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A MESOLITHIC SITE AT FAIRLIGHT, EAST SUSSEX

by John W. Moore

Excavations in the immediate vicinity of Fairlight Coastguard Station revealed a lower stratum containing Mesolithic flintwork of Earlier Mesolithic type. In the upper levels, flintwork of Later Mesolithic type succeeded and was in part contemporary with another flint industry in the earlier tradition. The site was later visited by Neolithic groups and finally a small late Iron Age settlement was established.

THE SITE LOCATION AND ITS PHYSICAL ASPECTS

The site (TQ 8610 1117) on Tertiary Ashdown Sand (Fig. 1) is upon the western side of H.M. Coastguard Station, at an altitude of OD 470ft. falling to 430ft., and is within the precincts of Hastings Country Park, a region of cliffs, beaches, farmlands and woodlands extending 2½ miles eastwards from Hastings across to Firehills.

The Ashdown Sand presents three facies: a fairly hard greyish brown sandstone, friable white sandstone, and an underlying sandrock rubble prior to meeting the Fairlight Clays. In the Hastings area it possesses a varying content of sandy, laminated clay. At different levels the rock is cemented by calcite into lenticular masses of hard rock which on exposure weather to a rusty appearance. The Fairlight Clay is more argillaceous than the Ashdown Sand, comprising a complex series of grey clays, white clays, dark shales, and light-coloured sandstones containing iron ore and lignite.

In contrast to the clay soils met with over most of the Park, where old claypits are frequent, the soils at the Fairlight site are lighter, being chiefly derived from the Ashdown Sand.

So far as the immediate area of the Fairlight site is known, it appears that in the late-glacial period a considerable exposure of the friable white rock suffered severe erosion, a process which here and there exposed the sandrock rubble at the base of the Ashdown Sand, as well as leaving behind a studding of small boulders and small outcrops. This surface afterwards received a deposit of compact light-brown sand which now survives only in patches, its erosion being associated with cavities and channels in the Ashdown Sand surfaces resembling similar channelling produced by the final late-glacial solifluctions.

In the less severe conditions of the early post-glacial period, accumulating dunes of white sand filled in the cavities, and it was this landscape that attracted the first Mesolithic settlement at Fairlight.

Local Mesolithic sites

At Fairlight numerous small Mesolithic sites are to be expected along the southern edge of the field where the present excavation took place. At Cliff End, Pett Level, 1½ miles east of Fairlight, flint artefacts from a cave in the cliffs have been assigned to the Mesolithic period.[1] The occupation level appears to have been white sand as at the Fairlight site.

The Mesolithic site at West Hill, Hastings

As we shall see, the Fairlight site possesses three Mesolithic flint industries, as: (a) an industry with steeply blunted microliths and large micro-burins, and also a few true burins, (b) an industry with small micro-burins, microliths less steeply tooled, and with burins which appear to be far removed from the upper palaeolithic prototypes, and (c) a sparse geometric industry with typical cores and microliths.

Briefly, the West Hill material remaining at Hastings Museum comprises a mixture of two Mesolithic assemblages together with some Neolithic finds, as illustrated by Clark.[2] The second assemblage is similar to material from Sevenoaks, yet it is identical to that from the white sand at Fairlight. Moreover the Neolithic material, in particular a large transverse arrowhead, is also identical to that from the upper levels at Fairlight. Transverse arrowheads and their derivatives are not commonly found in East Sussex, but bearing in mind the collecting that has been going on since Victorian times there is no question whatever that some casual material found its way into Hastings Museum where, being unmarked like the West Hill finds, the material became mixed. (West Hill is $2\frac{1}{2}$ miles west of Fairlight).

Fortunately, this site is almost on my doorstep, and over a long period I have made a thorough study of the site, with very useful results. Firstly, excavation is still viable; secondly, the industry is wholly that of (b) above, with a microlithic component composed of shallow tooled oblique points together with a few blunted all along the edge, and there are also some rods. The proportion of micro-burins to microliths is 1:6.

The source of the finds was a brown sandy deposit forming a capping to the Ashdown sandrock. At the time of the original excavations,[3] the brown sand had penetrated the rock fissures together with early mediaeval debris. These rock fissures contained an ancient filling of stiff clay and rock fragments; there is no association of artefacts with the white sand which forms a drift at the foot of the cliff, and it appears that the white sand was shrouded by deep deposits of brown sand at the time of the Mesolithic occupation.

During the second world war, sand was removed from the foot of the cliff (the prominent rock face below The Ladies Parlour) and this reduced the depth of the brown sandy scree by about 30ft., as may be judged from graffiti in completely inaccessible positions, revealing the undisturbed white sands at base. The West Hill industry thus equates with (b) from the capping brown sands at Fairlight.

Palaeolithic material

Palaeoliths in Hastings Museum, found long ago in the valley east of Coastguard Lane, may perhaps be referred to dispersed solifluction deposits of great antiquity, of which a deep gravel section remains intact under Brakey Bank in Warren Glen, resting at a maximum height of OD 200ft., but which elsewhere are to be regarded as being shrouded by slipped soils or eroded completely away as in Fairlight Glen.

THE FAIRLIGHT SITE

The site area is a tilted plane, inclining at one corner to the south-east where a lynchet has formed latterly via ploughing, and earlier as a rainwash from ancient soils. Flint artefacts from successive Mesolithic assemblages are now known to have been redistributed in the direction of the

nearby cliff and it is probable that the white sand dunes, together with some of the flintwork content, suffered the same fate at this corner of the field. It has to be said that the final disappearance of the sand dunes appears to call for a mechanism far more drastic in its effect than the usual process of lynchet building would allow. The white sands appear to have been stripped off after the first Mesolithic settlement, permitting the brown sands and clays, with their typical inclusion of ferruginous rubble, to encroach upon the site, whereupon further Mesolithic settlement occurred. It is hoped to be able to clarify this problem by further fieldwork.

Total excavation is desirable at many kinds of archaeological sites, but at sites having a context in natural history I believe the practice to be unwise, leading as it must to the inhibition of fresh studies, and for this reason a large enough remainder should always be left. As an example, when the occasion arises for a re-examination of Star Carr, Yorkshire, a site almost totally excavated at the time, it will be found that the Flixton[4] find-spot, where the data for the discovery of Star Carr were assembled, is almost wholly intact, with extensive Upper Palaeolithic and proto-Maglemosian strata still awaiting exploration. The same principle has been applied here at Fairlight, where the main area of settlement has been left untouched.

Soil disturbances

As excavation progressed in Area 1 (Fig. 1), it became evident that the site had suffered various soil disturbances, e.g., from the late Iron Age settlement, from the transfer downslope of soil by ploughing, from the sinking of fence posts, from burrowing creatures and root systems, and from the natural drift of soil by the action of rain and wind. These disturbances affected only the brown sand and in this soil Mesolithic artefacts were to be found mixed with Iron Age potsherds. Only at the bottom of the section, in clean white sand, rested Mesolithic artefacts free of disturbances. These circumstances rendered abortive any stratigraphical studies in the brown sand of Area 1. Such studies were therefore postponed until such time as the excavations were clear of the Iron Age area, satisfactory results in this respect being later achieved in Area 2.

CATALOGUE OF THE ARTEFACTS

	Area 1 White Sand	Area 1 Brown Sand	Area 2 Basal 6in.	Area 2 Brown Sand	Area 3 Brown Sand
Total yields	95	1540	119	1615	743
Percentage of debitage*	86%	98.5%	96%	98%	94%
Primary flakes (with cortex)	9	506	78	713	340
Secondary flakes (no cortex)	46	935	26	762	364
Utilised secondary flakes	(1)	(20)	(2)	(23)	(4)
Narrow flakes, 4:1; 5cm. min.	1	12	1**	1	0
3cm. max.	12	16	4	52	12
geometric flakes?	0	0	0	4	4
Cores; flake width 1cm-2cm	8	23	2	24	5
flake width 4mm-1cm	0	2	0	4	3
Core rejuvenation flakes	4	17	3**	12	5
Transversely blunted flakes, 4:1	2	0	0	0	0
Tranchet core axes	0	0***	0	frag.	0
Ditto, sharpening flakes	0	2	0	3	0
Scrapers, end of blade	1	2	0	0	0
round	0	3	1	6	1
hollow	0	1	0	0	3
Squat awls	0	1	0	0	0
Nosed awls	0	1	0	1	2
Leaf-shaped flakes	0	0	0	1	0
Burins	3	2	1**	1	0

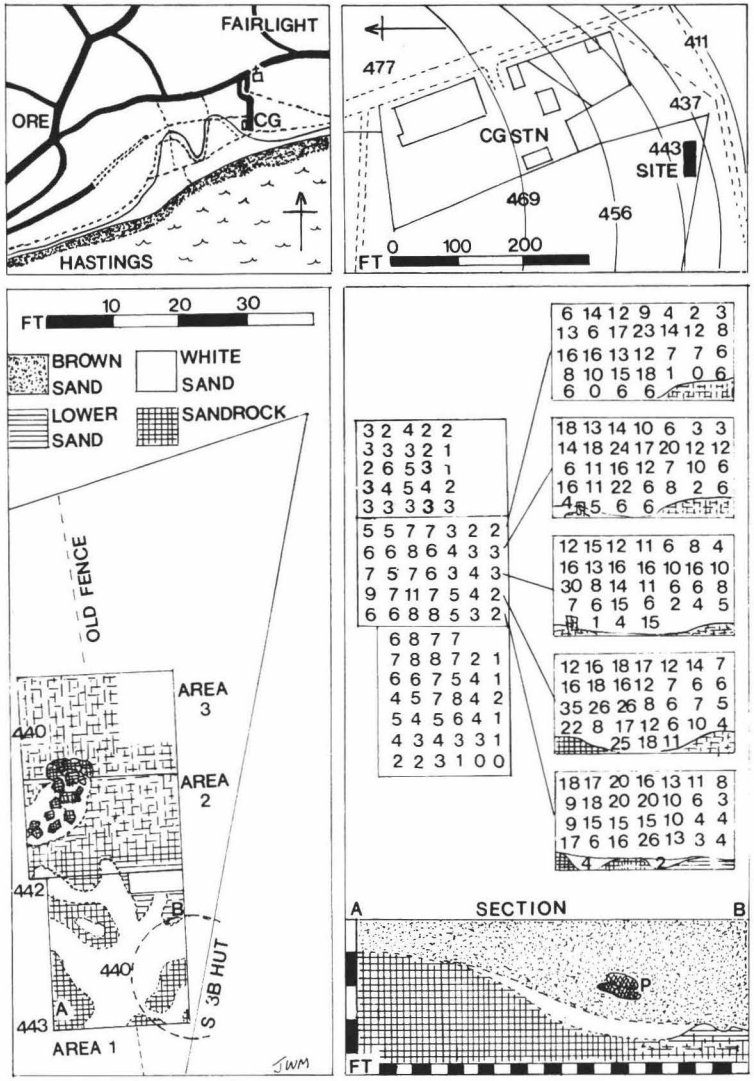

Fig. 1. Fairlight, 1977. Plan of erosion features at the base of the excavations, with full Section A-B of Area 1, and distribution of flintwork (see text). The intrusive Southern Third B hut and post holes are indicated by P and the broken circle.

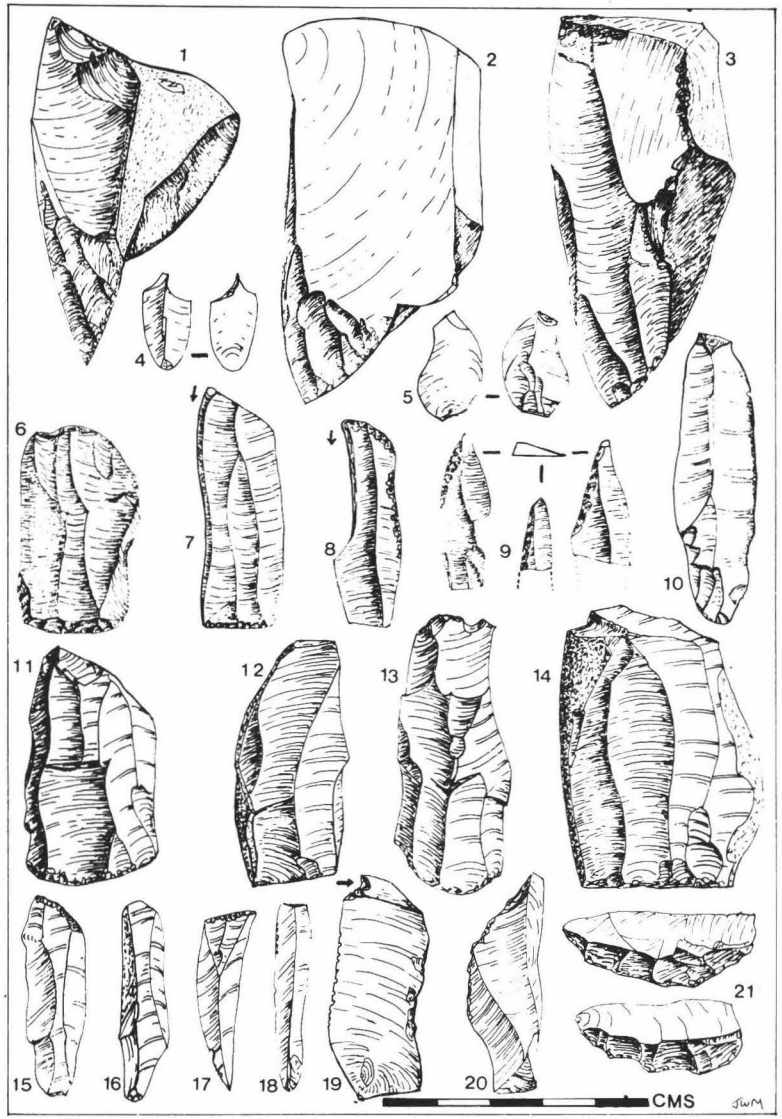

Fig. 2. Fairlight, 1976. Flintwork and typical debitage from the white sand of Area 1.

(a) The white sand finds from Area 1. 1-3; heavy tools, possibly gouges. 4, 5; micro-burins. 6; end scraper. 7, 8, 19; burins. 9 inclusive; steeply blunted microliths, type A. 10, 16, 18, 20; utilised flakes. 11-14; cores. 15, 17; transversely blunted flakes. 21 inclusive; core trimming flakes.

