, B and C in Fig. 1; open circles). Group A consists of 9 cropmark sites around the 20 foot (6 metre) contour. Group B consists of 8 sites along or slightly below the 10 foot (3 metre) contour. Group C (5 sites) is located on a low 'island' within Felly Marsh. Nowhere does the island exceed 10 feet above sea-level.

A few words about the the relation of these groups to the contours may be appropriate. In the Dengie peninsula, due south of Little Wigborough, Gurney (1980) located a string of red hill sites, just below the 25 foot (7.6 metre) contour. These may form part of the same sequence as the New Hall Farm Group A sites. In Lincolnshire, Simmons (1977) has demonstrated the chronological significance of red hill locations, and shown that Iron Age salt-working sites are concentrated on the 15 foot (4.6 metre) contour, and Romano-British sites on the 10 foot (3 metre) contour. It may be that a similar sequence existed at New Hall Farm, with the Group A sites situated around the 20 foot (6 metre) contour at the head of a protected creek representing an Iron Age production centre. The presence of sites on the less protected 10 foot contour may reflect increased industrialisation during the early Roman period. However, in our present state of knowledge, there is too little firm evidence on Essex salt-working sites to justify general statments relating the date of red hills to the height above current sea-level.

Given the important role played by the late Iron Age salt industry in the development of Camulodunum (Rodwell 1976, pp. 298-301), this lack of research is unfortunate. There is as yet no accurate survey of the number of such sites, and only one is scheduled. Moreover, because of their almost invariable location on agricultural land, they are virtually unprotected by planning leglisation, and most are being slowly ploughed away. When Stopes (1879) dug the red hills of site TL 91.33 (Fig. 1), they contained 4½ feet (1.5 metres) of deposits. The New Hall Farm sites described in this note were in most cases reduced to 0.5 m high.

References

Gurney, D., 1980 — 'Red hills of the Dengie Peninsula, *Essex Archaeol. Hist.* **12**, 107-9.

Rodwell, W. J., 1976 — 'Coinage, oppida and the rise of Belgic power in south-eastern Britain', in Cunliffe B. and Rowley T. (eds) *Oppida: the beginnings of urbanisation in barbarian Europe*, BAR **S11**, 181-366.

Simmons, B. B., 1977 — 'Ancient coastline around the Wash', *South Lincolnshire Archaeol.* **1**, 6-9.

Stopes, M., 1879 — 'The salting mounds of Essex', *Arch. J.* **36**, 369-72.

Woodham Walter TL 812081
C. R. Wallace

As a footnote to the recent publication of the Section's excavations at Woodham Walter (Buckley, Hedges and Priddy 1987), it may be worthwhile drawing attention to some suggestive evidence for ritual practices.

Lengths of the three late pre-Roman Iron Age enclosure ditches on the west side of the settlement were excavated and all produced pottery (Rodwell 1987, 28-35 and figs 20-26). However, ditch CF101 (of Phase III) produced a rather larger amount of pottery than the other two, as can be seen on plate VIII of the report.

Dated to the mid first century AD (with a handful of intrusive Roman sherds), some fifty-four kitchen and tableware vessels are illustrated and Rodwell offers an estimate of a maximum of eighty pots — from a six metre length of ditch. 'It may be noted in passing that it is unusual to find such a large number of freshly broken vessels in a domestic rubbish deposit. It is worth observing that they might be taken as a calamity rather than simply being casual breakages' (Rodwell 1987, 39).

A recent survey of some of the material evidence for ritual and magical practices has suggested that the deliberate dumping of complete pots in pits and ditches may be taken as evidence of a *rite of termination* (Merrifield 1987, 49) and at Woodham Walter the filling of ditch CF101 marks when the Late Iron Age enclosure went out of use.

Merrifield cites unusual dump deposits on sites in Southwark and London and, roughly contemporary with Woodham Walter, a rural site in Kent. On its

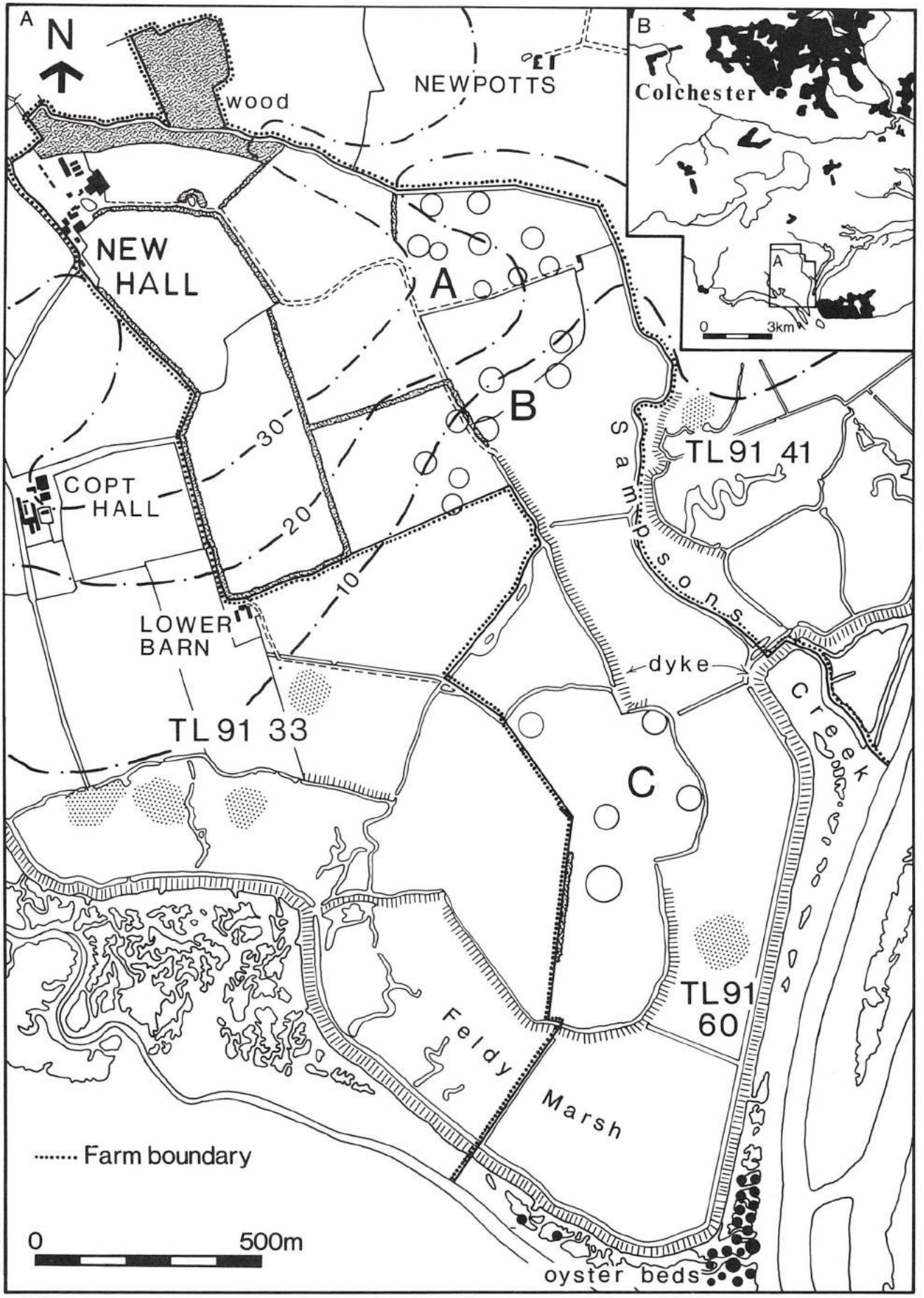

Fig. 1 Location of sites. New sites are indicated by open circles, previously known sites by stipple. These latter are as follows: TL 91.33 A group of 10 red hills. TL 91/41 Discovery of an 'urn'. TL 91.60 A single red hill.

abandonment, one pit was filled with 'an exceptional deposit of at least 43 pots, many largely complete, and clearly thrown into the pit at one time' which Merrifield sees as 'a sequel to some final feast of communion with local gods'. Something similar may have gone on at Woodham Walter.

Works cited

Buckley, D. G., Hedges, J. D. and Priddy, D., 1987 — *Excavations at Woodham Walter and an Assessment of Essex Enclosures*, East Anglian Archaeology **33**.

Merrifield, R., 1987 — *The Archaeology of Ritual and Magic*, London.

Rodwell, W. J., 1987 — 'The Pottery and its Implications', in Buckley D. G. et al. (*above*), 20-39.

Moulded stone from Little Coggeshall Abbey

Stuart Rose

The illustrated capital (Fig. 2), in Barnack stone or similar, was found by Mr and Mrs Stuart Rose when a juniper tree was removed in their garden at Walpole House, East Street, Coggeshall. This was, in fact, a rediscovery; the presence of the stone had already been recorded by the Royal Commission (RCHM vol. III, 1922, p. 122) which described it as "a scalloped 12th century capital, probably from Little Coggeshall Abbey".