	Area 1 White Sand	Area 1 Brown Sand	Area 2 Basal 6in.	Area 2 Brown Sand	Area 3 Brown Sand
Total yields	95	1540	119	1615	743
Percentage of debitage*	86%	98.5%	96%	98%	94%
Micro-burins: large, 2cm	2	0	1**	1	0
small 1cm	0	2	0	12	2
geometric, 5mm	0	1	0	0	0
Gouging tools	3	0	0	0	0
Microliths, type A: steep edge	3	1	1**	3	1
shallow edge	1	7	1	4	4
Microliths, type B	0	3	0	1	1
Microliths, geometric	0	2	0	5	2
Microliths, rods	0	0	0	4	0
Microliths, large coarse crescents	0	1	1	0	0
Neolithic: transverse arrowheads	0	0	0	3	0
"Levalloisian" cores	0	0	0	2	0
polished axes	0	frag.	0	0	frag.
lanceolate arrowheads	0	0	0	1	0

*Including utilised flakes. Except for cores the debitage contains little that could be used again. **Finds in basal white sand. ***From the surface.

The artefacts; illustration

Since it would be detrimental towards any understanding of the Fairlight site to illustrate the flintwork in the customary groupings, i.e., all like artefacts being brought together, rather than as being the material from specific areas where overlapping of assemblages may have occurred, another method of presentation had to be adopted. It will be seen that the finds from the white sand of Area 1 (Fig. 2), the finds from the brown sand of Area 1 (Fig. 3), and the finds from Area 2 (Fig. 4), have been illustrated separately, making possible a better visualisation of the cultural factors involved. The Area 3 finds have been omitted in this respect, being redistributed material.

For some reason the minute blades for the manufacture of geometric microliths were rarely met with, and are not figured, although some regular spalls belong to this category. The smaller microliths were probably shaped directly upon the blade in most instances, without employment of the micro-burin technique. Great skill was displayed in producing small blades, with negligible wastage. These artefacts provided the armatures for composite implements, where uniformity was desirable.

The "Levalloisian" core technique of the Neolithic and Early Bronze Age requires, I take it, no explanation here, excepting that at Fairlight such cores were the bases from which derivative transverse arrowheads were fashioned. At Fairlight, transverse arrowheads were otherwise manufactured from thin and wide regular blades, and from these several arrowheads could be obtained simply by breaking pieces off.

Numerical summary

Fig. 1 follows the customary pattern of reduction from region to site area and then to a plan of the excavations of Areas 1, 2 and 3, emphasising the erosion features at base. The diagonal section A-B of area 1 is extended to the right. A further development, however, is the insertion of blocks of numbers. These numbers represent the horizontal yields of flintwork from Area 2 for each square yard taken in descending spits of 6in. The left hand block of figures expresses the vertical yield of flintwork from each square yard of Areas 1, 2 and 3, the yield being divided by 9. This device allows the emergence of zero figures for a better visualisation of the centre of Mesolithic activities, and it was used in the field for the purpose of achieving economies in costs and time.

The artefacts: stratified finds in Area 2

These stratified finds, representing flintwork of different assemblage, present a problem in nomenclature. If the flintwork from West Hill, Hastings, is free of Later Mesolithic influences and, as we shall see, stratigraphically later than the flintwork from the white sand at Fairlight, it forms an entity in its own right and is deserving of the title "West Hill" type. The finds from the white sand will be referred to as "Fairlight" type since a similar industry is not known from Sussex. The geometric flintwork will be referred to as Later Mesolithic.[5]

The examples of artefacts and debitage illustrated in Fig. 4 came from the following levels:

0in-12in. depth: 1-15, 21, 25.
12in.-18in. depth: 16-20, 22-24, 26-28, 30, 32.
18in.-24in. depth: 29,31, 33-34.
24in.-30in. depth: 35-43 (No's 37-40, 42, 43, came from the basal white sand).

This stratigraphy can be expressed schematically, as:

	Neolithic	West Hill type	Later Mesolithic	Fairlight type
0in-12in.	4, 5, 6, 13, 25	7-12, 14, 15, 21		
12in.-18in.		22-24, 26, 27, 30	16-19, 28.	
18in.-24in.		33, 34.	29.	
24in.-30in.				37-40, 42, 43.

It will be noticed that the burin, no. 2, and the broken core axe, no. 3, as also the sharpening flake, no. 32, have been omitted from the scheme, whereas the burin, no. 40, is included. The discriminating factor is, of course, that the burin came from a sealed deposit. Stylistically, the two artefacts, nos. 1 and 20, also omitted, appear to belong to the white sand assemblage, it being evident that prior to settlement by West Hill folk there was a scatter of artefacts in the area, producing the mixing that was seen at the lower levels of Areas 1 and 2.

The inverse retouch on the rod, no. 20, has a history going back to Pre-Boreal times in Britain. The coarse crescent, no. 41, has a similar history, as indeed the core axes and sharpening flakes also have. Altogether, if the stratified finds from the white sand of Area 1

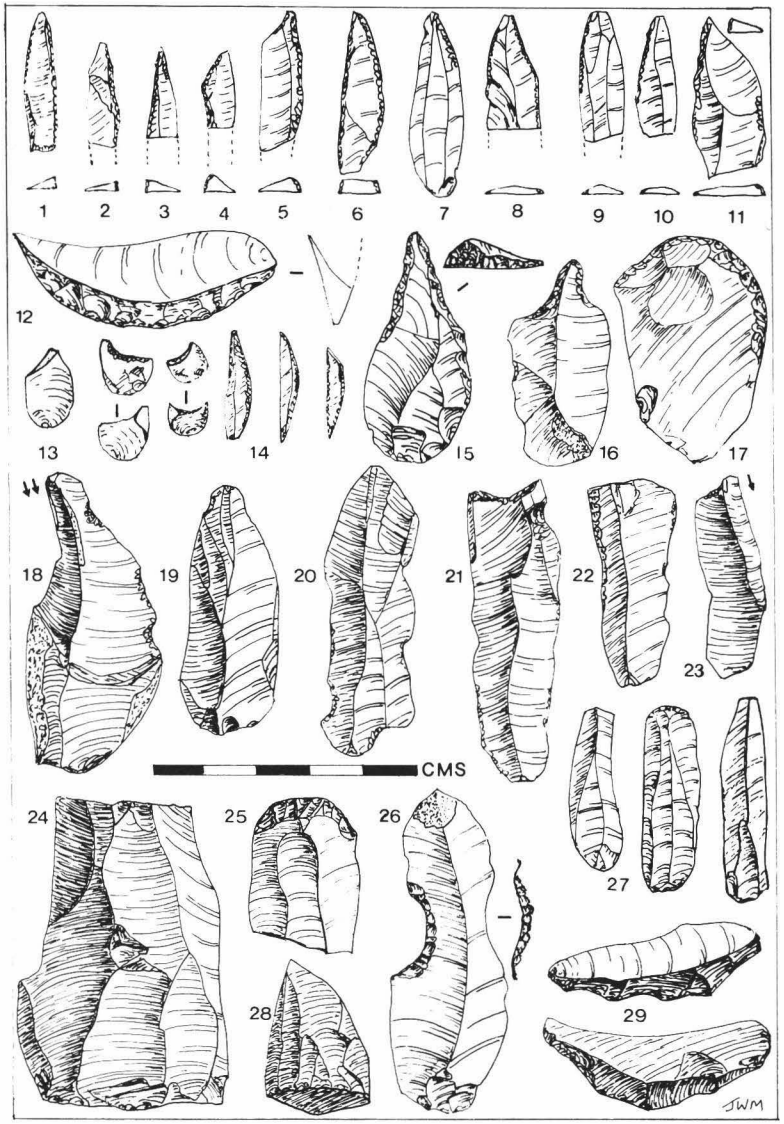

Fig. 3. Fairlight, 1976. Flintwork and typical debitage from the brown sand of Area 1.

(b) The brown sand finds of Area 1. 1, 2, 5; microliths, type B. 3, 4, 7-11; microliths, type A. 6; microlith, crescentic. 12; axe sharpening flake. 13 inclusive; micro-burins. 14 inclusive; geometric microliths. 15, 16; awls. 17, 25; scrapers. 18, 23; burins. 19-22; utilised flakes. 24; a heavy core. 26; hollow scraper. 27 inclusive; blades.

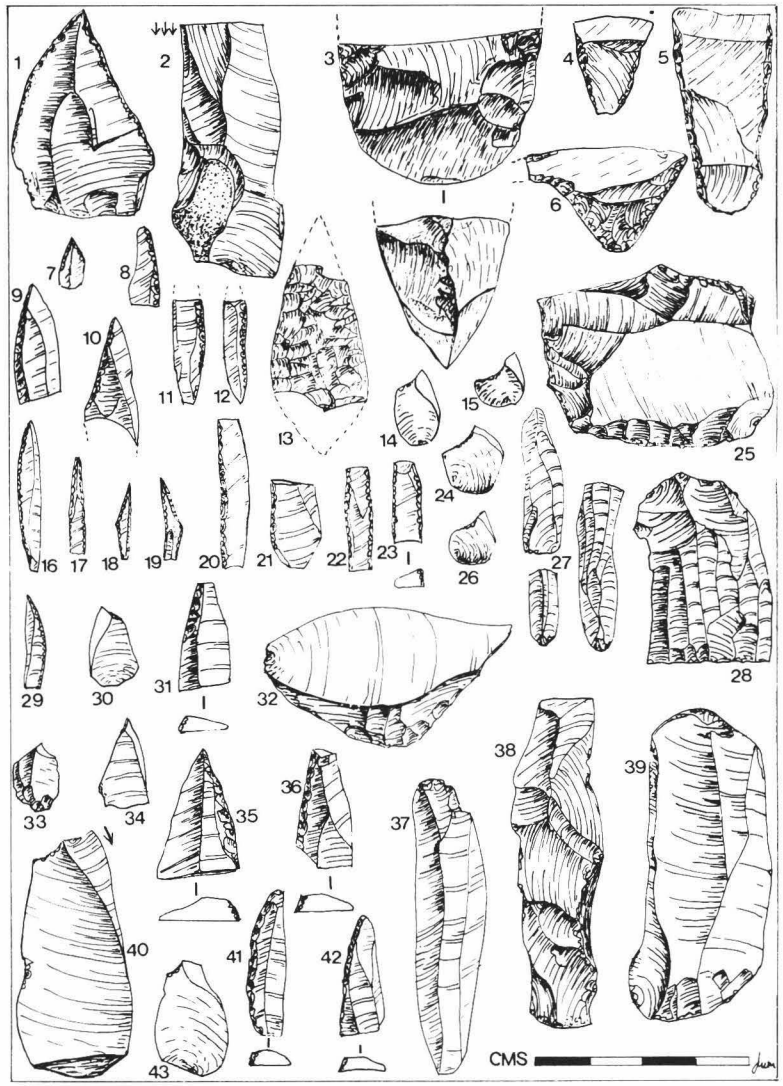

Fig. 4. Fairlight, 1976. Flintwork and typical debitage from Area 2, mostly from brown sand. For stratification, see text.

(c) The finds from Area 2. 1; a leaf-shaped flake. 2, 40; burins. 3, 32; a broken core axe and a sharpening flake. 4-6; transverse arrowheads. 7-11; 31, 35, 36, 42; microliths, type A. 12; microlith, type B. 20-23; rods. 13; a lanceolate arrowhead. 14, 15, 24, 26, 30, 33, 34, 43; micro-burins. 16-19, 29; geometric microliths. 25; a "Levalloisian" core. 27 inclusive; blades. 28; a geometric core. 37-39; core trimming flakes. 41; microlith, crescentric.

are added to the above scheme, two Mesolithic assemblages are seen to be present, separated by a gap in time, with a transient assemblage of Later Mesolithic affinity making its presence felt during the more recent occupation. The Neolithic artefacts were also those of a transient folk, since no strong occupation is known hereabouts.

Site 3 (Fig. 1).

Despite the diminishing quantity of artefacts within the yield of debitage at the eastern end of Area 2, the excavation was continued into Area 3 with the intention of reaching the limits of the scatter, and also with a view to obtaining some insight into the cause of the known drift of flintwork towards the cliff. That Area 3 very early in its history suffered severe erosion is beyond doubt, as may be judged from evidence at the eastern end of the basal rocks of Area 2 where the rocks were no longer bedded in their own white sands of erosion, but had been undermined to some extent and the recesses filled with brown sand, i.e., a much later deposit.

By the first century A.D., there was already 2ft. 6in.-3ft. thickness of brown sand in parts of the site, as is proven by Iron Age postholes and post support stones indicating a minimum depth of 2ft. of soil present at the time, and Area 3 yielded traces of cooking pits containing potboiler stones, patches of burned soil and smears of charcoal at 2ft. 6in. depth. So the incident of erosion took place before 2000 years ago.

The path leading into Warren Glen holds a scatter of flintwork derived by erosion, and this scatter is directly aligned with Area 3 and a barely perceptible recess running between the unexcavated main site, of which Areas 1-3 consist of a strip along the edge, and the upper slopes of the site area. A probe into the main site revealed brown sands passing downwards into lighter coloured sands, with none of the mixing and stripping effects suffered in Areas 1-3. It appears that the extensive deposit of the main site protected Areas 1-2 from violent erosion in times of storm, such storm waters having been diverted along the northerly edge of the main site and flowed thence via Area 3 towards the cliff, presumably disrupting Area 3 more or less completely and removing much of its early contents.

From Areas 1-3, therefore, the exploratory programme has yielded sufficient evidence to suggest the main site as being the only suitable place for soil sampling and pollen studies. Area 3 would have given a pollen spectrum later than the Mesolithic occupation, and pollen from the basal white sand of Area 1 would have placed the occupation too early in the sequence of climatic and vegetational development.

It may now be taken as fact that the bulk of the white sand dunes favoured by the first Mesolithic settlers was transported into Warren Glen. The history of the white sand at Fairlight began in conditions of frost dessication. The sand was augmented during succeeding conditions of drought dessication, followed by dispersal of the sand in a wetter climate.

The old quarry by Fairlight Church is of interest in this respect. Since 1952 a large expanse of the commercial glass-sand, still lacking much vegetational cover, has suffered 26 years of seasonal rainfall, the effect being gulleying and the transfer of sand along the gradients. Where plants had taken root in wind-blown soils it was noticed that they tended to resist erosion and survived as small hummocks. It may well be, therefore, that at Fairlight the stripping of the white sand followed a similar pattern, plant growth preserving remnants of the dunes as small hummocks surrounded by otherwise sterile sand, implying that the sand spreads favoured by Mesolithic settlement are not necessarily homogenous deposits.

It follows that some of the flintwork from at least the basal 3in. of brown sand in Areas 1 and 2 is referable to the first Mesolithic settlement, being material preserved in hummocks, and thus augmenting that culture with sufficient artefacts to confirm that it is a reasonably complete Earlier Mesolithic assemblage. The redistribution of the flintwork in Area 3 by Iron Age folk digging cooking pits destroyed any evidence for stratified finds and only a few microliths confirm again the presence of the three Mesolithic assemblages distinguished in Area 2.