A post-medieval folding-knife from Metropolitan Essex

David Gaimster

During 1987 a horn-handled folding-knife was submitted for identification to the Department of Medieval and Later Antiquities, British Museum, by Mrs P. A. Bonnett of Central Farm, Aveley Road, Upminster. The find was recovered from ploughed farmland in the South Hornchurch/Dagenham area approximately 75 years ago, and remains the property of the present owner.

Description (Fig. 3)

Single-edged iron blade with an angled back, decorated with an incised interlocking circle motif; no identifiable cutler's mark. Curving handle is constructed of the horn scales held by brass bolster-mounts and iron rivets; iron thumb-piece and pivot; the three main rivets fitted with bone washers. The horn scales are decorated with brass piqué work.

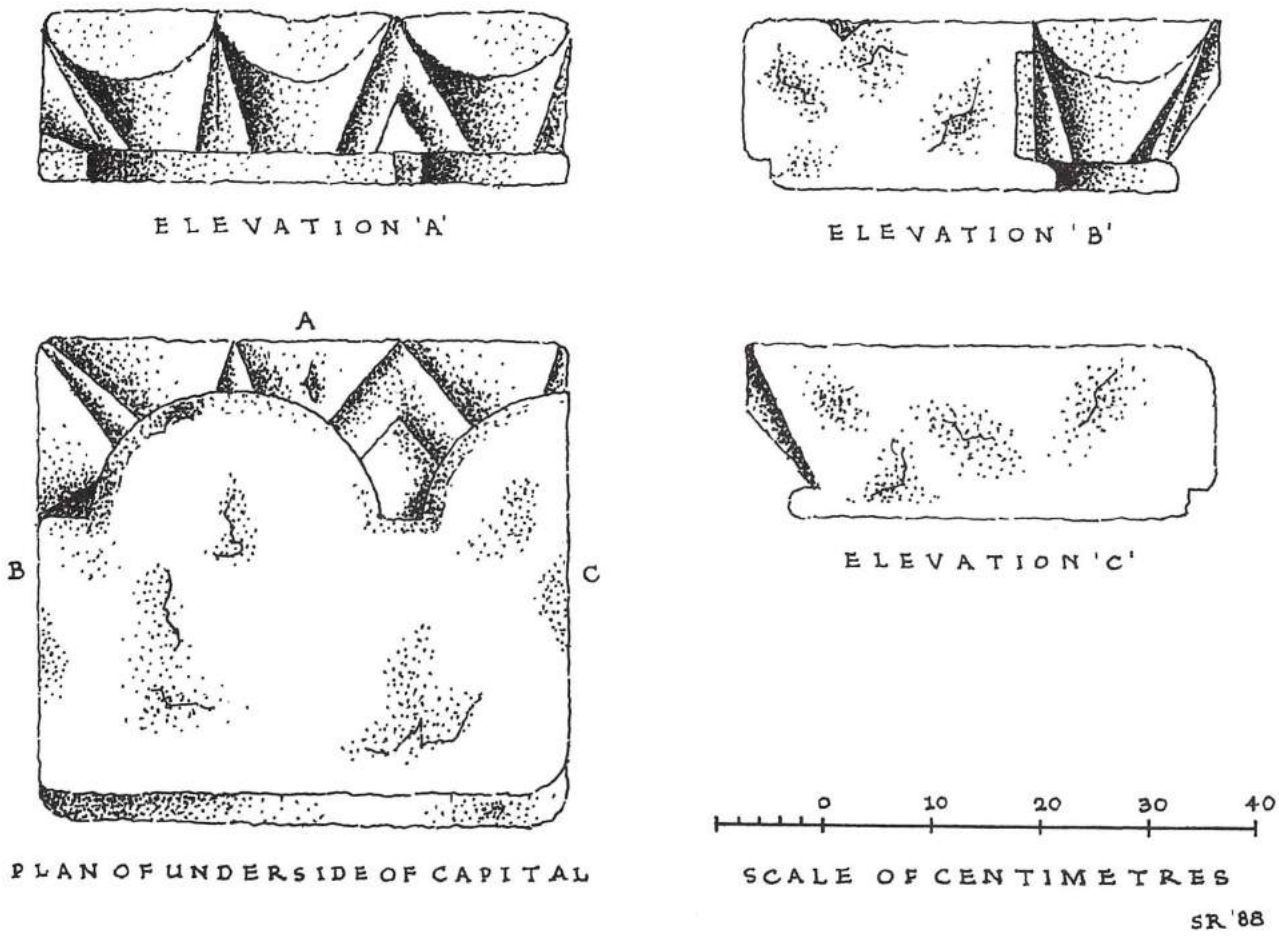

Fig. 2 Moulded capital from Coggeshall.

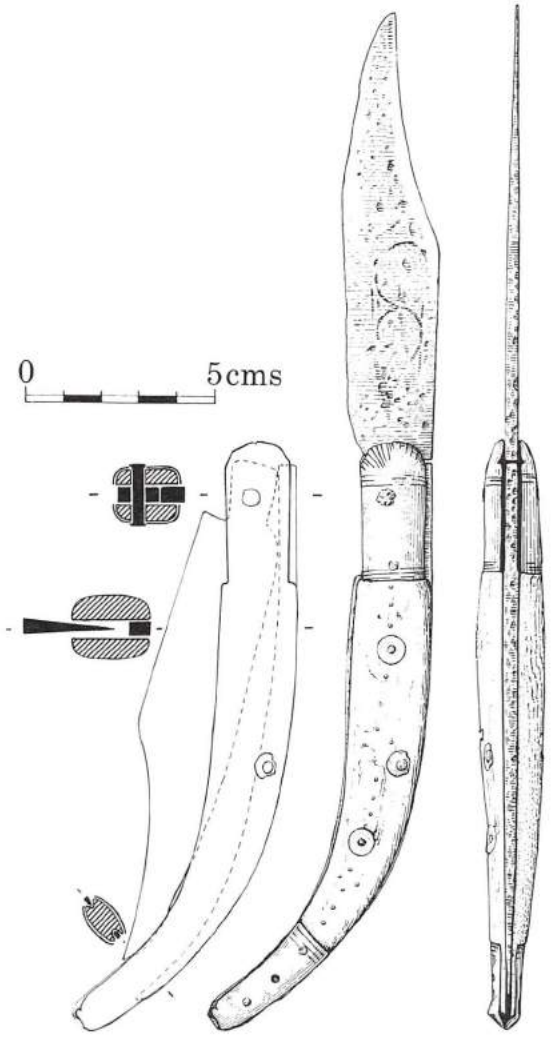

Fig. 3 Post-medieval folding-knife from Metropolitan Essex.

Dimensions: open length: 270 mm.
closed length: 153 mm.

Discussion

Horn became an increasingly common medium in cutlery handle manufacture during the 18th century. Several excavations in London and Oxford have uncovered pits of 17th to 19th century date containing horn cores for use in the manufacturing industry (MacGregor 1985, 53). A wide range of post-medieval pen-knives, cut-throat razors and pocket-knives with horn scales survive in museum and private collections (Hardwick 1981, 129-134), but very few have a strict archaeological provenance. Similarly, the typological development of folding-knives remains obscure on account of the poor survival of items from independently datable contexts (G. Egan, pers comm.). Generally speaking, the use of the horn for handle-scales and the embellishment of bone washers around the rivets as decoration continued on the Continent until the early 19th century (*Objets civils domestiques,* 1984, cat. no. 1220). Brass piqué work decoration is also a common trait on horn folding knives dating from the 18th and 19th centuries in Britain (Hardwick 1981, 134).

The blade form of this knife is reminiscent of an example from the Thames foreshore at Billingsgate, City of London, now in the Museum of London collections (M.O.L. 812.385). The folding-knife has bone scales and is rivetted with iron pins. Both the South Hornchurch and Billingsgate knives are remarkably similar in form and construction to a recent find recovered during maritime survey work in the Thames Estuary (*M.A.S. Newsletter,* 1988, 5). Associated with the wreck of the English East Indiaman *Albion,* sunk off Long Sand in 1765, the scales on this knife are of bone, but are secured with the same type of brass *bolster*-mounts and iron rivets as the Rainham type.

The *terminus ante quem* provided by the *Albion* find would suggest a date range covering the first half of the 18th century for the South Hornchurch knife. The date would comply with the well-documented introduction of mass-produced folding-knives at the beginning of the 18th century in Britain and the consequent improvements in knife-making technology (Smithurst 1987). This date still does not preclude the possibility, however, of folding-knives of this type being manufactured much later in the 18th century.

This as yet little-known knife-type is representative of the more utilitarian range of cutlery and household tool in use at the lower end of the social scale during the early modern period.

Acknowledgements

The Author is most grateful to Mrs P. A. Bonnett for permission to examine and publish this find. Special thanks to Rosemary Weinstein, Museum of London, for showing me the Billingsgate knife, and to Dr Mark Redknap, National Museum of Wales, Cardiff, for bringing the *Albion* example to my attention. Finally, I am indebted to Karen Hughes, British Museum, for providing the illustration.