Debitage

The high percentage of waste flintwork at Fairlight can be explained. Normally one would have expected a figure around 85%, whereas the average figure proved to be 94%. At Fairlight very little of the debitage, excepting for cores, could be used again. The flintwork was knapped from beach pebbles, with consequently more cortex to be disposed of, and further were far-travelled pebbles with flaws penetrating well into the flint.

The pebble beaches of East Sussex, and the complex spread of flint gravel forming the coastal plain from Pett to Dungeness and beyond,[6] must have started arriving in early Atlantic times and we have to look for lost beaches further from the present coastline for the source of the flint pebbles at Fairlight.

Cultural affinities

If it can be accepted that some of the flintwork from above the white sand is of the same assemblage as that within it, a distinctive and recognisable Earlier Mesolithic facies emerges possessing early tranchet core-axes, true burins, steeply blunted microliths of simple oblique form, transversely trimmed flakes, large micro-burins, and appropriate blade-flakes and cores. A major excavation might well show that coarse crescentic microliths, a few boldly flaked rods, and leaf-shaped flakes are also components of this industry, the rods falling midway in development between the rasp-awls of Star Carr, similar artefacts from the West Baltic region, and the small rod segments suggested for composite tools of the later Mesolithic period. The rasp appears to be a Gravettian concept.

The large oblique point from the brown sand (Fig. 4, no. 35) is anomalous in that it appears to be a broken representative of the rasp-awls of Star Carr, differing only in being heavily patinated, and it is possibly an intrusion from an earlier facies somewhere near the site. But, accepting Mitchell's theory,[7] its size may be accounted for by previous access to abundant flint, a suggestion

that must be accepted for the large tranchet core-axe (Fig. 5). The Kentish hinterland, indeed the larger part of Kent, still await the intensive Mesolithic researches progressing elsewhere, as Woodcock has remarked, and it is at his Perry Woods site[8] where large Mesolithic artefacts occur. Large micro-burins, indicating large microliths, are known from Orpington[9] and other localities in Kent, and even from the somewhat meagre publications from that county it is clear that both Earlier and Later Mesolithic influences are present.

The large microliths from High Rocks, Tunbridge Wells[10] are not dissimilar to those from Orpington, although the absence of micro-burins suggests a late dating.[11] The hollow-based Horsham point, absent at West Hill and Fairlight, conjoins with artefacts of Earlier and Later Mesolithic type to form the somewhat nebulous Wealden culture, yet it may be asked how much of this fusion of assemblages arises from defects of stratigraphy.

While the white sand artefacts at Fairlight bear, in terms of craftsmanship all the hallmarks of the Baltic homeland, the steep blunting of the oblique points, the leaf-shaped flake, the boldly flaked axes of oval section,[12] and the burins, all find counterparts along the Thames, the industry having affinity with one of Late Boreal age at Ham Common[13], where large micro-burins are also featured. Scraping edges on heavy cores occurred at Ham Common and have an Upper Palaeolithic ancestry. Similar artefacts occurred at Fairlight (Fig. 2, nos. 1-3), but differ in not being utilised cores.

The somewhat earlier assemblage from the white sand at Fairlight must have arrived from Kent, possibly via the marshy lagoons and dunes of the coastline of that era. The West Hill facies at Fairlight, and at West Hill itself, was already established before a facies of Later Mesolithic affinity, about 6500 B.C., added artefacts to the range of British microliths, extending as far afield as Northern Ireland, bringing flake axes as well.[14]

The late Iron Age occupation

During the excavation of Area 1, large boulders used for post supports came to light, resting above brown sand containing potsherds. In four instances the otherwise undisturbed white sand below had been penetrated, the cavities consequently being filled with brown sand from which one potsherd (Fig. 6, no. 4) was retrieved. These disturbances occurred along an arc indicating the one-time presence of a round structure 19ft. in diameter. A 'wattle and daub' exterior was clearly suggested by a few finds of fire-reddened clay containing twig impressions.

Only 12 potsherds came from within the structure, another 78 came from outside the hut upon its northerly side, and a further 132 small pieces came from the rest of the excavation. The siting of the cooking pits (in Area 3) in the easterly quarter tells of prevalent south-westerly winds. In the absence of metals and bones or of any closely dateable artefact, the pottery from this site nevertheless falls into a recognisable group dating somewhat prior to A.D. 50. There is no Roman influence and the Belgic influence is less strong than at Crowhurst[15] and Sedlescombe[16] where the butt beaker reflects trade in that article not long before A.D. 50. The coarse black pottery, comprising one third of the finds, originated in the Late Bronze Age, and may imply a continuity of settlement from Warren Glen times, although the pottery at Fairlight is thinner and the calcined flint filler is less coarse. This black pottery survived well into the second century.

Description of the pottery

1. A hard, grey fabric with finely crushed grits. The exterior is pink and light brown. The interior is grey to buff in colour. Decorative devices are: flat bases, recurved rims, parallel scoring, annular grooving, roulette patterns, black paint infillings, annular cordons, and cordons with slashed cable patterns. There are 39 sherds of this fabric (Fig. 6, nos. 2, 4, 8, 10).

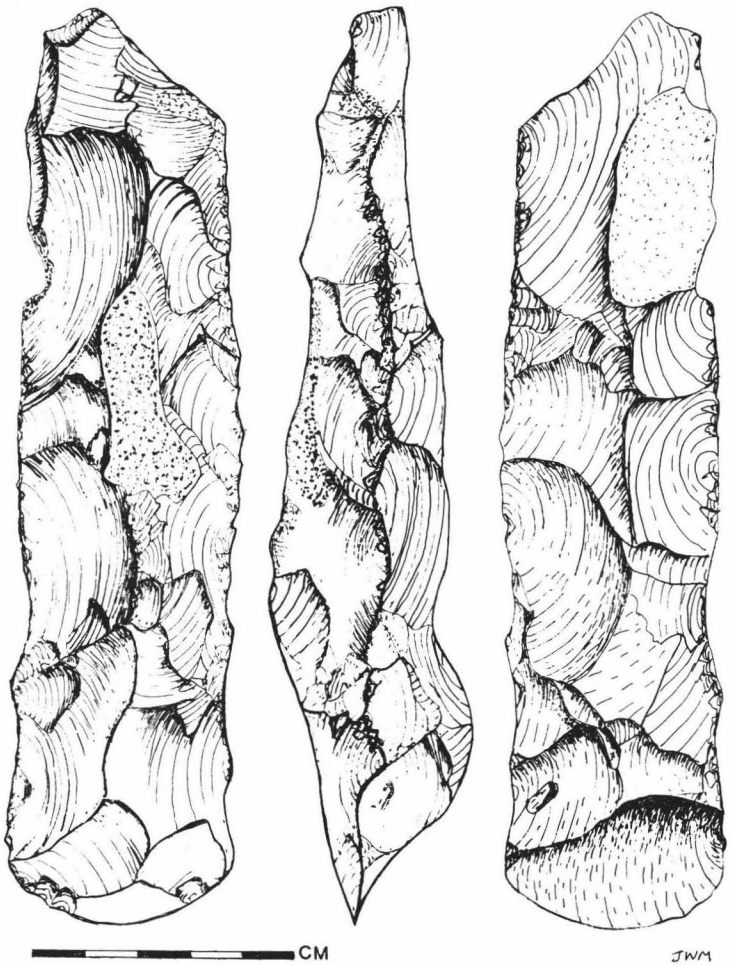

Fig. 5. Tranchet core axe, Fairlight, East Sussex.

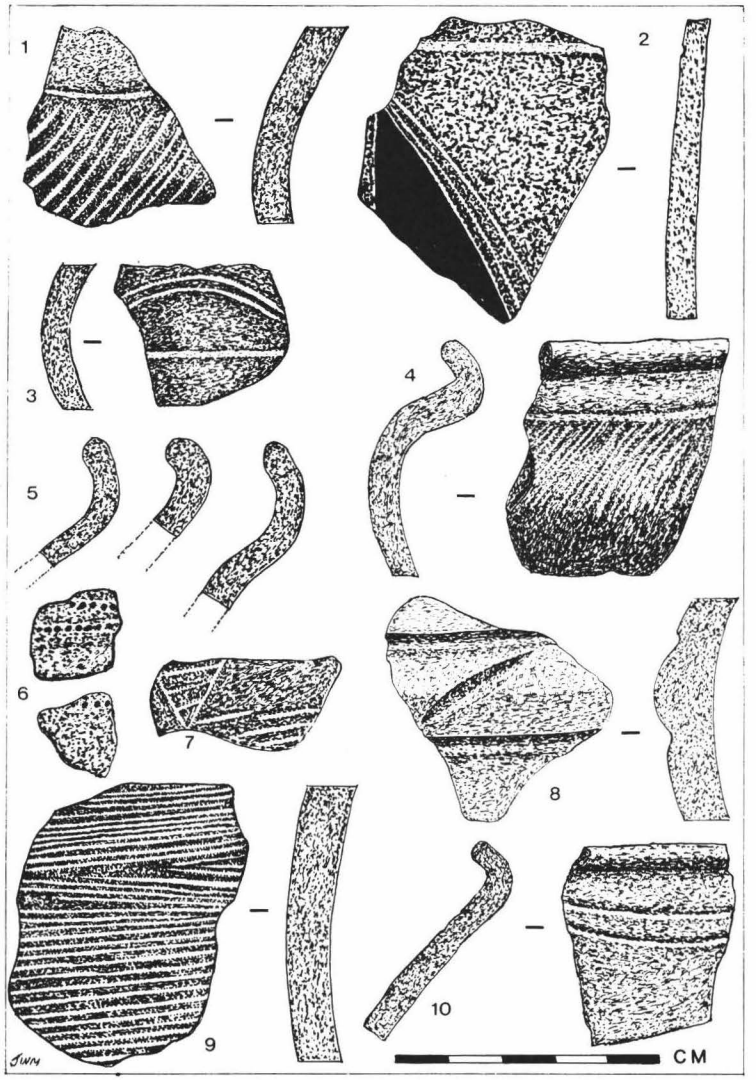

Fig. 6. Late Iron Age pottery, Fairlight, East Sussex.

2. A hard, grey fabric with finely crushed grits. The exterior has a black slip, also applied sometimes to the interior. Decorative devices as for (1). There are 62 sherds of this fabric (Fig. 6, nos. 5 and 7).
3. A hard, grey to black fabric with finely crushed grits and light-brown slip. The interior is black, sometimes reddish-brown. Decorative devices are: as for (1) excepting roulette patterns and cordons. There are 67 sherds of this fabric (Fig. 6, nos. 1 and 3). This fabric sometimes has a reddish-brown core.
4. Coarse black fabric with a thick, pink slip. Fine, calcined flint grits. There are 53 sherds of this fabric. For decorative devices only flat bases can be recorded.
5. Hard, red fabric. Decorative device: combed zones. There are 2 sherds of this fabric (Fig. 6, no. 1).

ACKNOWLEDGEMENTS

My thanks are extended to Hastings Corporation for the grant of an extensive lease to excavate. My thanks are similarly extended to Mr. Richard Ashworth of Place Farm, Fairlight. Mr. Devenish has kindly accepted the finds for Hastings Museum.

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THE EXCAVATION OF A CROSS-DYKE AT OLD ERRINGHAM FARM UPPER BEEDING, WEST SUSSEX 1976

by *Owen Bedwin, B.A., Ph.D.*

Part of a cross-dyke on the South Downs near Upper Beeding was excavated in advance of its destruction by quarrying. The dyke consisted of a continuous ditch, the material from which had been thrown up to form a parallel but irregular bank. The construction of the dyke is tentatively ascribed to the early Iron Age.

INTRODUCTION

During routine survey of planning applications by Mr. F. G. Aldsworth, Field Archaeologist, West Sussex County Council, a hitherto unrecorded linear earthwork was noticed on an aerial photograph. This earthwork, a cross-dyke, was in an area due to be taken over by the Blue Circle Cement Company for the extension of an existing quarry. The Sussex Archaeological Field Unit was informed, and excavation was carried out in October 1976, before the site was affected.

The cross-dyke, NGR TQ 208 090, was 170m. long, running approximately north-south, with a bend at its southern end (Fig. 2). It was situated across the top of a broad spur of Upper Chalk, which drops gradually westward to the River Adur (Fig. 1). The site was extremely exposed, and from it there was a comprehensive view over the valley of the Adur and also of part of the coastline, 5km. to the south. To the east of the site, there are a number of well-known Iron Age sites (Fig. 1).

For most of its length, the bank of the dyke has been ploughed out; the ditch was faintly discernible as a shallow depression. The field in which it lay has been cultivated for about 15 years; prior to that it was scrub, and is shown as such on Ordnance Survey maps of the early part of this century. Before the scrub was cleared, the bank and ditch of the dyke were much more pronounced.[1] The only survivor of regular modern ploughing was the final 15m. at the extreme northern end of the dyke, where both bank and ditch are quite conspicuous. Fortunately this part of the earthwork, to the north of the new fence line in Fig. 2, will be outside the limits of the new quarry.

EXCAVATION

A large area, 50m. long, was excavated towards the northern end of the dyke (Fig. 2; Area I), and a narrow trench was put across the ditch towards the southern end (Fig. 2; Area II). Ploughsoil was removed from Area I by machine, and the ditch sections were then dug by hand. Area II was entirely excavated by hand.

The results of the excavation can be described briefly. Nothing survived of the bank, which formerly stood to the west of the ditch, i.e. slightly lower down the spur. It was, however,

[1] Mr. F. Grantham, owner of Old Erringham Farm, pers. comm.

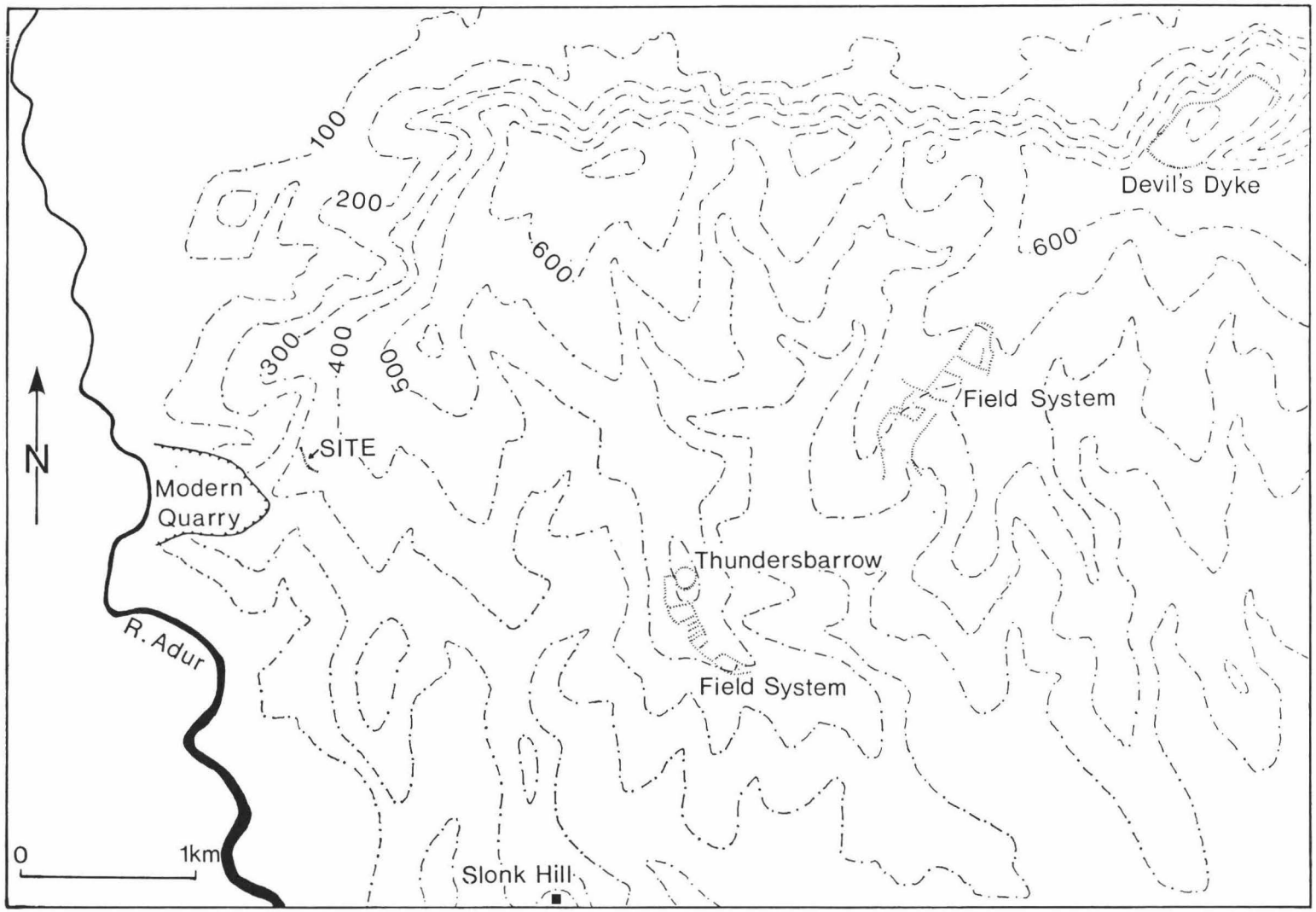

Fig. 1. Upper Beeding. Site location

possible to estimate the dimensions of the bank from the areas of raised chalk left where it once stood (Fig. 3). Thus the base of the bank was at most 5m. wide; no structures were found associated with it, and there had been no berm. In Figs. 2 and 3, gaps in these areas of raised chalk are shown. Two such gaps were exposed in Area I, and an examination of aerial photographs held by West Sussex County Council suggests a third at the point where the earthwork bends. Although it is tempting to interpret these gaps as interruptions in the original bank, a more likely explanation is that the variable size of the ditch (Fig. 3) was reflected in a bank of variable height. The raised areas of chalk are thus due to a substantial bank protecting the subsoil beneath from the plough. The gaps, on the other hand, correspond to lower stretches of bank, insufficient to protect the subsoil from the plough. This is presumably why the gaps occur where the ditch was smallest. In support of this latter interpretation, it is worth mentioning that none of the *unploughed* cross-dykes in Sussex exhibit a continuous ditch with an interrupted bank; all " gaps " in these earthworks are caused by modern footpaths.

The ditch, which was continuous, varied considerably in both width and depth. It was 450cm. at its widest; 140cm. at its narrowest; 140cm. at its deepest, and 70cm. at its shallowest (Fig. 4). In spite of this variation in size, the general profile was that of a ditch with gently sloping sides and a narrow, flat bottom. The only exception to this was in Area II (Fig. 4; G-H) where the bottom of the ditch was noticeably wider. The ditch sections were extremely similar throughout the excavated area, and indicated silting that was undisturbed until modern ploughing. The primary silt, layer 6 in Fig. 4, was considerable, especially on the side nearer the bank.

Few finds were made during the excavation. Some animal bones, marine shells, and abraded potsherds were all that was recovered. These latter, where diagnostic, were of an early Iron Age date; none were found in the primary silt, however. There was a complete absence of pottery between the early Iron Age and the twentieth century, and it is likely that the ditch silted up naturally during this time.

DISCUSSION

In southern England, the linear earthworks known as cross-dykes are generally confined to rather broken upland, typified by the South Downs.[1] At least 60 cross-dykes are known in Sussex, and about half of these are situated across ridges at the top of the scarp slope of the Downs. It is almost certain that more exist, as they are often inconspicuous, easily levelled by ploughing, after which they may only be visible from the air in favourable conditions.

There is considerable variation in both siting and morphology among Sussex cross-dykes. For example, there are single, double, and multiple dykes; earthworks of this last type are usually found on ridges at the top of the scarp slope, e.g. to the east and west of Harting Beacon.[2] There are dykes which are close to settlements and enclosures, e.g. at Bury Hill, Houghton (Fig. 5A); some even form one side of an enclosure, as at Bow Hill (Fig. 5C). On the other hand, there are dykes which are distant from known, contemporary settlements, e.g. the excavated example at Upper Beeding (2km. from Thundersbarrow Hill and 2½km. from Slonk Hill). There are dykes which run across ridges and those which run across spurs; those which are straight and those which have a bend, or bends: finally, some are continuous whereas others have a " break " or entrance.

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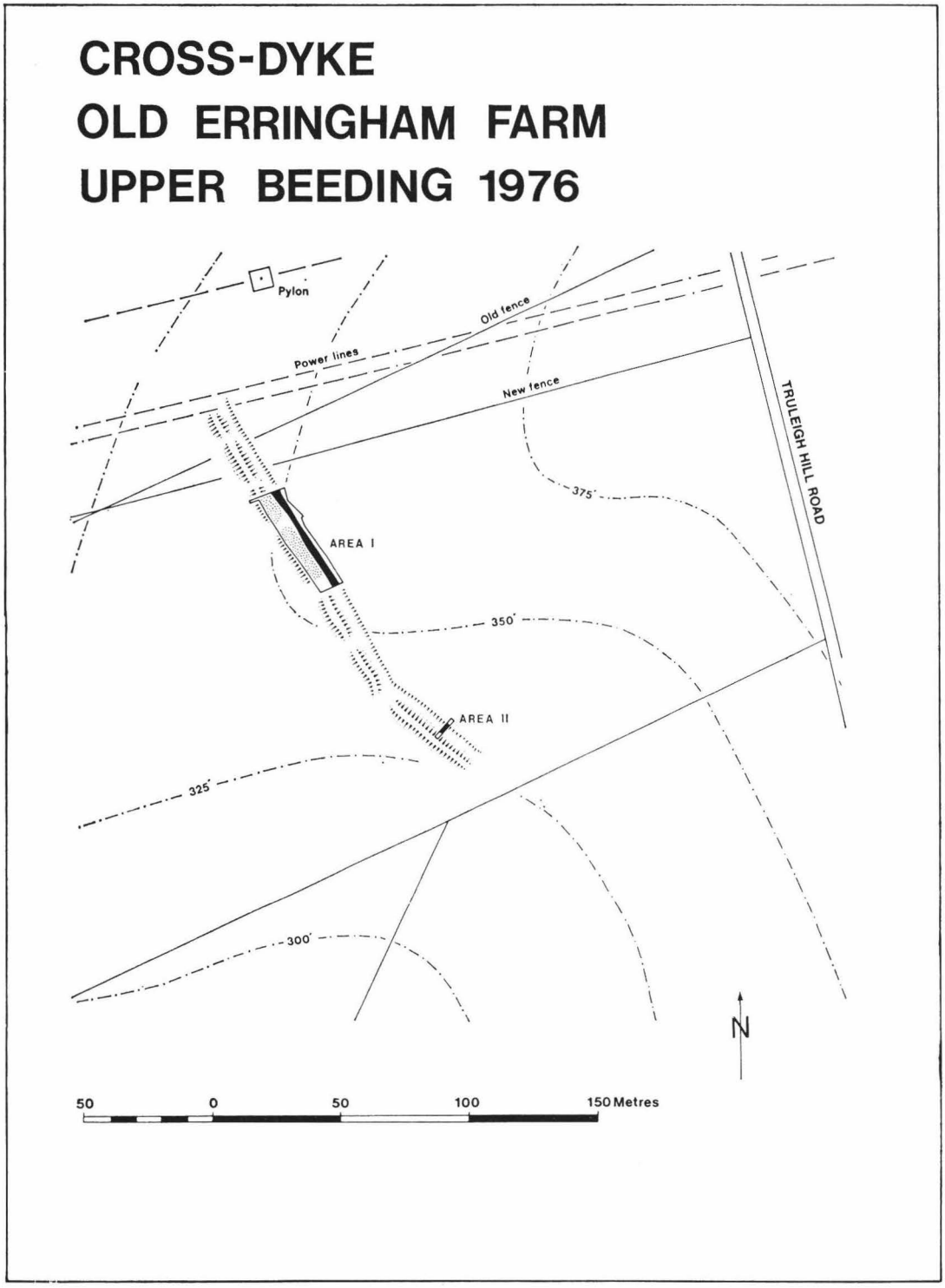

Fig. 2. Upper Beeding. General site plan (by F. G. Aldsworth). Contours in feet

CROSS-DYKE, OLD ERRINGHAM FARM, UPPER BEEDING 1976

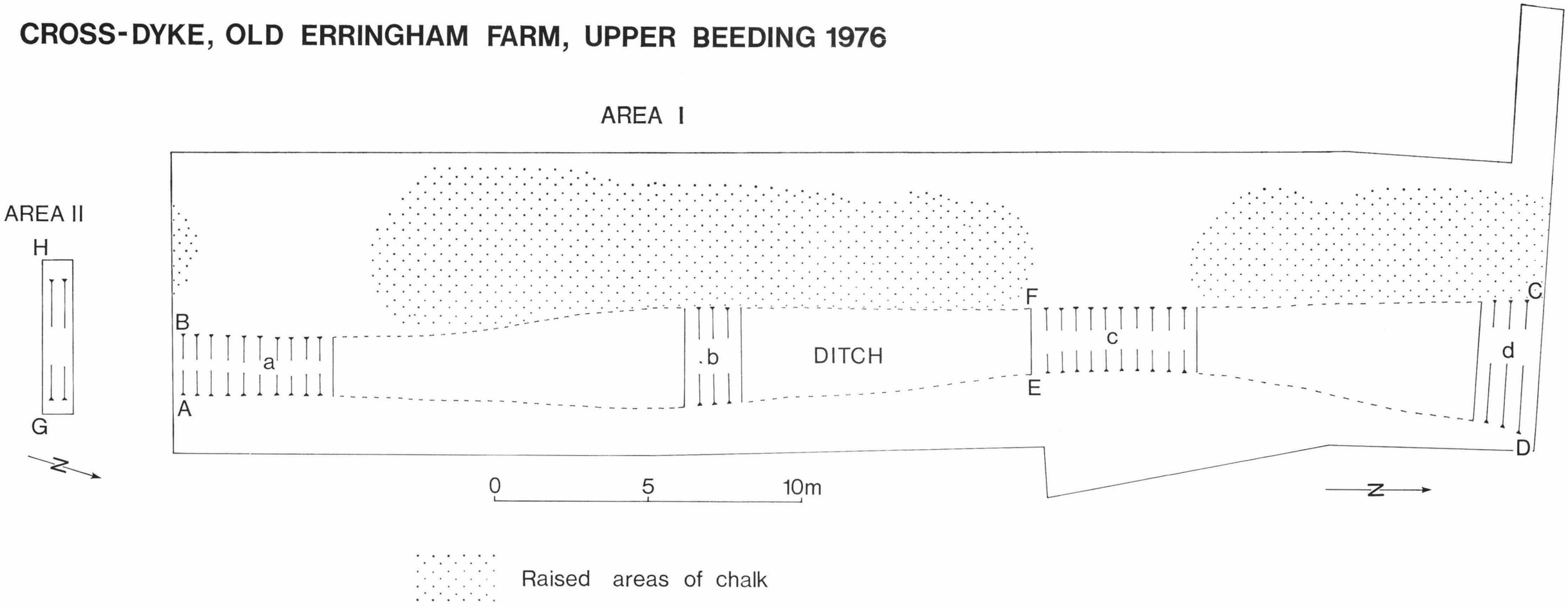

Fig. 3. Upper Beeding. Plan of excavation

The pioneering study of cross-dykes was carried out by the Curwens in the early part of this century.[1] Apart from surveying many of these earthworks, the Curwens investigated three of the more prominent examples by means of narrow sections, on Newtimber Hill, Glatting Down, and Upwaltham Hill. All the ditch profiles were remarkably similar, i.e. with sloping sides and flat bottom. There was usually a considerable amount of primary silt, and no evidence of re-cutting. No old land surface was found beneath any of the banks, nor was there any evidence of associated palisades. More recent excavation has corroborated these findings, e.g. sections through a cross-dyke on Alfriston Down, East Sussex,[2] and a cross-dyke on Buxbury Hill, Sutton Mandeville, Wiltshire.[3]

However, even when excavated, cross-dykes are by no means easy to date because of the paucity of artefacts; on the evidence provided by the pottery, for example, the Upper Beeding cross-dyke was certainly silting up during the early Iron Age. Since the nearby settlements also belonged to the early Iron Age, its construction is most likely to date from this period. In their study of cross-dykes, the Curwens came to the conclusion that they were pre-Roman, partly as a result of excavation and partly from a consideration of the surface evidence, e.g. the observation that the cross-dyke on Glatting Down is cut by Stane Street.[4] The dyke excavated on Alfriston Down in 1975 was thought to date from the late Bronze Age or early Iron Age.[5]

Given the difficulty of dating these sites accurately, positive statements about the function of cross-dykes are not easy to make. The Curwens suggested that some of the dykes, especially those across a ridge, might have been droveways for moving stock from one area of pasture to another.[6] Recent re-appraisals[7] have rejected this suggestion and focussed instead on the idea that some of these earthworks may be territorial boundaries akin to the much longer " ranch boundaries " found on the plateau upland of Wessex. In particular, Fowler has produced convincing evidence of the role of bivallate cross-dykes (i.e. two parallel banks with a central ditch) as territorial boundaries along the Ebble-Nadder ridge in Wiltshire.[8] It is this writer's belief that many cross-dykes can be interpreted as means of demarcating areas of land both *within* and *at the edge of* territories. This second category includes dykes situated at the junction of contiguous territories.