Bibliography

Hardwick, P. *'Discovering Horn'*, Guildford (1981).

MacGregor, A. *'Bone, antler, ivory and horn. The Technology of Skeletel materials since the Roman Period'*, Beckenham (1985).

'Maritime Archaeological Surveys Newsletter', Issue 2 (Spring 1988).

'Objets civils domestiques', (Principes d'analyse scientifique), Ministere de la culture, Parish (1984).

Smithurst, P. *'The Cutlery Industry'*, Shire Album 195 (1987).

Addendum to EAH volume 19

Shirley Durgan

Please add the following to the end of the Docklands section of my article, 'Local Government Planning

Papers as source for the local historian', in vol. 19 (1988), p. 237:
J. Anderson, M. Mayo, I. Newman, *Social Change, Geography and Policy* (units 23-26 of Open University foundation course in social science) gives useful historical background to planning in London's docklands.

Book Reviews

Archaeology and Environment in South Essex. East Anglian Archaeology 42, 1988, by T. J. Wilkinson. 139 pp. £14.

It is sadly the case that archaeology produced by archaeologists trained initially in subjects other than archaeology is often significantly more interesting than that produced by conventionally trained archaeologists. This volume is a case in point. Motorway archaeology certainly got an extremely bad press in the 1970s as many projects were badly conceived, badly executed and either badly or never published. This point is clearly, if more tactfully, made in the preface to this volume; I therefore approached it with some initial reservations. Such reservations were rapidly dispelled. This is not the archaeology of a motorway, but the archaeology of a landscape conveniently using samples taken from a landscape transect provided by the construction of the M.25 and other major roads in south Essex.

Part 1 introduces the volume by outlining the geology and landscape of the area and setting out field objectives. These objectives make it clear that the landscape, not the individual site, was the unit of study. More effort was put into locating and dating sites than totally excavating them. Part two presents evidence from the excavated sites. None of the sites found were spectacular, indeed several were downright dull. However, each feature, or group of features, represent activity in a landscape, the significance of which was drawn together in Part 6. The archaeological descriptions, plans and sections are all clear, concise and to the point.

With the exception of the Saxon grave goods from Ardale, the finds have all been grouped together by material in Part 3. The report on the flint industry, with its superb drawings, is particularly interesting in its postulation of Iron Age flintwork. The Iron Age pottery report by Sue Hamilton is a model of its type, although the entirely adequate pot drawings may be somewhat too simple for some people's taste. Some indication of fabric differences could have been shown on the pottery drawings.

Part 4 outlines the minimal zoological and botanical evidence obtained from archaeological contexts. The bone evidence is extremely poor because of the nature of local soils, and is rather predictable. It is important, however, because so little evidence is available from the area. The seed evidence is more interesting as it adds to the extensive evidence recovered by Peter Murphy from sites further north, like Springfield Lyons and Lofts Farm. The short note on the discovery of impressions of barely and emmer from pottery from Orsett adds to the rapidly increasing data on Neolithic agriculture from Britain.

The final two parts of the report, Parts 5 and 6, represent without a doubt the most important aspects of this project. Part 5 considers the physical environment of the area. The value of colluvial and alluvial deposits in the interpretation of landscape development has been well known to geographers for many years, but archaeologists have only taken them seriously in the last 15 years or so. Details of landscape use are skilfully extracted from deep exposures, especially in the floor of the Mar Dyke. The Mar Dyke produced sediments and peat deposits, both ideal loss traps for pollen. The pollen analysis by Robert Scaife represents yet another piece in the jigsaw of environmental development which he has been recovering across southern Britain. It could, indeed, be argued that Dr Scaife's work in southern England is perhaps the most important contribution to archaeology that has been made with English Heritage funds in the last decade. However, instead of running a major research team he remains a 'one man band' in Fortress House. I assume pollen analysis, being slow and highly specialized, is not seen as giving 'value for money'. The peats of Mar Dyke contained evidence for anthropogenic impact on the landscape from the Neolithic to the Saxon period. Early Neolithic clearance is followed by Late Neolithic and Early Bronze Age forest regeneration, then extensive clearance for cropping throughout later Prehistory, the Roman and Saxon periods.

Part 6 brings all the numerous threads of this project together in a discussion of landscape change. Data from the project is merged with that held in the County's Sites and Monuments Record and derived from Domesday and later surveys. The general lack of evidence for pre-agricultural communities is explained in environmental terms. The development of the landscape from the Neolithic to the Medieval period is then outlined, with emphasis on settlement fluctuation and the impact of man on the landscape. The over-confident dating of the rectilinear land system in southern Essex, which we saw in the late 1970s, is reconsidered in a more responsible way. No firm date is suggested for this distinctive landscape feature, but all the evidence is reviewed and the system now looks distinctly un-Roman. An early Medieval date appears more likely. Part 6 ends with proposals for future research in the areas. There are gaps and these can be filled by further research, and particularly research-orientated rescue work of the type undertaken by the Archaeology Section of Essex County Council.

At the end of the volume we are presented with those usual disagreeable bits of plastic. One suspects they are there on the insistence of some grant-giving body rather than at the considered judgment of the author, but the contents are listed in the main text, so you can at least find out what you can't read on the train.

This volume represents a successful project completed. The author and his contributors should be congratulated, together with the Archaeology Section of

the Essex County Council. The County Archaeological Officer, David Buckley, is acknowledged for the inception of the project. His editing of this volume is sharp and accurate. It should sell well; if not there is something wrong with the consumers, certainly not with the producers.

P. L. Drewett

The Prehistoric and Roman Settlement at Kelvedon, Essex. By K. A. Rodwell. 145 pp, 98 figs, 9 pls, 2 microfiche, *Chelmsford Archaeol. Trust Rep.* **6**, *Counc. Brit. Archaeol. Res. Rep.* **63**. 1988. Price £21.

The report is an account of the rescue excavations undertaken 1968-1973 on the prehistoric and Roman settlements at Kelvedon, in which a gazetteer of other finds and a general discussion have been included. The report is welcome, if well overdue; the interim summary was published as long ago as 1975 (Rodwell and Rodwell 1975).

The report is mainly concerned with the Later Iron Age and Roman settlements, and is perhaps particularly notable for its description of the Late Iron Age rectangular structures excavated, the possible mid first century military phase, and the Roman cemetery.

In general, the report is well written and well illustrated. Perhaps some criticism may be made of the choice of letraset sizes on many of the plans, where it is often difficult to locate particular features which are referenced in the text. However, the plans and sections, and the finds reports, are very clearly and accurately cross-referenced from the text, making it very simple to follow arguments from the written report. An excellent appendix lists all excavated features except graves from the two main excavated areas, and correlates the published plans and sections on which they appear with the illustrated finds. Thoroughness in the proof-reading state is attested by the rarity of typographical errors and accuracy of the cross-referencing to figures.

For the purpose of the report and the gazetteer, Kelvedon has been divided into plots of land lettered A-R, and the letters used as prefixes for the excavated trenches and source of finds and features mentioned in the gazetteer. The plots thus identified are restricted to that area of the town sampled by excavation in 1968-73, and this seems to be symptomatic of a tendency, outlined below, to regard this series of excavations as sufficient, in terms of the areas sampled, to draw definite conclusions about the evolution of the settlement as a whole.

The excavated features are, in the main, not closely datable, but this does not seem to be sufficient reason for the sometimes confusingly free use of period descriptors. While the outline chronology at the beginning of the report states, for example, that phases in the Roman period later than Period 3A cannot be readily correlated between different excavated areas, it is, I think, unwarranted to have in Area J three phases in the Roman period, 3A-C, which represent early Roman (3A), non-cemetery features (3B) and cemetery features (3C). Period 3C spans the whole of the Roman period, except Period 3A (though this is not explicitly stated), and is, like Period 3B, a functional attribute of Area J rather than a chronological one. In Area B, on the other hand, Period 3C has a clear chronological (late Roman) meaning.

The descriptions the mixed cremation / inhumation Roman cemetery is very thorough, and the section constitutes no less than half of the report of excavated features. Much data about the buried population has been lost because of the almost negligible bone preservation in the brickearth natural of the 60 inhumations and 35 crematons. However very detailed recording of the graves during excavation has enabled Mrs Rodwell to draw useful conclusions about coffin construction etc., and the evidence for her conclusions is well supported in the publication in the form of a series of axonometric views of the grave fittings and furniture. The cremations are of special interest insofar as they continue in use from the first until the later fourth century; cremations are not superseded by inhumations. The cemetery report has its own discrete discussion section, which is both concise and erudite. The conclusion that most of the inhumation element cemetery was recorded led to the conclusion that the cemetery may represent a living population of only ten to twelve people over a period of perhaps 340 years, and may thus represent a family cemetery.

The finds reports are comprehensive, well-written and well-illustrated. Warwick Rodwell's report on the samian pottery, and Kirsty Rodwell's on the Late Iron Age and Roman assemblages constitute a strong foundation for the study of future assemblages from the town. Dr Reece's report on the Roman coins is clear and incisive. The samian and coin reports form perhaps the most convincing evidence from the excavations for the postulated Roman fort.

The discussion is very brief. The author has a rather unfortunate tendency to be dogmatic about certain aspects of the settlement's development, with an apparent assumption that the excavations of 1968 — 73 covered a sufficiently large area of the town to be certain that other major areas of settlement do not exist. For example, in the discussion she states 'the Late pre-Roman Iron Age settlement occupied the edge of the terrace above the floodplain of the river . . .'; more recent excavation elsewhere in the town has shown this certainly not to be the case, and the conclusions lose much of their validity as a result of later work.

An inner conflict appears throughout the report about the possible early military phase of the Roman settlement. Rodwell and Rodwell (1975) suggested that the dogleg in the line of the road at the western end of Kelvedon High Street resulted from the deviation of the road around a Roman fort. This assertion was refuted by Eddy (1982), who suggested that most of the small quantity of military metalwork from the town was associated with probable *mansio* and that a ditch

excavated by Rodwell and proposed as the fort ditch was no more than a field boundary. Kirsty Rodwell is rather more guarded in her statements about a fort, saying 'there is a certain amount of evidence pointing to military activity at Kelvedon in the mid 1st century AD'; however Warwick Rodwell remains much more certain about the point in his report on the samian when he says 'the considerable amount of both plain and decorated wares assignable to the period *c.* AD 55-70 is only satisfactory explained in terms of a military base in the 60's, and this has now been located'.

The vexed question of the existence of an early Roman fort in the town, and elucidation of the Late Iron Age site, particularly its house types, can only be resolved by future work, and this will be greatly aided by the welcome appearance of this long-awaited report.

C. P. Clarke

References

Rodwell, W. J. and Rodwell, K., 1975 — "Kelvedon", *Current Archaeol.* 45, 25-30.

Eddy, M. R., 1982 — *Kelvedon: The Origins and Development of a Roman Small Town*, Essex County Council Occas. Pap. **3**.

Excavations at Great Dunmow, Essex by N. P. Wickenden, Chelmsford Archaeological Trust Report No. 7. East Anglian Archaeology No. 41 (1988). Price £14.

This volume reports the excavations by P. J. Drury in 1970-72 to east and west of Chequers Lane in Great Dunmow about 120 metres north of Stane Street, the Roman road linking Colchester with Braughing and beyond. The report is divided into six sections: A Introduction; B The Excavated Features; C Domestic Life and Industry in Dunmow; D An Archaeological Gazetteer of Dunmow; E The Countryside Around Great Dunmow; F Conclusions. There are two sheets of microfiche.

It has been long suspected that a Roman settlement existed at the crossing of Stane Street and the road from Chelmsford to Great Chesterford (*VCH Essex* III, 125); the excavations reported in this volume confirm that this was so. A military belt-fitting, but no features, hints at a military origin, perhaps after A.D. 60/61. In the main excavated areas two sets of parallel ditches, sometimes supplemented or replaced by fence lines, persisted from the end of the first or early second century A.D. until the early or mid fourth century. These met a 'crossroads' and seem to have marked the line of tracks between properties; they may have been set out parallel to the major Roman roads. No domestic structures relating to these properties were found, though a scatter of stone and tile fragments (including box flue tile) testifies to the presence of a substantial building elsewhere in the settlement. Instead, in the south-east angle of the cross-roads, the excavator was fortunate to uncover a sequence of funereal and ritual features. The earliest were what seem to have been two grave-pits for inhumation burials, aligned approximately east-west on the line of a ditch which seems to have been the original northern boundary of one of the properties in the excavated area. Next a wedge-shaped enclosure was laid out with two of its corners coinciding with the positions of the two earlier graves. Within this enclosure was a single cremation burial. It was only after this that the east-west trackway was laid out on the line it was to maintain for over two hundred years. When this happened the burial enclosure was extended to fill the whole of the angle between the trackways.

The extended enclosure contained thirteen further cremations, perhaps spanning some eighty years in the second century. The grave with the richest assemblage of grave-goods was Cremation 2 where the fittings of a casket which had contained the bones were recovered. Some of the pottery with the burial had been deliberately damaged or 'killed' before deposition, a rite that was noted in several of the other burials. Two balls of fired clay with this burial will also have had some ritual significance for they are paralleled by the round stones found with other burials elsewhere (*Archaeological Journal* 143 (1986), 222). As the eastern part of the grave pit was empty when excavated it is suggested that some perishable object was placed there. This is likely, and the reviewer would suggest that the space was occupied by footwear. The 'entrance' into the enclosure was on its eastern side, but this should more properly be regarded as the 'exit' for the dead than an entrance for the living. The position of footwear in burials often indicates the direction the dead were expected to take to the other world (*Ibid*, 216-17).

Contemporary with the burials in the enclosure were four others located on the lines of the ditches bordering the east-west trackway. If the cemetery enclosure was in use by one family, as it seems reasonable to suppose, and occupied the corner of one property, these additional burials, on the boundaries of the trackway, should indicate at least three distinct properties in the excavated area in the second century. They are analogous to the earlier inhumation burials on the site of the enclosed cemetery.

By the end of the second century the cemetery was out of use and no later burials were found in the excavated areas. It is possible that a larger communal cemetery was then in use. It is to be hoped that the emergence of communal cemeteries at settlements like Great Dunmow will eventually be studied and explained. At present much more evidence is required, and that from Great Dunmow is a welcome additional item.

In the mid-fourth century the southern part of the old cremation enclosure was re-used. A roughly square structure with a sunken floor was built. Three pits with ritual deposits were either contemporary with this building or immediately pre-dated it. Within it was a clay-lined pit which probably held large storage jars. To

the west and partly, if not wholly, blocking the north-south trackway was a gravel spread interpreted as the floor of another building. Above this was found a large number of coins and bracelets, and from nearby a number of finger rings.

The form of the buildings represented by these features cannot safely be reconstructed. The square sunken-floored building is called a shrine, and the gravel-floored building is clearly associated with it. The association of coins and bracelets as offerings is found in Temple V at Springhead in Kent (*Archaeologia Cantiana* LXXVII (1962), 119-21), and both are common, and perhaps interchangeable gifts for the dead to carry to the other world (*Archaeological Journal* 143 (1986), 223). No burials are associated with the structures, but in view of the types of offerings and the siting of one of them over the earlier cremation cemetery the reviewer would conjecture that they were sacred to a goddess associated with the dead. That this was a public shrine seems to the reviewer less likely. A family shrine, with the hope of strengthening the ties between the present and the past in an age of anxiety, is a more appropriate interpretaton. The shrine was once rebuilt and the probable presence of early Saxon pottery suggests that the site was frequented as late as *c.* 425.

The sequence of religious usage of part of the excavated site is remarkable and casts much needed light on religious practices at a fairly low level of Romano-British society. This is what justifies publication of a monograph, which should reach a wider readership than had it appeared in our society's *Essex Archaeology and History*. Mr Wickenden is to be congratulated on his presentation of the evidence which is admirably clear and logical. He has been ably assisted by C. J. Going who was responsible for sectons D and E, as well as for the main pottery report in section C. The usual arrangement of excavation reports in two parts, site and finds, has been modified here, in the reviewer's opinion in a very successful way, towards greater integration. Section drawings and some plans (e.g. of the cremation burials) have been reduced slightly too far, but the reproduction is excellent. The reviewer recommends this volume to members of the society.

E. W. Black

The mansio and other sites in the south-eastern sector of Caesaromagus, Chelmsford Archaeol. Trust Rep. 3.1, C.B.A. Res. Rep. **66**, P. J. Drury, 1988; 146 pages, 92 figures, 8 plates, microfiche supplement. £22.50.

Caesaromagus, Chelmsford, is perhaps one of the most extensively excavated of Romano-British small towns, and P. J. Drury's report is welcome as an important contribution both to the archaeology of the region and to that of Roman Britian in general. The minor towns of Roman Britain have received increasing attention in the last few years, as reflected in the recent survey by B. C. Burnham (1987), but the detailed investigation and publication of individual towns remains essential to making further progress in understanding their role in the life of the Roman province.

Drury's theme is the development of Roman Chelmsford from a small fort on the London - Colchester road, guarding the crossing of the rivers Cam and Chelmer, into a posting station and civilian settlement by the late first century, culminating in the construction in A.D. 120-5 of an impressively laid-out *mansio*, a government inn. This was at first represented by a short-lived timber structure, but was quickly replaced by a large stone courtyard building, with an attached baths block built on the site of an earlier, probably military, bath house (sites Z, AK and AD).