(i) *Cross-dykes which may form the boundary of a territory.* The excavated dyke at Upper Beeding probably belongs in this category. Other examples are the two cross-dykes on Alfriston Down (Fig. 5B), each about 1km. from the Bronze Age settlement at Blackpatch. The dyke on Sullington Hill, West Sussex (NGR 094 125), 2km. north of Harrow Hill, may also be of this type.

These earthworks can perhaps be seen as a response to increasing population pressure; thus, in a given area, such dykes would become necessary at a time when most of the available land was already in use, and delineation of territory became increasingly important. In Sussex,

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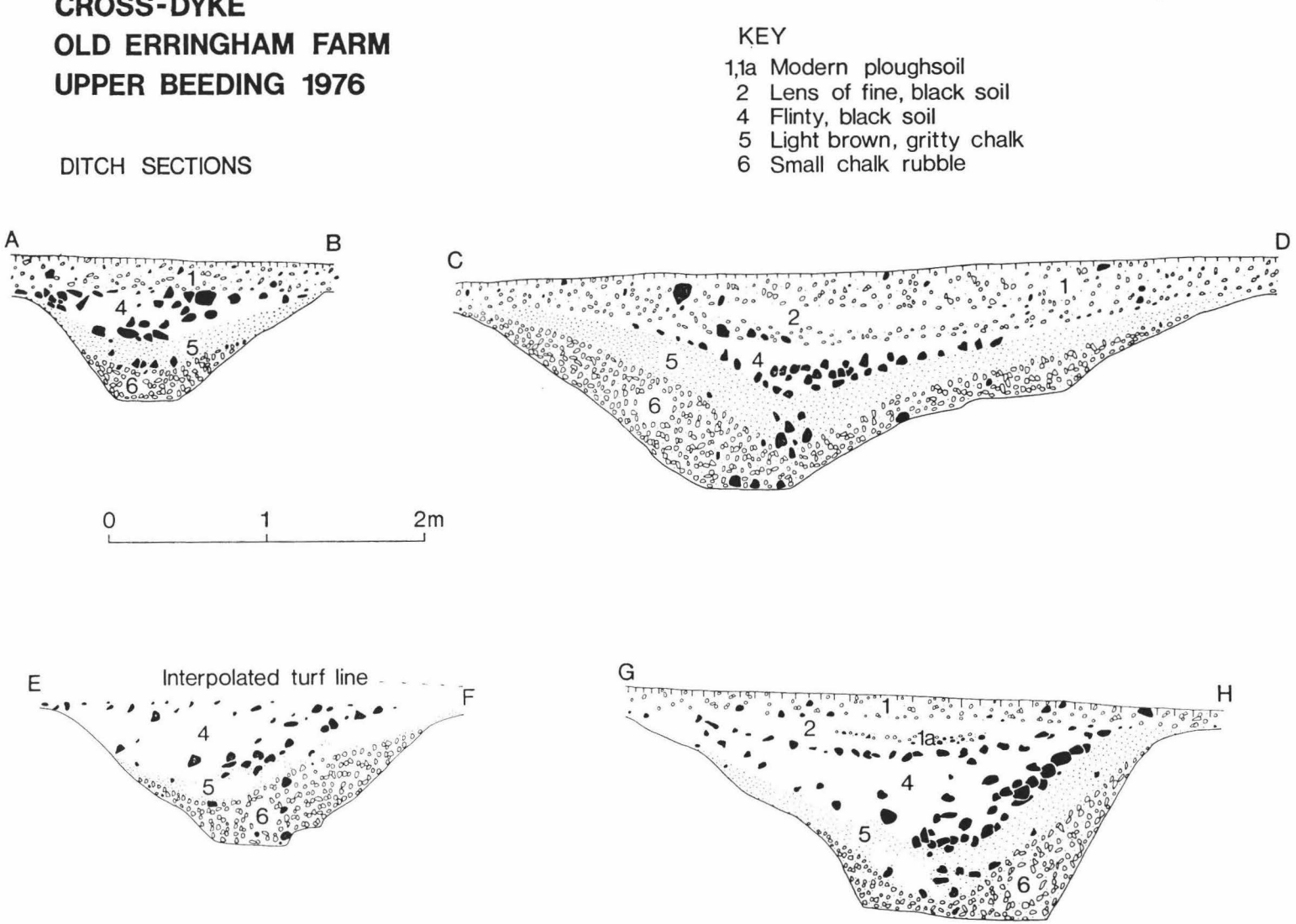

Fig. 4. Upper Beeding. Sections through cross-dyke ditch. Refer to Fig. 3 for location of sections

this is likely to have been in the later part of the Bronze Age, or early Iron Age, but could have been earlier in other parts of southern England.

It is unfortunate that Fowler's analysis of cross-dykes and settlements on the narrow Ebble-Nadder ridge,[1] with its more or less linear array of sites, cannot be extended to deal with the South Downs. The latter is a far broader chalk ridge with a considerably more complex pattern of sites.

(ii) *Cross-Dykes within a territory.* On Bow Hill, West Sussex, there are several examples of dykes which may delineate areas within a territory; two of these dykes form one side of small enclosures (Fig. 5C). At the Trundle, one of the dykes forms the inner boundary of a field system (Fig. 5D); Bradley has suggested that this type of earthwork separates arable land from infield pasture.[2] Similarly, at Itford Hill, a prominent cross-dyke forms the inner boundary of a series of fields (though the excavators were in favour of a Roman date for the field system).[3]

Without comparative evidence from large-scale excavations of other dykes, it is perhaps unwise to make generalisations from the reuslts of the excavation at Upper Beeding. One or two points are worth making, however. First, this earthwork, in which the shallowest parts of the ditch and feeblest parts of the bank correspond, cannot have presented a severe obstacle either to man or animals (unless reinforced by a substantial hedge along the top of the bank). Secondly, there is no obvious reason for the bend towards the southern end of the dyke; it does not cut off the spur any more effectively as a result. The answer to this problem may lie in some topographical factor present at the time when the dyke was being built, e.g. the extent of the woodland may have influenced the line.

The pottery (by Susan Morris, Institute of Archaeology, Oxford)

The total number of sherds, 32 in all, was too small a sample for conclusive dating; some of the more diagnostic sherds are illustrated in Fig. 6.

Area I; Layer 1.

Not illustrated; 1 sherd fine/medium flint grit fabric; 7 sherds fine grog with quartz sand fabric, including 1 shoulder sherd.

Area I; Section d; Layer 4.

1. Small upright rim, slightly rounded, vessel widens below rim, smooth surface, light brown, fine sand with grit fabric.

Not illustrated: 2 sherds fine/medium flint grit fabric; 5 sherds fine quartz sand with grit fabric; 3 sherds fine sand.

Area I; Section a; Layer 4.

2. Body sherd, with cordon or edge of rim, smooth surface; fine quartz sand fabric.

Not illustrated; 2 sherds fine flint grit; 2 sherds fine quartz sand.

Area I; Section b; Layer 5.

3. Rim sherd, narrow upright rim, profile thickens below rim; fine flint grit with quartz sand fabric.
4. Rim, flat top, upright, smooth finish, fine flint grit with quartz sand fabric.

Not illustrated; 1 sherd fine flint grit with quartz sand.

Area II; Layer 5.

5. Flat base, roughly smoothed surface, fine/medium flint grit with quartz sand.

Not illustrated: 2 sherds fine/medium flint grit with quartz sand; 1 sherd fine flint grit with sand; 1 sherd fine sand, vesiculated surface.

Discussion

The paucity of the sample makes analysis difficult. The sherds are largely undiagnostic, although the illustrated ones suggest an early date. The fabrics are generally fairly fine, particularly in the case of the illustrated sherds, and are usually well finished.

[1] P. J. Fowler, (1964), op. cit.

[2] R. J. Bradley, op. cit.

[3] G. P. Burstow and G. A. Holleyman, "Late Bronze Age Settlement on Itford Hill, Sussex," *Proceedings of the Prehistoric Society*, Vol. 23 (1957), pp. 167-212.

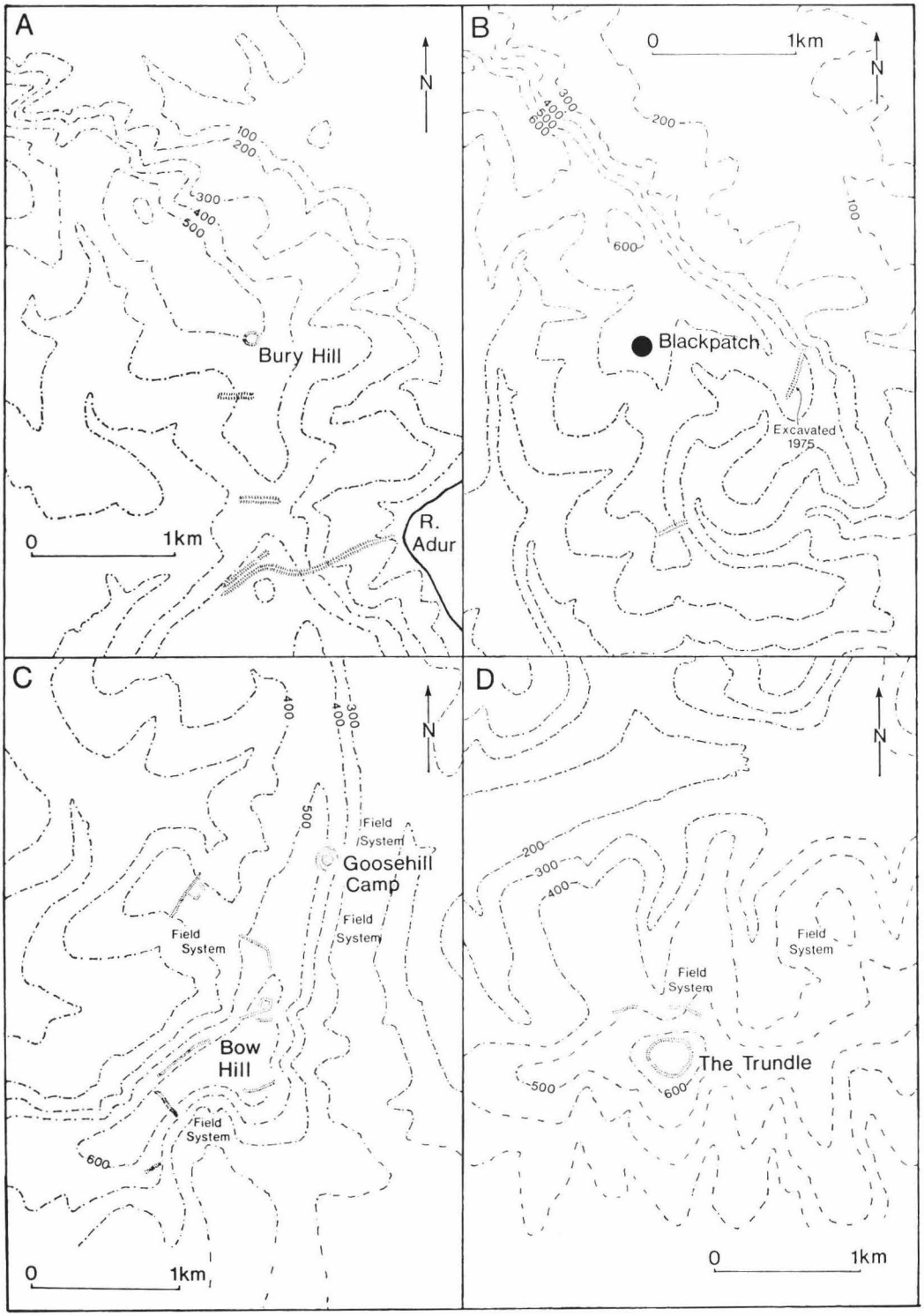

Fig. 5. Upper Beeding. Examples of the location of cross-dykes in relation to other sites and earthworks

The ditch may represent two periods, the earlier phase recognisable by the flint gritted ware and the simple upright profiles, and the later one by the finer fabrics and the more globular profile (Fig. 6). However, the phases may be extremely narrow, or possibly of consecutive or even contemporary date. The pottery probably belongs to the late sixth to fifth centuries B.C., although the forms represented may conceivably have continued in use into the early fourth century B.C. The proximity and comparability of material from this site, Slonk Hill and Thundersbarrow may suggest that the pottery from these sites all came from one source.

Further excavation of diagnostic pottery is needed to provide more specific evidence. The pottery is broadly comparable to several Sussex sites (usually in the early phases), e.g. Caburn,[1] Stoke Clump, Hollingbury,[2] and Torberry,[3] among others

Animal bones and marine molluscs.

A few fragments of animal bones and marine shells were found. These are as follows:

Layer 4: *Bos taurus;* 1 fragment of tibia
1 fragment of pelvis
Ovis aries; 1 fragment of upper molar
Mytilus edulis (mussel); 4 fragments.
Ostrea edulis (oyster); 1 valve

Layer 5: *Bos taurus;* 1 fragment of metacarpal
1 fragment of upper molar.

Acknowledgements

Thanks are due to the Blue Circle Cement Company for permission to excavate, and also for allowing excavators to use their canteen at the Shoreham works.

I am also grateful to those who helped on site; Martin Howe, Jill Craddock, Ray Hartridge, Alec Barr-Hamilton, Fred Witten, Brian Holmes, and Joyce Barry. I woud also like to thank Lys Drewett for Fig. 6, Fred Aldsworth for Fig. 2, and Sue Morris for examining the pottery. The finds have been deposited in Brighton Museum.

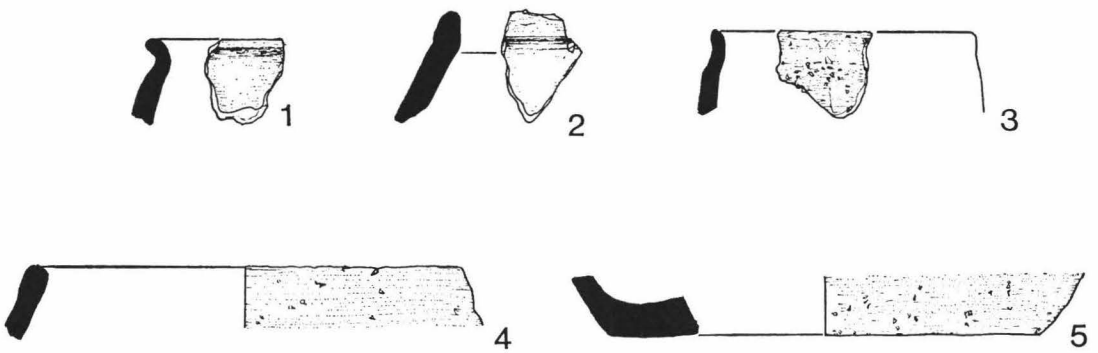

Fig. 6. Upper Beeding. Iron Age pottery (x¼)

The Society is grateful to the Department of the Environment for a generous grant towards the cost of publishing this paper.