From the early second century onwards the *mansio* would have been the major public building in the Roman town, and the focus for a wide range of official activities. The repeated layout of suites of rooms shows that the main function of the *mansio* was to provide accommodation, most likely for private travellers as well as government officials; however, Drury suggests (p. 132) that it was also a centre for the *cursus publicus,* the imperial posting service, and the office of the local *beneficarius,* an official responsible for the collection of the corn tribute for supplying the army. In this way the *mansio* combined the functions of hotel, posting station and local administrative centre.

Drury relates the *mansio* to sites to its west adjacent to the main London - Colchester road (sites S and AR) and suggests that it was developed directly from a series of earlier military and official posts there (pp. 125-130). The key evidence is at site S (pp. 50-7), where Drury suggests that a post-Boudican military earthwork, either a temporary camp or fort annexe, was succeeded by an early Flavian fort of two phases. Then, shortly after A.D. 77 the fort ditch was infilled, a gateway was blocked, and internal buildings of a non-military type were erected. He argues that this sequence "must surely represent a road station, developing directly from the post-Boudican military base, and maintaining approximately the form . . . of a small fort" (p. 130). Both the fort and road station were apparently related to the circular *laconicum,* or sauna, a peculiarly military form of bath house, which preceded the *mansio* itself (p. 128).

This line of argument is central to Drury's assertion that the *mansio* was developed from an earlier posting station on the site of a first-century fort; however, some of the evidence on which it is based is rather limited. For example, the interpretation of the later of the two forts at site S is quite convincing, as military-style defences and a gateway were recorded, but by contrast the sole evidence for the earlier fort is limited to part of a possible barrack block. On balance, Drury probably draws the correct conclusions from the evidence, but his arguments must be read critically.

In broad terms, Drury's conclusions support the view of Frere (1975, 6) that Chelmsford is a prime example of a town which developed as a result of its administrative importance, as represented by the *mansio*, but based

ultimately on its origins as a military post. Although Drury suggests that Chelmsford also served as a market for the surrounding countryside (p. 136), it is nevertheless quite clear that its development as a military and administrative centre was the crucial factor in its growth as a town.

Drury does not, however, ignore the economic and social life of the townspeople, and traces the commercial development alongside the London - Colchester road right through to the end of the fourth century. In some cases he is able to examine near-complete plans of buildings and their plots, but with the notable exception of the pottery kilns at site S, evidence of manufacture is limited to some working in copper alloy, and the ubiquitous iron smithying. Other, more problematic, aspects of the town's development are also discussed, such as the construction in the late second century of the short-lived earthwork defences, and the possibility of a disastrous "Antonine fire". Drury suggests the existence of a late second century crisis (pp. 135-6), but it is difficult to come to any firm conclusion on this point without more evidence, both from within the town and elsewhere in the region.

In general, the report is set out in the traditional manner, with an introduction (Section I) and phase-by-phase descriptions of the sites (Sections II-VI) followed by the finds reports, on the building materials, loose finds, and environmental evidence (Sections VII, VIII and IX). The various sections of the report are then brought together in a general topographical discussion at the end (Section X). On the advice of the academic assessor the report has been reduced by 20 per cent, although the original manuscript is reproduced in full in a microfiche supplement. This editing has been judiciously carried out, without sacrificing any important material, and the published text, especially the description of the sites, has gained in clarity as a result.

The pottery report by C. J. Going is published in a companion volume (Going 1987; reviewed in EAH 18), but this does not cause any problems, as summaries by Going of the relevant dating evidence have been included after each phase description. This integration of stratigraphic and dating evidence works well and is one of the most successful aspects of the report.

The other finds reports have been kept extremely concise, and less important evidence has been retained in microfiche in the form of tables and catalogues, with summary discussions in the published text. This has been done purposely, to avoid pointless or repetitious reporting, and those reports which are published in detail have been selected for their value in interpreting the sites or for their wider significance. A key report is that by Drury and N. P. Wickenden (including work by E. Black) on the roller-stamped box flue tiles from the *mansio* (pp. 81-3), which suggests that Die 16 was used by a group of contractors who were involved in the construction of *mansiones* at Godmanchester (Cambs.) and Wall (Staffs.) as well as at Chelmsford in a single government work programme. This interpretation is crucial to the discussion of *mansiones* throughout Roman Britain, and is regarded as evidence of a general reorganisation of the *cursus publicus* by the emperor Hadrian. Other important reports are: the faunal remains by Dr R. M. Luff (pp. 118-23), particularly for the discussion of the horse remains from votive deposits in a well at site AR: and the hoard of jet and shale jewellery from site T by M. Henig and N. P. Wickenden (pp. 107-10), including jet necklaces and a pendant cut with the head of Medusa, considered to be the finest example yet from Roman Britain.

Overall, the report contains much interesting and important archaeology, and is for the most part clearly presented, with only one major criticism. Although Drury's conclusions in the topographical discussion (Section X) are well argued, it is not always easy to relate them back to the detailed description of the site evidence on which they are based, while the interpretation figures (especially Fig. 86) relating the different sites and summarising the topography appear to be over-reduced. A series of short interpretative summaries accompanying the site descriptions, and clearer topographical figures, would have made the report easier to use.

Finally, it is a great shame that the report contains so many typographical errors. The most serious of these concerns Figs. 81-4, which have been laid out in the wrong order with the wrong captions, meaning that the graphs and bar charts in Dr Luff's report on the faunal remains need to be read very carefully to be understood. Equally seriously, printing errors have confused the layout of Table 1, which summarises the outline chronology of the report. These basic errors should have been easy to correct; however, it is understood that the final page proofs were not submitted to the author for checking, and in this the C.B.A. must accept a major share of responsibility for the resulting problems in the published text.

Nevertheless, this is an important report which deserves to be read by anyone with a developed interest in the Roman period, both in relation to Essex and Roman Britain as a whole.

Patrick Allen

Works cited:

Burnham, Barry, C., 1987 — "The morphology of Romano-British 'small towns'," *Archaeol. J.* **144**, 1987, 156-90.

Frere, S. S., 1975 — The origin of small towns, in Rodwell, W. & Rowley, T., 1975, *The small towns of Roman Britain*, Brit. Arch. Rep. **15**, 4-7.

Going, C. J., 1987 — *The mansio and other sites in the south-eastern sector of Caesaromagus*, Chelmsford Archaeol. Trust Rep. **3.2**, C.B.A. Res. Rep. **62**.

The Sleepers and the Shadows. Chelmsford: a town, its people and its past. By Hilda Grieve. Volume I, The Medieval and Tudor Story, pp. xii + 203. 5 colour and 5

half-tone illustrations, 8 line maps, with additional loose copy of one for quick reference, endpapers map. Essex Record Office, 1988. £14.95 (£16.50 by post.)

Chelmsford, the county town of Essex, was granted a charter of incorporation in 1888, and *The Sleepers and the Shadows*, published jointly by Essex County Council and Chelmsford Borough Council, marked the centenary year. The book is also notable as the 100th publication of the Record Office, where the author served as Senior Assistant Archivist for 27 years. It is handsomely produced and nicely illustrated, with a good index, general list of sources, and Bibliography. Serious students will regret that there are no detailed footnotes to sources. These are available in a marked-up copy of the original typescript kept in the Essex Record Office, but since the pagination of the typescript differs from that of the printed text it takes some time to locate a particular footnote. A marked-up copy of the book itself would be better.

Medieval Chelmsford was a small parish containing two manors, separated by the river Can: Bishop's Hall, to the north, held by the Bishop of London, and Moulsham, held by the Abbot of Westminster. Moulsham had been the site of the Roman town of Caesaromagus, but in 1066 it was no more than a hamlet of 12 households, while the bishop's manor had only 5. According to local tradition Maurice, Bishop of London, about 1100 built a bridge, or bridges, to carry the main London road through Chelmsford. The recent discovery of Norman revetment on the banks of the Can, near the bridge, tends to confirm this. In 1199–1201 a later bishop, William of St. Mère Église, obtained from King John three charters, empowering him to hold a market and a fair at Chelmsford, and granting privileged tenure to all who became townsmen. Chelmsford town developed during the following centuries, in the south-east corner of the bishop's manor, at the junction of the rivers Can and Chelmer. Lying in the centre of Essex, on main road from London to East Anglia, it had by 1250 already become the main seat of royal justice for the shire.

The Sleepers and the Shadows concentrates on the urban part of Bishop's Hall manor, a small area consisting mainly of the present High Street and New Street. It draws on many original sources, public and private, and especially on the court rolls of Bishop's Hall manor, which have been analysed in great detail. Besides providing much information on local government and urban problems, the court rolls, in conjunction with rentals and surveys, title deeds, rate and tax assessments, John Walker's fine map of Chelmsford (1591), and the large-scale Ordnance Survey maps of the 19th century, have been used to trace the history of every medieval site in the town, and to work out a full 'Street Directory of the 1590s' related to modern street numbers, which is appended to the book. This includes a good deal of earlier information as well as the names of the 1590s' owners and occupiers. The amount of work required by this admirable study of historical topography must have been prodigious. Miss Grieve was engaged on the book for over forty years. When she has done so much it may seem ungrateful to point out that Moulsham has not been studied in such detail, although that part of the town was already well developed by the 16th century, and has preserved more of its ancient character than has the rest of Chelmsford. Moulsham does figure in the book, but in a minor rôle. That is not for want of records, for Moulsham remained in the hands of Westminster Abbey until 1540.

The keynote of the book is struck in the first sentence. 'This is the story of Ceolmaer's ford in Essex, and the town that a Norman bishop planted there.' Miss Grieve has aimed to tell a story that will interest and instruct the man and woman on the Chelmsford omnibus. She has included some explanations of national events, including the Hundred Years' War,the Wars of the Roses, the Reformation, and the royal succession in 1547, 1553, and 1603. At the same time she provides many personal details of the townsfolk, their activities and relationships. Some of these make racy reading, like the tale of Mother Bowden's brothel, from which in 1568 one client, pursued by his wife, 'sliped out of the house thorowe the backside', and that of the vendetta between the Barker and the Whale families. If the details of court business and drownings in the rivers occasionally seem tedious, there is much to kindle the imagination of Essex readers as they go along the familiar streets of their county town. Since much of the evidence comes from court records the story is sometimes sordid, but it is pleasant to read, for example, the John Bridges, who died in 1575, left £4 a year to pay for a family party twice a year, at Christmas and Whitsun.

Miss Grieve also has much to teach those whose interests are more than local. Chapter 5 — perhaps the best in the book — relates the part played by Chelmsford men in the Peasants' Revolt, and traces the decline of villeinage. The problems of sanitation and public order created by the town's growth are well described in Chapter 7 (The Fifteenth Century) and Chapter 9 (The Elizabethan Town). The Black Friars, who settled at Moulsham in the 13th century, are treated in chapters 3 and 4; more might have been said to emphasise the impressive scale of their priory buildings, revealed by the excavations of 1968–70 and 1973. Also in Moulsham was a Leper Hospital, founded before 1293, and the predecessor of the almshouses which still survive there. There is a welcome addition to the list of Essex's medieval hospitals, for it is not mentioned by R. C. Fowler in his survey of our religious houses in the *Victoria History of Essex*. The organization of the Friday market, and the wide range of occupations in the town, helpfully indexed, will interest economic historians. The account of the Chelmsford festival of 1563 will be useful to those studying the history of drama, while the organizers of the modern annual festival will be gratified to know that they are much more successful than their predecessors in 1563, who lost £9 on their venture and took a decade to clear the debt.

The chronological arrangement of the book makes it less than ideal for reference. Those, for example, who may wish to read all that is said about the parish church will have to plod through the pages with the help of the index. A combination of chronological and topical chapters might have avoided this difficulty. The index itself leaves little to be desired, though the reference to p.21 for the Leper Hospital is incorrect and all the Hertfordshire entires (p.195) have been attributed to Herefordshire, while William the Butcher (le Maskal), indexed under 'W', and John the Horseleech (le Mareschal), indexed under 'J', would have been better brought together under the surname of Marshall (cf. P. H. Reaney, *Dictionary of British Surnames*). The inclusion in the index of 'Ceolmaer, a Saxon' and 'Mul, a Saxon' is also questionable, since they are not the names of real people in Chelsmford's recorded history, but the inventions of place-name scholars to explain the etymology of the names Chelmsford and Moulsham.

The origin of Chelmsford's name may, indeed, call for re-interpretation. The early forms of the first element 'Chel-' are very similar to those of Chelmarsh (Salop.) and Cheylesmore (Warws.), which, like Cheal (Lincs.) are thought to be derived from the Old English ***cegel**, meaning 'a peg, or a pole, or a plank bridge'. (Cf. P. H., Reaney, *Place Names of Essex*, 245; E. Ekwall, *Concise Oxford Dictionary of English Place-Names* (4th edn.), 98–9, 102). Miss Grieve mentions (p.115) an ancient wooden cart bridge, Treen Bridge, over the Chelmer, beyond which, beside a ford, was a wooden causeway for pedestrians. How early is this known to have existed, and is it possible that Chelmsford like Bridgeford, Nottinghamshire (cf. Ekwall, op. cit. 64) means 'ford by the wooden bridge' or 'ford with a footbridge'?

In her preface Miss Grieve says that she was inspired to write this book by J. H. Round's remark that 'There seems to be very little about which to write' on the early history of Chelmsford. Her early reconnaissance convinced her 'that Round might be wrong.' Horace Round (1854–1928), besides being a leading authority on Domesday Book and Anglo-Norman England, was President of our Society and a contributor to this journal for 50 years. We celebrated his work by a seminar at Colchester in 1979, the proceedings of which were published in volume 12 of this journal. The words Miss Grieve quotes are from page 10 of a paper which Round wrote for volume 15 of the previous ('New') series (not volume 10 as her bibliography states) and it is fitting to acknowledge that the paper, on 'The Mildmays and their Chelmsford estates' was itself a useful contribution to the town's history. Thomas Mildmay (d.1566), son of a local mercer, prospered as Master Auditor of the Court of Augmentations, and bought both Chelmsford and Moulsham from the Crown. His family was to dominate the town until the 19th century. Round touched on their early history in another paper, published posthumously, upon which Miss Grieve has also drawn.

Modern scholars are still learning from Round, even when they disagree with him. In discussing the Domesday estates of the Bishop of London (*V.C.H. Essex*, i.339) he drew attention to the distinction between the manors, including Chelmsford (439) listed under the heading 'Lands of the Bishop', and those listed as 'The Fee of the Bishop'. By comparing the Essex and the Middlesex Domesday entries he inferred that 'The Lands of the Bishop', except for Laindon, belonged to the see, while 'The Fee of the Bishop' comprised manors acquired by Bishop William during his episcopate (1051–75). Dr Pamela Taylor, in her thesis on 'The Estates of the Bishopric of London from the 7th century to the early 16th century' considers (p.52f) that 'The Lands of the Bishop' included not only the early endowments of the see, but also some bought by Bishop William before the Conquest. Concerning Chelmsford she is equivocal. On pp. 53–4 she points out that there is no pre-Domesday evidence of Chelmsford's ownership, which 'could mean that [the manor] was ... first held by the bishop in his personal capacity, but we cannot be sure.' On page 423 she states that Chelmsford was 'acquired privately by Bishop William before 1066 and then transferred to the demesne', but she quotes no new evidence for this. Miss Grieve says cautiously (p.1) that 'It is not known how or when [Chelmsford] came into the bishop's possession, but there is no evidence that it had belonged to any of his predecessors.' Perhaps further research into the early descent of the manors adjoining Chelmsford may sheld light on the problem. Meanwhile, J. H. Round's view that Chelmsford was among the ancient possessions of the see cannot be ruled out.

Round's use of the Hertfordshire Domesday reminds us of the value, in local history, of considering what was happening in other places. Besides elucidating sources, this can often help to explain events. In *The Sleepers and the Shadows* it might have been useful to devote a little space to comparing Chelmsford with the many other towns for which charters were granted at the same period. During his short reign King John granted at least 96 charters which are thought to have conferred borough status on English, Irish, and Welsh towns, or places which the grantees hoped would become towns — the New Towns of that age. To other places, including Chelmsford, he granted more limited privileges. Chelmsford's charters of 1199 and 1201, granting a weekly market and an annual fair, were not unusual, but its charter of 1200 calls for comment. It grants to all men who accept from the Bishop of London messuages or building plots in his demesne the right to hold them 'in peace, freely, and with all appurtenances and liberties and free customs belonging to the messuages or plots.' This seems like the creation of burgage tenure in Chelmsford, and Miss Grieve quotes (pp. 10, 160) later references to the borough (*burgus*) and to the burgesses (*burqenses*). That Chelmsford did not achieve full borough status in the Middle Ages may have been due to the fact that it belonged to the Church, which was always slow to concede independence to its tenants, as Lipson showed (*Economic History of England*, 8th edition, i.204f). This point may be worth following up by

comparing Chelmsford with Braintree, whose charter of 1200 was identical with that of Chelmsford and was granted on the same day, with Bishop's Stortford, another town belonging to the Bishop of London, and with Maidstone, the county town of Kent, which in 1086 belonged to the Archbishop of Canterbury.

In *The Sleepers and the Shadows* one would also have liked to learn more about Chelmsford's commercial links with other places. A Genoese merchant is mentioned in 1327 (p.24) and Londoners are said to have 'invested eagerly' in the town from the first (p.72). The London connexion certainly deserves further study. It might also have been helpful to sum up the book with an assessment of Chelmsford's growth in relation to other places. In 1547 it had some 800 or 1000 adult inhabitants (p.98). Even allowing for an increase in the following decades that suggests, by modern standards, no more than a village, but there is reason to believe that by 1603 Chelmsford ranked in size above the average market town, though not among the larger county towns (cf. *A New Historical Geography of England before 1600*, ed. H. C. Darby (1976), 293–8). After a late start it had outstripped towns with poorer communications, like Hatfield Broad Oak, which in 1086 had had a population almost four times that of Chelmsford and Moulsham combined (cf. *V.C.H. Essex*, viii.159). This is a success story that deserved to be told. Miss Grieve's many friends will look forward eagerly to the next instalment of it. Meanwhile, she has made a notable contribution to our urban history.