1 E. Curwen and E. C. Curwen, "Excavations in the Caburn, near Lewes," *S.A.C.*, Vol. 68 (1927), pp. 1-56.

2 B. Cunliffe, "Stoke Clump, Hollingbury, and the Early Pre-Roman Iron Age in Sussex," *S.A.C.*, Vol. 104 1966), pp. 109-120.

3 B. Cunliffe, "Iron Age sites in Central Southern England," *CBA Research Report* No. 16 (1976).

EXCAVATIONS AT HARTING BEACON, WEST SUSSEX; SECOND SEASON 1977

by *Owen Bedwin, B.A., Ph.D.*

(With specialist reports by Sue Hamilton and Karen Petzoldt)

Two areas were excavated at Harting Beacon in 1977. First, the western entrance was re-excavated; it had previously been investigated, but no adequate report has been forthcoming. A pair of large entrance post holes was found, and the two ditch terminals excavated.

The second area (30 x 15 m) was inside the hill fort, adjacent to an area examined in 1976; only one pit and a post hole were found.

INTRODUCTION

Harting Beacon is a large, feebly-defended hill fort situated on the north edge of the South Downs. Its univallate earthwork encloses *c.* 10 hectares (24 acres). Most of the interior is ploughed every year; fieldwalking has shown a slight scatter of potsherds over the eastern half of the hill fort, with a faint concentration in the extreme south-east corner.

In 1976, about 1,300 m^2 were excavated in this corner (Fig. 1; Area I); three small pits, four four-post-hole structures and one six-post-hole structure were found (Bedwin 1977). A section was also cut through the southern defences of the hill fort (Fig. 1; Area II).

In 1977, it was decided to excavate another area within the south-east corner of the hill fort in order to trace the extent of the features found the previous year (Fig. 1; Area III). Secondly, the western entrance was re-excavated (Fig. 1; Area IV); this had already been the subject of excavation in the late 1940s, and it had been claimed that there was a Roman or late Iron Age re-cut in the ditch terminals, though no evidence was presented to justify this claim (Keef 1953). Since no sign of use or occupation of Harting Beacon during the late Iron Age or Roman period was forthcoming from the 1976 excavation, it was thought worthwhile to examine the western entrance once more.

Excavation was carried out for four weeks in September 1977. The archaeology of the area surrounding Harting Beacon, and previous finds from the hill fort are discussed in detail in the report on the first season's work (Bedwin 1977).

EXCAVATION

Area III (Plan; Fig. 2: Sections; Fig. 5)

The dimensions of this area were 30 by 15 m. Ploughsoil was removed by machine, and features cut into the chalk subsoil excavated. One shallow pit containing a few sherds of early Iron Age pottery, and a single small post hole were all that was found.

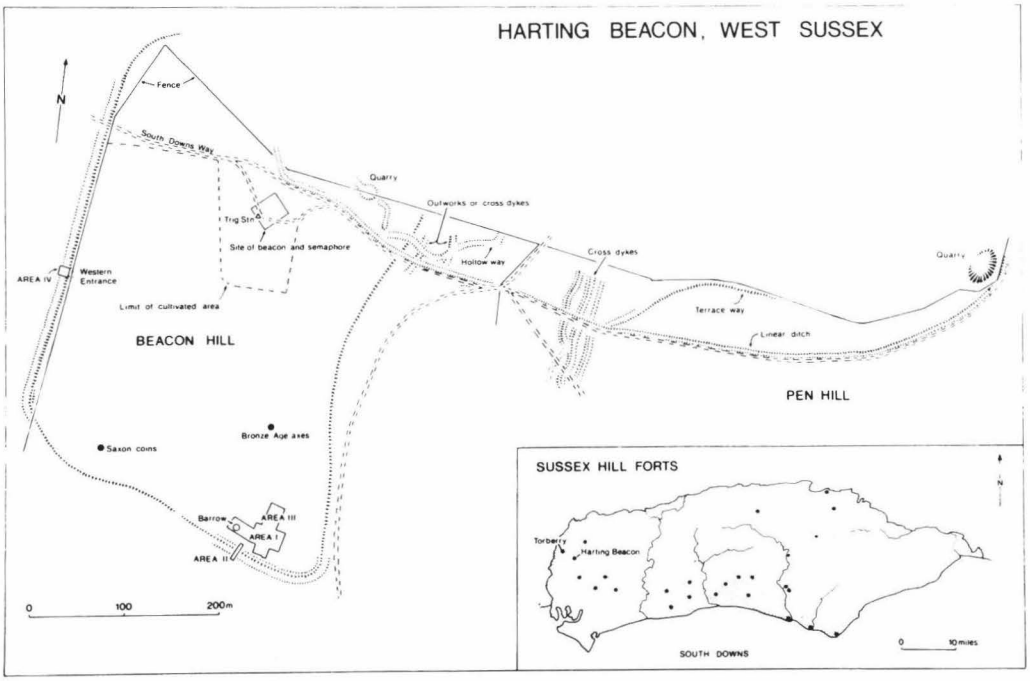

Fig. 1. Harting Beacon 1977. Site location. The plan of the hill fort is based on a survey by F. G. Aldsworth

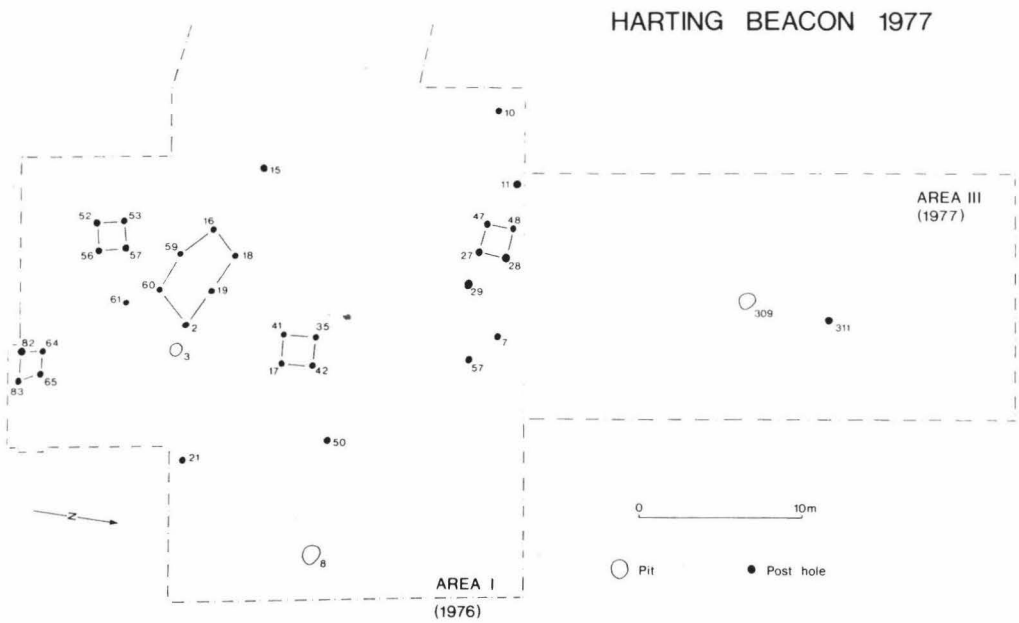

Fig. 2. Harting Beacon 1977. Plan of Areas I (1976) and III (1977)

Area IV (Plan; Fig. 3: Sections; Figs. 4 and 5)

This area, 12 by 10 m, was dug entirely by hand. Before excavation, it was covered by thick, coarse grass, with a few small gorse bushes, but the position of the entrance was nevertheless distinct as simple break in the rampart. A well-defined trackway runs diagonally up the steep hillside towards the entrance, terminating in a well-worn depression between the rampart terminals.

Removal of the topsoil (and also a little of the front edge of both rampart terminals) revealed four features. These were a pair of large entrance post holes, features 404 and 405, and the two ditch terminals.

The entrance post holes were substantial, oval features; the northern one was cut 55 cm into the chalk subsoil, the southern one, 70 cm. Both were over 1 m wide at the top, but only 60 cm across at the base. Both post holes had a sizeable, stepped shelf well above the bottom, and this may indicate a re-cut. The fill of the post holes was uninformative in this respect, consisting largely of domestic debris in a fine chalky matrix. This debris included early Iron Age pottery, animal bones, charcoal and, particularly in feature 404, several large fragments of saddle quern. All this was presumably deposited after removal of the entrance posts.

A length of about 2.5 m of each ditch terminal was uncovered; their shapes differed considerably. The southern terminal was wide and square-ended, whereas the northern terminal had a narrow, sharply-rounded end. It is likely that the latter was shaped to accommodate the track running diagonally up the hill side to the entrance.

The extreme ends of both ditch terminals contained the backfill of the previous excavator (Keef 1953). The undisturbed fill in both terminals nevertheless showed clear evidence of a shallow, incomplete re-cut (Fig. 4). This was especially noticeable in the southern terminal, where the original silting was virtually sterile, but the re-cut contained considerable amounts of pottery, animal bone and antler, and also a human skull, lying on its left side.

The pottery from the original silting (layer 9 in Fig. 4), and also from the re-cut (layers 8 and 8A in Fig. 4), falls into Cunliffe's 'Kimmeridge-Caburn' category, dating to the sixth and fifth centuries B.C. (Cunliffe 1974). Pottery of no other date was found. Other finds from Area IV were a chalk loomweight (Fig. 7.16), a bronze horse ornament (Fig. 7.15), and a fragment of a small, baked clay spindle whorl (Fig. 7.14).

No post holes were found beneath the front edge of the rampart material (cf. the two post holes found below the front of the rampart in Area II in 1976). Given that the rampart material may have slumped considerably from its original position, this should not be taken as unequivocal evidence for the absence of post holes here.

DISCUSSION

Area IV

The results from this area confirm the findings of the 1976 excavation, dating the hill fort to the early Iron Age. This contradicts the claims of Miss P. A. M. Keef, who had previously identified the re-cut, but dated it to the late Iron Age or Roman period (Keef 1953). Since no pottery has been published in support of this claim, it is difficult to assess.

On our present understanding, pottery from both the re-cut and the original silts in the ditch terminals is assigned to the early Iron Age (sixth and fifth centuries B.C.) and suggests a fairly short life for the hill fort.

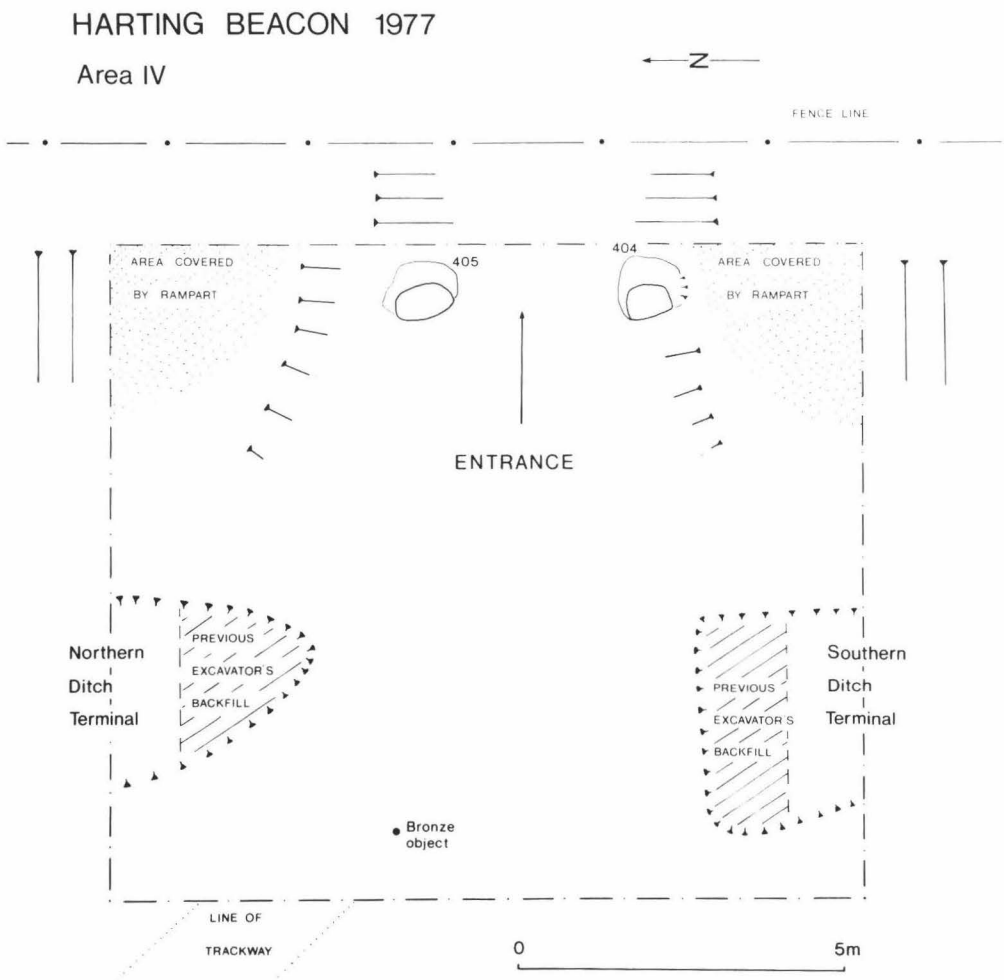

Fig. 3. Harting Beacon 1977. Plan of Area IV, the western entrance

During Miss Keef's excavations in the 1940s, two small penannular gold rings were found in the northern ditch terminal, though the exact context is not entirely clear (Keef 1953). It was originally suggested by Gordon Childe that these were of late Bronze Age date, though without excluding the possibility of an early Iron Age date. It now seems likely from the 1977 excavations that these gold rings were deposited with early Iron Age pottery. (Of course, there still remains the possibility that these gold rings may have been precious items, somewhat in the manner of family heirlooms, in which case the date of manufacture could have preceded deposition by a considerable margin.)