W. R. Powell

Hanged for Witchcraft: Elizabeth Lowys and her successors, by Joyce Gibson. Canberra: Tudor Press 1988. 256 pp. $ (Aust). 22.00.

Few historians realised how prevalent were fears of witchcraft among villagers in 16th and 17th century Essex until Alan Macfarlane published his pioneering study in 1970. He showed not only that many people were prosecuted for causing their neighbours harm by supernatural means — over 300 in the secular courts between 1560 and 1680 — but that there was also a host of less articulate suspicions. One indicator of these was the many 'white witches' or 'cunning folk' who were consulted on such matters as whether someone had been bewitched and how to 'unwitch', as well as on cures for 'natural diseases.

Macfarlane's survey was inevitably very general, and historians have been slow to follow it up with more detailed analyses of individual cases. Joyce Gibson has chosen an excellent starting point for such a study with the case of Elizabeth Lowys or Lewis, who was a local healer in the village of Great Waltham. The church-court evidence presents a short but lively vignette of her relations with her family and neighbours, not all of whom appear to have thought she was a witch. It was those neighbours who felt she had used her skills to cause harm rather than to cure who, with the help of the vicar, caused her to be presented at the church court for witchcraft. As the author points out, studies of cases such as this should help dispel the popular stereotype of the women prosecuted for witchcraft as poor old hags who had been made the scapegoats for whole communities.

The case is, unfortunately, far too brief on its own to be made the subject of a book, even with the additional socio-economic information which the author has gleaned from other records. The evidence only consists of a few pages, though there were a couple of other witchcraft cases from Great Waltham in the late 16th century which, taken with this case, could have been used as a basis for a more general study of village conflicts. Joyce Gibson tries to make up for her lack of material by providing extensive background information, but few readers will be prepared to wade through over a hundred pages of this, including much irrelevant dynastic detail, before reaching the case itself. The account is also marred by some major factual errors, including the suggestion that a convicted felon who had avoided the death penalty by pleading 'benefit of clergy' would subsequently have had to serve the church!

It is only near the end of the book that Joyce Gibson really spells out the thesis that she is putting forward, and it becomes apparent that this case is a very slender hook indeed on which to hang it. She argues that the main initiative in the prosecution of Elizabeth Lowys, as of others accused of witchcraft in subsequent years, came not from the neighbours who were allegedly the victims of witchcraft, but the church and local gentry. This could have made an interesting reversal of Macfarlane's thesis, since it has similarities with more recent studies of continental and Scottish witch-hunts (works not, however, referred to by Gibson). In the discussion of the Lowys case, however, it is not helpful to be told that the JPs Thomas Mildmay and Lord Rich played an active role in the prosecution of Elizabeth, when no supporting evidence is provided.

The other main thrust of Joyce Gibson's argument concerns a category of healers referred to in the book as 'traditional empirics', around whom she weaves a rather fanciful mystique. It is certainly possible that healers with practical experience could have been less dangerous to their patients than professional physicians who relied on a medical theory which was fundamentally flawed. Many of the author's statements are, however, at best speculative, such as the information that 'traditional empirics' (including Elizabeth Lowys) prescribed 'natural' remedies, and therefore should be distinguished from cunning folk who prescribed 'magical' remedies. We are also told that they were 'disbelievers' like the rest of their class, who had become alienated from the church by the bewildering series of changes which had taken place since the Reformation. It appears that 'in the eyes of those in authority [Elizabeth Lowys'] curing of the sick made her a ringleader in the prevailing alienation of her social class from the Church and the new economy ... for this reason she was seen as

sufficiently dangerous to be eliminated' (p.192).

There are yet more complexities in the author's theory, some of which she begins to substantiate, while others are left as bald assertions. Joyce Gibson uses much primary material, but it is a pity that her ideas are not given a more solid grounding, and that she does not make more of an attempt to relate her arguments to the work of modern historians.

Annabel Gregory

Sylloge of Coins of the British Isles. Vol 38. The Norweb Collection. Tokens of the British Isles, 1575–1750, Part II. by R. H. Thompson, ALA. Spink and Son Ltd, 5–7 King St., St James's, London, SW1Y 6QS. 1988. 171pp. Illus. £20.00.

A programme of detailed listing of British coins, both regal and non-regal, held in private and museum collections at home and abroad has been undertaken and this volume, the second relating to the Norweb collection of 17th century British tokens is particularly welcome for it includes an outstanding series of Essex tokens of that period.

The Hon R. Henry Norweb of Cleveland, Ohio, USA, who died in 1983 aged 89 and Mrs Emery May Norweb who died six months later were life-long numismatists active in the American Numismatic Society of which Mr Norweb was a Member of Council from 1960–78 and a Vice-President. From 1953 working together as a team they acquired and recorded 17th century tokens to form probably the largest collection ever assembled comprising some 13,000 pieces. They were fortunate in adding to their own extensive acquisitions some 800 tokens from the Virgil Brand collection; 3000 from A. H. F. Baldwin; and 8000 from the Ralph Nott collection, itself a remarkable lifetime's work. Ralph Nott made many contributions to numismatic knowledge over the years and was a Fellow of the Royal Numismatic Society.

Tokens were issued by local traders between 1649 and 1672 in response to the shortage of low value regal coins and were generally acceptable in change in the immediate locality of the issuer who eventually would redeem them. The practice of issuing tokens was very widespread and it is estimated that in this period over the whole country upwards of 20,000 different tokens were struck. In 1672 following the issue of adequate quantities of regal copper coinage tokens were suppressed and went out of circulation.

The Norweb collection therefore contained a high percentage of possible examples including specimens from most English counties. The present volume lists those from Dorset, Durham, Essex and Gloucestershire but it is the Essex series which is relevant to the present note.

It must be recognised at the outset that this is a descriptive catalogue of a private collection and not a comprehensive listing of all known Essex tokens. For that one must turn to Eileen Judson's recent book, *The Lives and Wills of Essex Token Issuers*, incorporating a Re-Listing of the 17th century Trade Tokens of Essex (1987). In fact reference is made to Mrs Judson's earlier listing in the description of several of the individual tokens. Nevertheless the importance of the present publication lies in the association of the descriptions with obverse and reverse photographic reproductions of no less than 356 out of circa 500 known varieties of Essex tokens.

In general the reproductions are full size having been reduced from oversize originals but as the tokens can be as small as 15 mm diameter and several are rubbed and worn the definition can be rather weak and a magnifying glass for the appreciation of the finer detail becomes necessary.

In order to avoid undue repetition in individual design descriptions the Neubecker classification has been adopted. This is a codification of design themes divided into five main categories — Geometrical; Universe; Living beings; Plants; and Inanimate objects. Those parts of this code relevant to the coinage are set out in extenso in the preface and although this entails constant reference back from the descriptions the text is more succinct. The metal, generally brass, copper, or mixed metal, is indicated and the weight of each specimen is given.

This is essentially a reference book primarily directed to numismatists interested in token coinage but it has a wider importance for the historian, and particularly the local historian. The author specifically disclaims any investigation into the personal background of the issuers. That would have been in any case an impossible task on a national scale but in the illustrations there is assistance for anyone, unable to see the original tokens, wishing to pursue the economic life and personalities in small communities, even as Eileen Judson has already done.

The book provides yet another valuable asset to the growing corpus of information on Essex history now available to the research student, and an excellent and essential addition to the numismatist's personal library.

John H. Boyes

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Bibliography of Essex Archaeology and History

by P. Hills, A. B. Phillips and P. R. Sealey

Both monographs and periodical literature are included; articles published in journals which are devoted exclusively to Essex (e.g. *Essex Journal*) are not included. Items which appeared in recent years and had been overlooked in earlier bibliographical reviews are included for completeness of coverage.

Archibald, M. M. 1985 — "British hoards" *Coin Hoards*, 7, 345–82 [publishes the 1980 Ridgewell hoard dated 1660 or later; more details of coins in the Messing hoard buried 1640 or later].

Bailey, D. M. 1988 — *A Catalogue of the Lamps in the British Museum. III. Roman Provincial Lamps,* London [publishes twenty-three lamps from Roman Colchester in the Pollexfen Collection at the British Museum].

Besley, E. 1987 — *English Civil War Coin Hoards* (British Museum Occasional Paper No. 51), London [publishes the 1984 Ashdon treasure trove find].

Bispham, J. 1987 — "Recent metal detector finds from Essex and Lincolnshire" *Brit. Numis. J.*, 56 for 1986, 183–5.

Blagg, T. F. C. — "Roman religious sites in the British landscape" *Landscape Hist.*, 8, 15–25 [Colchester was the only city in Roman Britain where temples held a pre-eminent position].