The fill of the entrance post holes and of the re-cuts in the ditch terminals were very similar in appearance, texture, and content (i.e. with much domestic debris). One other finding links these features; the human skull found in the southern ditch terminal lacked six front teeth. Two human teeth were found in post hole 404, and one human tooth in post hole 405. These corresponded to three of the teeth missing from the skull, and would strongly suggest that the entrance post holes and the ditch re-cuts were filled at the same time. This would most logically represent one of the final acts in the occupation/use of the hill fort; i.e. dismantling the gate posts, and clearing the site, with rubbish being thrown into the now empty post holes and the ditch re-cuts. On this interpretation, the re-cutting of the ditch terminals has no defensive significance; it is more likely that the re-cuts are simply rubbish pits cut into a partially silted up ditch. (It should be remembered that no such re-cut was seen in a section through the southern defences in 1976 (Fig. 1; Area II).)

Area III

The findings from this area in 1977 imply that features such as the four-post-hole structures and the six-post-hole structure found in 1976 nucleate just inside the southern rampart, in the eastern corner of the hill fort.

Harting Beacon and the early Iron Age

The role of Harting Beacon is still not conclusively established; the most plausible function remains that of a stock enclosure. The evidence, largely circumstantial, in support of this is summarised as follows;

(i) Although the hill fort is a large one, features such as four-post-hole structures seem to be limited to a small area in the south-east corner. A considerable part of the interior may therefore be 'empty' of archaeological features.

(ii) No Celtic fields are known nearby, and the hill fort is located in the most marginal of Downland situations, namely on top of the scarp slope, where the topsoil is thin and the site extremely exposed.

(iii) Analysis of molluscs from the silts in the southern ditch terminal indicates that, during the period of its use or occupation, Harting Beacon (or at least the area around its entrance) was free of severe human disturbance (report below).

Some domestic activities undoubtedly were carried out at Harting; these are indicated by the finding of a loomweight, two spindle whorls, and some quernstone fragments during the two seasons' excavations. Given the extent of the excavated area, however, these reflect only a low level of activity, and do not suggest occupation of the site on any scale.

No contemporary settlement sites on the Downs near Harting Beacon are known; the nearest Iron Age settlement is a rather unusual group of 'hut shelters' terraced into the steep northern slope of Harting Hill, about two kilometres to the west (Keef 1950). The exact status of these hut shelters is difficult to evaluate, and certainly it seems an unlikely spot for permanent settlement. The pottery from the two excavated shelters is a little later than the Harting Beacon material, and is contemporary with the early part of the site at Torberry (Cunliffe 1976).

In the absence of known contemporary settlements on the Downs, it may be profitable to consider Harting Beacon, not just in the context of the Downland, but as a site which may be linked to the Weald. Harting Beacon lies on the very north edge of the Downs; as a stock enclosure, perhaps in only seasonal use, it could be used as a focus for upland grazing by communities living at the foot of the Downs, in particular exploiting the excellent arable land on the Upper Greensand

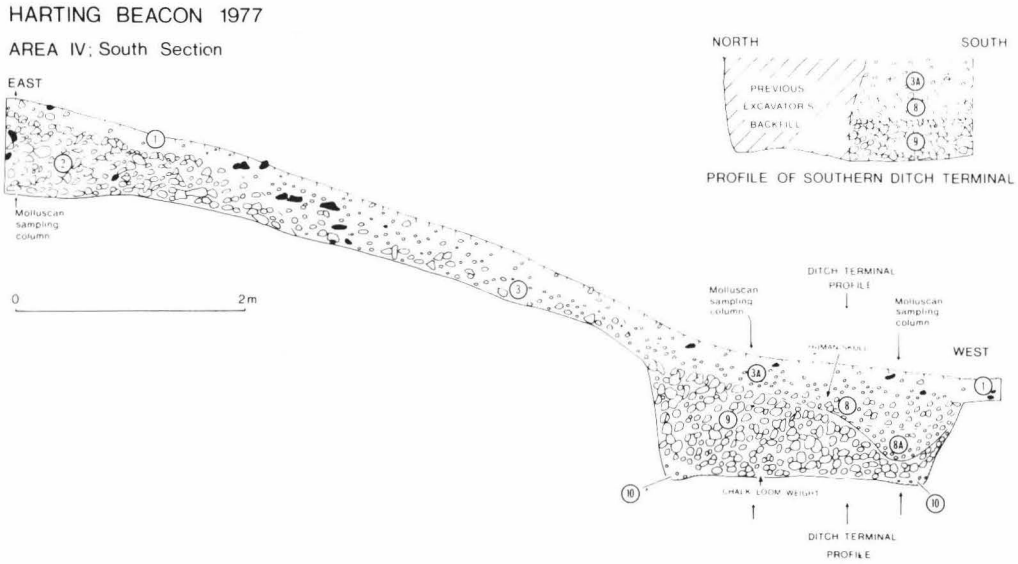

Fig. 4. Harting Beacon 1977. Southern section of Area IV. Find spots of the human skull and the loomweight are projected onto the ditch terminal section. Key to layers; 1. Dark rooty topsoil. 2, Large chalk rubble. 3. Loose chalk rubble in light brown soil matrix. 3a. Small chalk grit in dark brown soil matrix. 8. Large chalk lumps in sticky mid-brown fill. 8a. Small chalk lumps in soft mid-brown fill. 9. Clean large chalk rubble. 10. Fine chalk mud

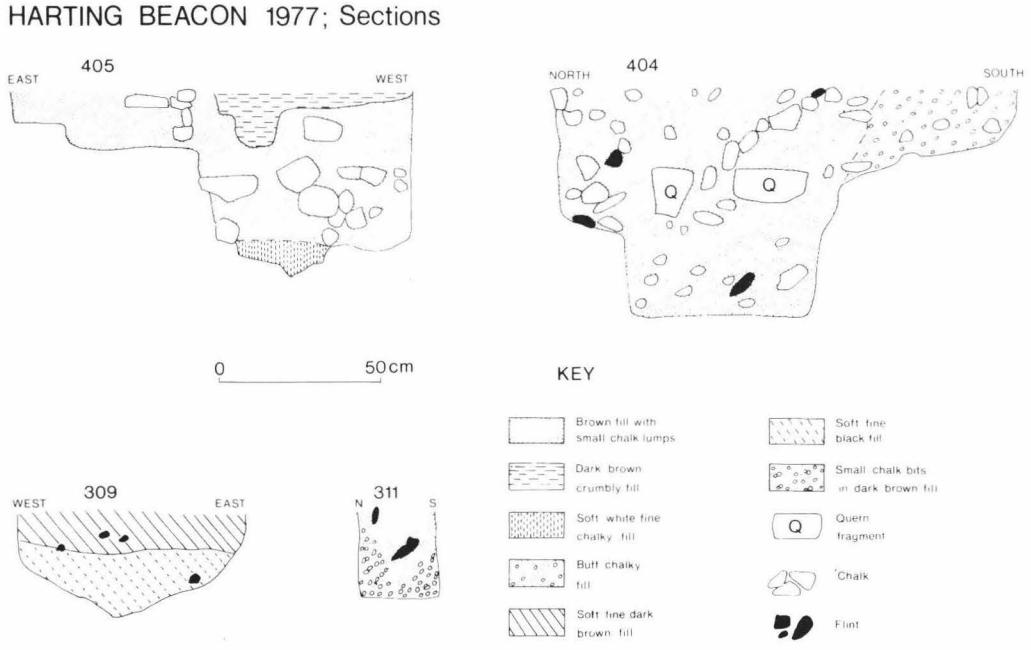

Fig. 5. Harting Beacon 1977. Sections

bench. Indeed, this idea could be extended to cover other hill forts on the northern edge of the Downs. The main drawback to this argument lies in the lack of known Iron Age sites at the foot of the Downs. However, any Iron Age site on the Upper Greensand would almost inevitably have been ploughed away over the years, and may now only be located with difficulty. Certainly, during the excavation of the Romano-British site at Elsted in 1975, a few sherds of Iron Age bead rim pottery were found, though there were no Iron Age features (M. Millett, pers. comm.).

SPECIALIST REPORTS

The Iron Age Pottery (Sue Hamilton; Institute of Archaeology, London)

Introduction

Two hundred and eighty five sherds were recovered during the 1977 excavation. These are similar and supplementary to the 1,092 recovered during excavation in 1976 (Morris 1977). Both can be assigned to the early Iron Age.

Fabric Analysis

With the exception of three grog-tempered sherds from the topsoil, the supplementary collection totally comprised calcined flint-gritted wares. These can be most closely related to those designated Fabric 1 by Morris (1977). The same method of fabric analysis was used as described for Chanctonbury Ring (Hamilton 1980). Segments on pie charts (Figs. 6 and 7) indicate visually the relative presence of inclusions for certain sampled vessels/sherds. The number of inclusions for each one gram sample is noted in the centre of each pie chart. Higher counts generally indicate smaller inclusions.

Sherds were grouped by fabric as follows:

Flint Gritted Wares (where flint represents over 60% of inclusions)

Coarser Wares:

Fabric 1 (4%)

Coarse-gritted: includes very coarse grits (4-6 mm).

Fabrics 2a and 2b (69 and 11%)

Medium coarse-gritted; includes medium (1-2 mm) and coarse (2-4 mm) grits, and is subdivided into 2a (frequent inclusions) and 2b (infrequent inclusions).

Finer Wares:

Fabrics 3a and 3b (6 and 9%)

Fine-gritted; having exclusively fine (0.5-1 mm) and very fine (0.2-0.5 mm) grits, and subdivided into 3a (frequent inclusions) and 3b (less frequent inclusions).

Other Wares:

Fabric 4 (1%)

Grog and flint ware (Morris 1977; Fabric 3). Major inclusions comprise grog (60%) and fine flint (20%).

The coarser flint wares are variable in size and abundance of gritting. The finer flint wares, however, indicate a conscious selective use of exclusively fine grits. Such a separation between coarse and fine is commonly noted with flint-tempered wares (e.g. Chanctonbury Ring; Hamilton 1980).

Forms and decoration

All wares are variable in their degree of oxidation. Bowl forms are more often oxidised and jars often reduced. Vessel 1 (Fig. 6) is totally black and is unique among the sherds in being burnished. The finer wares are notably thinner-walled, their sections averaging 5 mm.

Coarser ware forms comprise shouldered jars with concave necks (Figs. 6.3 and 10), a bag-shaped jar (Fig. 6.1), and bipartite bowls (Fig. 6.7, 8 and 9) and a small furrowed bowl (Fig. 6.11). Shoulders and rims are often decorated with oblique finger (Fig. 6.3 and 10) and fingernail (Fig. 6.7 and 8; Fig. 7.12) impressions.

In both fabric and style, sherds concur with the 1976 Harting assemblage. The affinities of the latter with other Sussex early Iron Age material (e.g. the Caburn, Stoke Clump, and Hollingbury) have been noted (Morris 1977). The assemblage is assigned to Cunliffe's early Iron Age 'Kimmeridge-Caburn' style group with a probable date range from sixth to fifth centuries B.C. (Cunliffe 1974; p. 33 and Fig. A3). The assemblage further stands comparison with that from Chanctonbury Ring (Hamilton 1980).

Tables

Tables 1 and 2 summarise fabrics and diagnostic sherds found in each feature.

Feature 309 is a shallow pit which contained three scraps of undiagnostic pottery. Features 404 and 405, large entrance post holes, shared pottery of the same fabric and included a few diagnostic sherds. The ditch silts contained pottery in the original silting of the north terminal (layer 9) and the southern re-cut (layer 8) only. Sherds in the northern

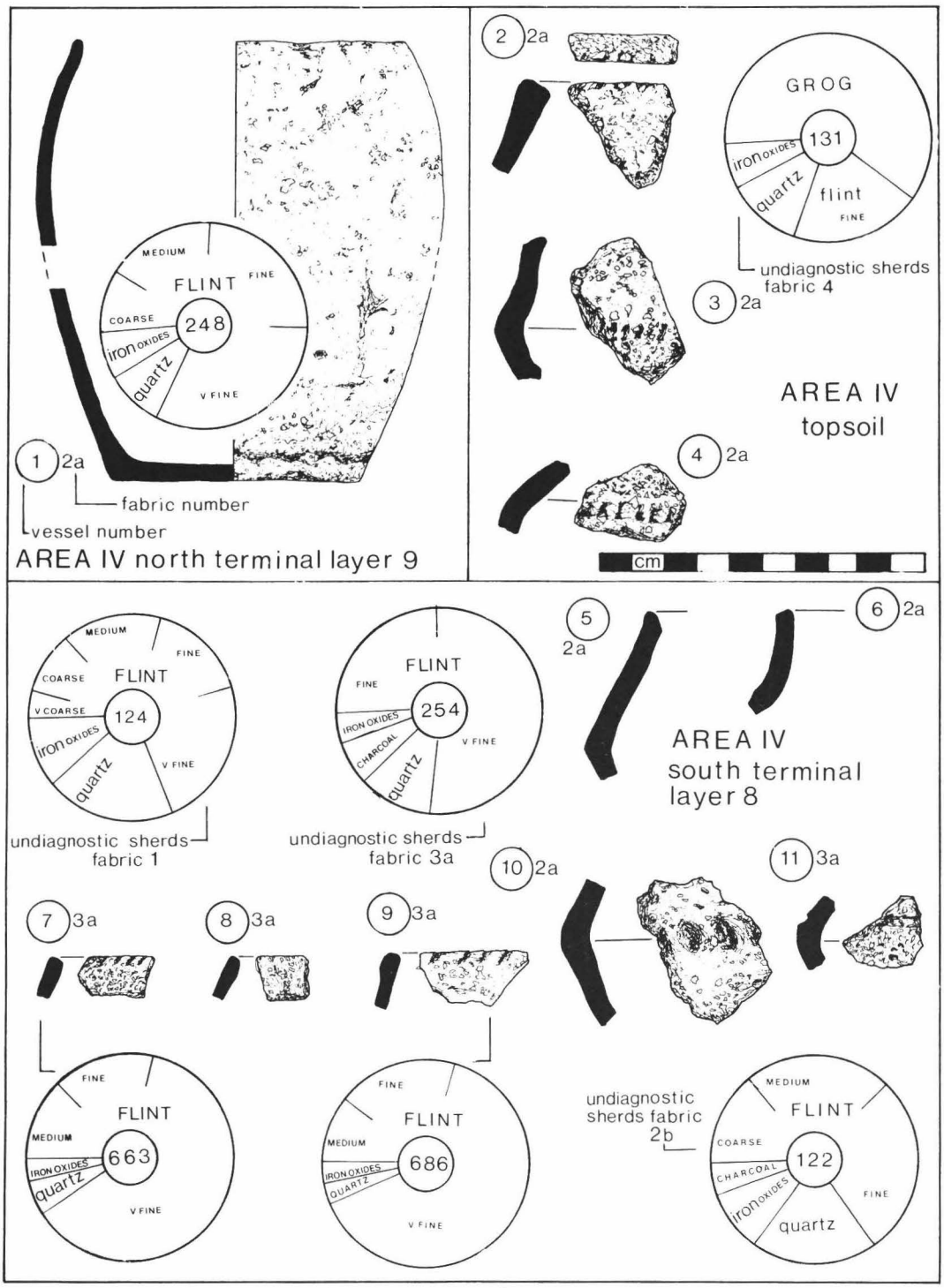

Fig. 6. Harting Beacon 1977. Iron Age pottery. Note reduction is to about half scale

terminal comprised a single three-quarter complete vessel (Fig. 6.1). Sherds in the southern re-cut were plentiful and included evidence of bipartite bowls and shouldered jars (Fig. 6.5-11). The pottery from this re-cut mirrors the rest of the assemblage and likewise dates to the early Iron Age.