Bond, D. 1988 — *Excavation at the North Ring, Mucking, Essex: a Late Bronze Age Enclosure* (East Anglian Archaeology Report No. 43), Chelmsford.

Bowdrey, J. P. & Spooner, B. M. 1988 — "Prehistory and archaeology". In B. M. Spooner & J. P. Bowdrey (eds) *Hadleigh Great Wood: the Wildlife and History of Belfairs Nature Reserve*, 6–7, Southend.

Brown, N. R. 1988 — "A Late Bronze Age enclosure at Lofts Farm, Essex" *Proc. Prehist. Soc.*, 54, 249–302.

Brown, P. N. 1986 — *The Maldon Burgh Jigsaw*, Maldon.

Buckley, D. G. & Hedges, J. D. 1987 — *The Bronze Age and Saxon Settlements at Springfield Lyons, Essex: an Interim Report* (Essex County Council Occasional Paper No. 5), Chelmsford.

Buckley, D. G. *et al.* 1988 — "Excavation of a possible Neolithic long barrow or mortuary enclosure at Rivenhall, Essex, 1986" *Proc. Prehist. Soc.*, 54, 77–92.

Buckton, D. 1986 — "Late 10th- and 11th-century *cloisonné* enamel brooches" *Med. Archaeol.*, 30, 8–18 [publishes a Colchester brooch].

Burnett, A. M. 1987 — "A provencal solidus from Hawkwell, Essex" *Numis Chron.*, 147, 182–3 [Byzantine coin dated AD 595/6].

Carrick, M. *et al.* 1988 — "Wall paintings at Creswells Farm, Sible Hedingham, Essex" *Archaeol. J.*, 144 for 1987, 328–39.

Cowley, M. R. *et al.* 1988 — "Celtic coinage in Britain: new hoards and recent analyses" *Brit. Numis. J.*, 57 for 1987, 1–23 [publishes the 1985 Southend treasure trove hoard of Gallo-Belgic E staters].

Crummy, N. C. 1988 — *The Post-Roman Small Finds from Excavations in Colchester 1971–85* (Colchester Archaeological Report No. 5), Colchester.

Crummy, P. J. 1986 — "Excavations at Colchester" *Current Archaeology*, 103, 238–45.

Crummy, P. J. 1988 — "Colchester (Camulodunum) — Colonia Victricensis". *In* G. Webster (ed.) *Fortress into City: the Consolidation of Roman Britain, First Century AD*, 24–47, London.

Davis, R. H. C. 1988 — "The treason of Geoffrey de Mandeville" *English Historical Review*, 103, 283–317.

D'Cruze, S. 1986 — "'To acquaint the ladies': women traders in Colchester 1750–1800" *Local Historian*, 17, 158–61.

Drury, P. J. 1988 — *The Mansio and Other Sites in the South-Eastern Sector of Caesaromagus* (Council for British Archaeology Research 66 & Chelmsford Archaeological Trust Report No. 3.1), London.

Fishwick, D. 1987 — *The Imperial Cult in the Latin West: Studies in the Ruler Cult of the Western Provinces of the Roman Empire* (Etudes Préliminaires aux Religions Orientales dans l'Empire Romain, Vol. 108), Leiden [republishes with minor revisions his 1972 and 1973 papers on the temple of Claudius at Colchester].

Gerloff, S. 1987 — "Bronze Age class A cauldrons: typology, origins and chronology" *J. Roy Soc. Antiq. Ir.*, 116 for 1986, 84–115 [publishes the cauldron fragment in the Elmdon hoard. The Colchester cauldron is redated from *c.* 700 to 1250–1000 B.C. and shown to be a product of a workshop in Essex or East Anglia].

Hart, F. A. *et al.* 1987 — "An analtyical study, using inductively coupled plasma (ICP) spectrometry, of samian and colour-coated wares from the Roman town of Colchester together with related continental samian wares" *J. Archaeol. Sci.*,14, 577–98.

Haselgrove, C. C. 1987 "The archaeological context of Iron Age coin finds on major settlement sites in eastern England: Colchester and St Albans". *In* J. Bousquet & P. Naster (eds) *Melanges Offerts au Docteur J.-B. Colbert de Beaulieu*, 483–96, Paris.

Hedges, J. D. & Buckley, D. G. 1985 "Anglo-Saxon burials and later features excavated at Orsett, Essex, 1975" *Med. Archaeol.*, 29, 1–24.

Hewitt, C. 1988 "A Saxon post" *Current Archaeology*, 110, 107–8.

Huggins, P. J. 1985 "A note on a Viking-style plate from Waltham Abbey, Essex, and its implications for a disputed late-Viking building" *Archaeol. J.*, 141 for 1984, 175–81.

Kenyon, R. F. 1987 "A 'Claudian copy' without a prototype" *Numis. Chron.*, 147, 164–6 [Roman coin from Colchester].

Kenyon, R. F. 1988 "The countermark PROB on coins of Claudius I from Britain" *Numis. Chron.*, 148, 53–61 [publishes coins from Colchester and Fingringhoe Wick].

King, P. 1987 "Newspaper reporting, prosecution practice and perceptions of urban crime: the Colchester crime wave of 1765" *Continuity and Change*, 2, 423–54.

McCann, J. 1987 "Brick nogging in the 15th & 16th centuries with examples drawn mainly from Essex". Transactions of Ancient Monuments Society, New Series 31, pp. 106–133.

MacConnell, J. 1988 "Modern history". In B. M. Spooner & J. P. Bowdrey (eds) *Hadleigh Great Wood: the Wildlife and History of Belfairs Nature Reserve*, 8–10, Southend.

Mason, A. S. & Bensusan-Butt, J. 1988 "P. B. Scalé: surveyor in Ireland, gentleman of Essex" *Proc. Huguenot Soc.*, 24 (6), 508–18.

Mason, C. F. *et al.* 1987 "Landscape changes in a parish in Essex, eastern England, since 1838" *Landscape and Urban Planning*, 14, 201–9 [Wivenhoe].

McCarthy, M. R. & Brooks, C. M. 1988 *Medieval Pottery in Britain AD 900–1600* Leicester [lists all Essex kilns with characterisations of their output].

Millett, M. J. 1988 "The question of continuity: Rivenhall reviewed" *Archaeol. J.*, 144 for 1987, 434–8.

Price, J. 1987 "Glass from Felmongers, Harlow in Essex: a dated deposit of vessel glass found in an Antonine pit" *Annales du Congrès de l'Association International pour l'Histoire du Verre* (Liège), 10 for 1985, 185–206.

Redknap. M. 1987 "Recent work at Stratford, E15: 30 Romford Road" *London Archaeol.*, 5, 291–7 [Roman road; 18th century house].

Rushen, J. 1987 "Grotesques in Essex architecture" *Archaeology Today*, 8, 12–4.

Sainsbury, F. (ed.) 1987 *A History of the County of Essex: Bibliography Supplement* (Victoria History of the Counties England), London.

Selkirk, A. 1988 "Springfield" *Current Archaeology*, 10, 6–11.

Symonds, R. P. 1987 "La production de la sigillée à Colchester en Angleterre, et les liens avec les ateliers de la Gaule de l'Est: quelques resultats chimiques" *Rev. Archaeol. Est Centre-Est*, 38, 77–81 [scientific investigation of samain pottery production at Roman Colchester and its links with workshops in eastern Gaul].

Thacker, T. 1987 *Register of Parks and Gardens of Special Historic Interest in England: Parts 3 ... 64 (Wilts)* London [includes Essex].

Turner, R. & Wymer, J. J. 1988 "An assemblage of Palaeolithic hand-axes from the Roman religious complex at Ivy Chimneys, Witham, Essex" *Antiq. J.*, 67 for 1987, 43–60.

Walthew, C. V. 1988 "Length-units in Roman military planning: Inchtuthil and Colchester" *Oxford J. Archaeol.*, 7, 81–98.

Wickenden, N. P. 1988 *Excavations at Great Dunmow, Essex: a Romano-British Small Town in the Trinovantian Civitas* (East Anglian Archaeology Report No. 41) (Chelmsford Archaeological Trust Report No. 7) Chelmsford.

Wickenden, N. P. 1988 "Some Roman military bronzes from the Trinovantian *civitas*". *In* J. C. Coulston (ed.) *Military Equipment and the Identity of Roman soldiers: Proceedings of the 4th Military Equipment Conferences* (British Archaeological Reports, International Series, S394), 234–56, Oxford.

Wilkinson, T. J. 1988 *Archaeology and Environment in South Essex: Rescue Archaeology along the Grays Bypass 1981* (East Anglian Archaeology Report No. 42) Chelmsford.

Wilkinson, T. J. & Murphy, P. L. 1988 "Wetland development and human activity in Essex estuaries during the Holocene transgression". *In* P. L. Murphy & C. French (eds) *The Exploitation of Wetlands* (British Archaeological Reports, British Series, No. 186 & Symposia Ass. Environ. Archaeol., No. 7), 213–38, Oxford.

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