The pottery analysed (from the 1977 excavation) contained common inclusions which could not alone indicate source. Harting Beacon shares a similar geological setting with Chanctonbury Ring, on the north side of the South Downs and having access to the Weald. Again, it would seem likely that the Gault and other Wealden clay-bearing strata were being exploited, rather than the thin and barely viable Clay-with-flints deposits of the surrounding Downland (see Chanctonbury Ring; Hamilton 1980, for further discussion). The wares analysed showed no clear indication of differentiation of source. Morris's Fabrics 4, 5 and 6 (a small number of sherds with sand inclusions; Morris 1977) indicate, however, that for the assemblage as a whole, there was a degree of variation in the strata exploited.

Small finds

(a) Conical bronze object with embossed ring at the top, and an iron spike at the base (Fig. 7.15). Length, including the spike, 4.7 cm; maximum width 1.3 cm. There were faint traces of gilding on the ring at the top. Found in the topsoil in Area IV (Fig. 3). It is probably a horse harness ornament of the early Iron Age.
(b) Chalk loomweight (Fig. 7.16). Diameter 9.0 cm. Circular, with central perforation, clearly made by boring in from opposite sides. The edges were rather battered. Found resting on the floor of the southern ditch terminal.

Foreign Stone (Identifications by Caroline Cartwright)

Eight large fragments of quernstone were found in feature 404; these were identified as a brownish-grey micaceous sandstone from a Wealden source. There was in addition a fragment of porphyritic granite, probably from Cornwall, in the topsoil in Area IV.

Charcoals (Identification by Caroline Cartwright)

Feature 309; *Crataegus sp.* (hawthorn)
Feature 404; *Quercus sp.* (oak)
Feature 405; *Ulex sp.* (gorse), *Corylus sp.* (hazel), *Crataegus sp.*
Southern ditch terminal, layer 8; *Quercus sp.* and *Crataegus sp.*

Human remains

One human skull, lying on its left side, was found in the upper fill of the southern ditch terminal in Area IV (Fig. 4, layer 8). The skull was complete, although part of the right side of the cranium was broken into several fragments which had collapsed into the skull cavity. The mandible was found about 8 cm away, a little lower in the same deposit. Age at death was 30-40 years. The robustness of the skull suggests that it was a male.

Six teeth were missing from the mandible and maxilla of this skull; these were four incisors and two canines. It is therefore interesting that in the post hole, feature 404, two human teeth were found (one incisor and one canine), and in the post hole, feature 405, one incisor was found. The appearance of each of these teeth was compatible with having come from the skull in the ditch terminal, and if they are all derived from the same individual, this would suggest that the re-cutting of the ditch terminals and the filling of the entrance post holes with domestic rubbish took place at the same time.

Animal remains

The fill of the re-cut in the southern ditch terminal and the two entrance post holes all contained some animal bone. Details are summarised below:

Southern ditch terminal, layer 8
The following remains were present (all the bones were fragmentary)
Ovis; 1 mandible, 2 tibiae, 3 radii, 1 humerus, 2 metatarsals, 1 scapula, 2 skull fragments, 8 teeth (1 deciduous). (Total; 20)
Bos; 1 tibiae, 2 femora, 2 humeri, 1 scapula, 1 pelvis, 1 skull fragment, 1 horn fragment, 1 tooth. (Total; 11)
Sus; 1 humerus, 1 astragalus, 2 scapulae, 4 mandibles, 1 maxilla, 4 teeth. (Total; 13)
Equus; 1 tibia, 1 fibula, 1 incisor. (Total; 3)
Cervus elaphus (red deer); 1 mandible, 1 metatarsal, 2 (large) antler fragments. (Total; 4)

Feature 404 (all bones were fragmentary)
Ovis; 1 radius, 1 skull fragment, 2 teeth. (Total; 4)
Bos; 1 tibia, 1 pelvis. (Total; 2)
Sus; 1 scapula.
Equus; 1 tooth.

Feature 405
Ovis; 1 first phalange, 5 teeth. (Total; 6)
Sus; 1 tusk (very large; probably from a wild boar).

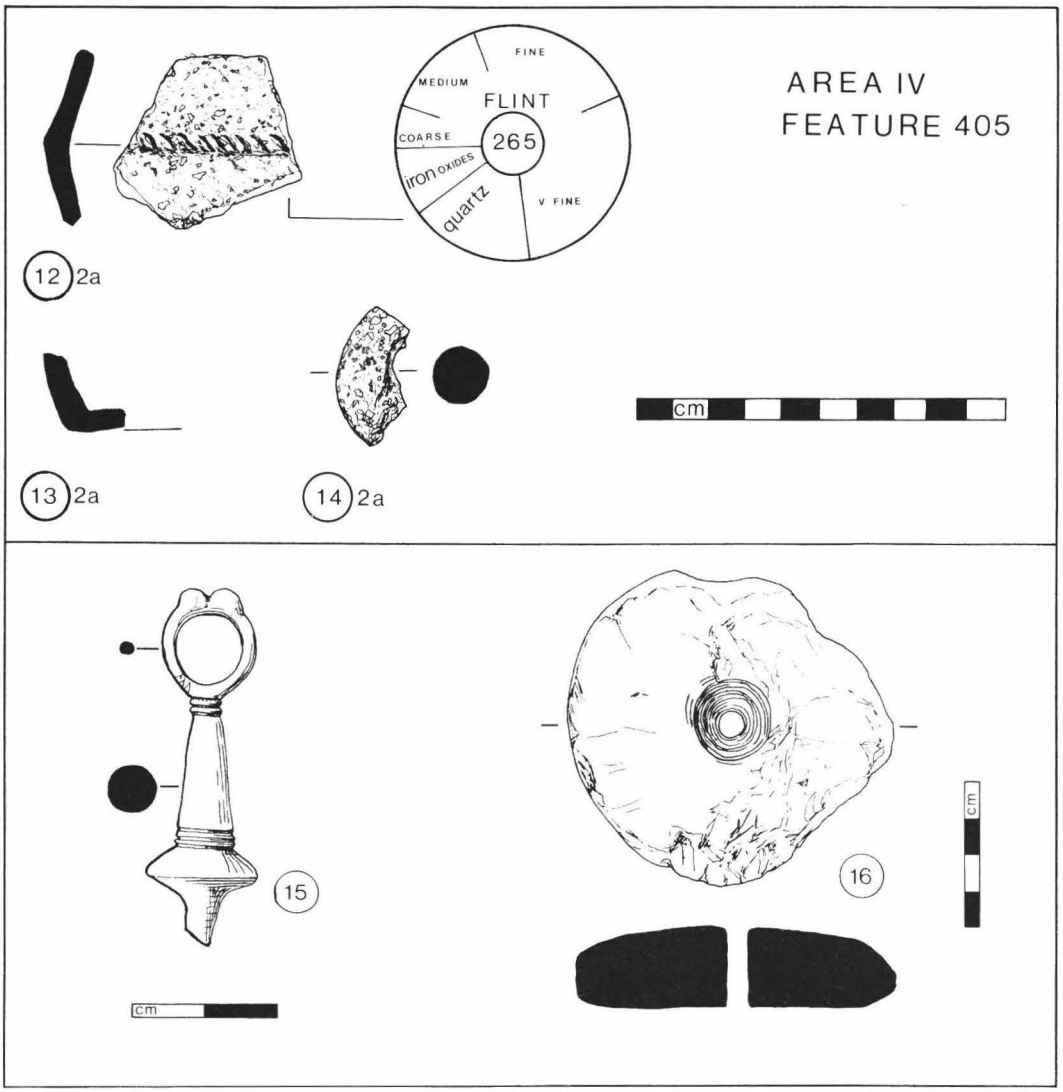

Fig. 7. Harting Beacon 1977. Iron Age pottery, bronze horse ornament and chalk loomweight. Note different scales

The common domesticated animals are all present, with the exception of *Canis*. The animal remains found in 1977, together with those from 1976 tell us, not unexpectedly, that the diet consisted of sheep, cattle and pig. In terms of numbers, sheep predominate, though because there is a greater weight of meat on a *Bos* carcase than on an *Ovis* carcase, it is likely that beef and mutton/lamb were of similar importance in the diet. The small number of red deer remains and the probable wild boar's tusk suggest that hunting was practised, but did not contribute greatly to the food supply.

Molluscan analysis (Karen Petzoldt)

Method

A series of samples was taken from the fill of the southern ditch terminal at *c.* 10 cm intervals in a column from the base of the ditch upwards. Spot samples were also taken from the primary silts in each corner of the ditch. A series of samples, in a column, was taken from the body of the rampart (Fig. 4 shows the position of these sampling columns).

Results

These are presented in Tables 3-5. The presence of non-apical fragments of species not otherwise represented in the samples is indicated by a plus sign. Non-apical fragments are not included in the percentage calculations.

Interpretation

The rampart The samples from the rampart material contained an unusually rich assemblage of snails apparently mixed in composition. The marked predominance of *Vitrea* species, *Discus rotundatus* and *Oxychilus* species suggest the presence of a rock rubble element in the assemblage. The rampart could have remained bare of vegetation and its constituent chalk rubble loosely packed for long enough to permit colonisation by rock rubble species. Alternatively, it is possible that the entire assemblage was derived from the rampart surface and incorporated into the rampart rubble by down-washing and/or earthworm activity. Taken as a whole, the snail assemblage is indicative of moist, rich, grassy vegetation, and local conditions free from intensive grazing or cultivation.

The ditch The snail fauna from the primary silt of the ditch (layer 10) is a specialised one and contained only two species in marked abundance. This unique sub-fossil fauna resembles faunas from modern 'transitory' grassland habitats. (Such faunas have been recognised and defined by Cameron and Morgan-Huws (1976). They have studied a series of modern grassland sites in the vicinity of Beacon Hill which represent early stages in the succession of grazed grassland to scrub. Faunas from the wetter, more vegetated sites are characterised by a predominance of *Aegopinella pura, Vitrea contracta,* and *Carychium tridentatum.)* The fauna from the primary silts at Harting Beacon resembles these modern faunas in being dominated by *Vitrea* species and *Carychium* species (Table 5). The fauna is indicative of moist, overgrown grassland, free from severe human disturbance.

The secondary fill of the ditch (layer 9) contains a rich snail assemblage dominated by shade-loving species, reflecting the favourable local conditions in the ditch. Together with the presence of what seem to be 'anthropophobic' species *(Helicodonta obvoluta* and *Acicula fusca)* this suggests that the local environment around the ditch was not affected by severe human disturbance.

The re-cut (layers 8 and 8A) was dug into the original secondary fill. The lower layer of the re-cut (layer 8A) contains a rich, sub-fossil snail assemblage very similar to that of the original secondary fill from which it must have derived. The upper layer of the re-cut (layer 8) contains very few shells, which is consistent with it being a rubbish deposit. The original secondary fill (layer 9) contains a number of open country species not recognised in the same layer in the middle of the ditch. These snails probably fell into the deposits from the lip of the ditch, and suggest that the local environment immediately surrounding the ditch was one of open grassland, but not of dry short-turfed grassland, for reasons already given.

Summary

The local Iron Age environment of the hill fort defences possibly supported moist, overgrown, grassy vegetation interrupted by patches of bare ground which could have been created by trampling. There is no indication that intensive grazing or cultivation was being practised in the vicinity of the defences.

Radiocarbon dates

Two carbon-14 dates for material from Harting Beacon have been provided by A.E.R.E., Harwell. Details are as follows;

HAR-2411; The human skull from the southern ditch terminal. 270 ± 80 b.c. This is very similar to one of the early Iron Age radiocarbon dates from Bishopstone (Bell 1977).

HAR-2207; Bones from the disturbed skeleton found in the burial beneath the barrow at SU 8067 1804 during the 1976 excavation. a.d. 800 ± 70. This indicates, as expected, that the barrow, just inside the southern edge of the hill fort, is a Saxon one.

ACKNOWLEDGEMENTS

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Thanks are also due to those who helped on site; Janice Cook, Maurice Smith, Ian Bell, Anne Jackson, James Richardson, Susan Schreiber, Alex Holmes, and Peter Pritchard. I am also grateful to F. G. Aldsworth for surveying the hill fort, to Lys Drewett for Figs. 6 and 7, and to Sue Hamilton and Karen Petzoldt for specialist reports.

The finds are in Chichester Museum.

TABLE 1. Sherd weights and counts for each stratum/feature and fabric

Area	Stratum/ Feature	Fabrics 1	2a	2b	3a	3b	4	Total
III	309	—	3	—	—	—	—	3
IV	Topsoil	7	41	11	—	—	3	62
IV	405	—	18	—	5	—	—	23
IV	405	—	11	—	1	—	—	12
IV	Layer 8	5	96	20	19	17	—	157
IV	Layer 9	—	28	—	—	—	—	28
Total no.		12	197	31	25	17	3	285
Total weight (gm)		214	1,063	131	80	57	5	1,550
% no.		4.22	69.12	10.88	8.77	5.96	1.05	100
% wt. (gm)		13.81	68.58	8.45	5.16	3.68	0.32	100

TABLE 2. Incidence of diagnostic sherds for each stratum/feature

Area	Stratum/ Feature	Bag shaped vessel	Decorated shoulder, jar	Rim, shouldered vessel	Flat base	Plain bipartite bowl	Deco'd shoulder, bipartite bowl	Deco'd rim, bipartite bowl	Plain rim, bipartite bowl	Shoulder, furrowed bowl
IV	Topsoil	—	2	1	1	1	8	—	—	—
IV	404	—	—	—	3	—	—	—	—	—
IV	405	—	—	—	—	—	1	—	—	—
IV	Layer 8	—	1	1	3	3	5	2	1	1
IV	Layer 9	1	—	—	—	—	—	—	—	—
Fabric		2a	2a	2a	2a	2a	2a	3a	3a	3a
Illustrated examples		1	3 10	2	13	5 6	4 12	7 9	8	11

TABLE 3. The Mollusca from Harting Beacon Rampart

	Samples-depth from modern land surface (cm)		
	5-15	25-35	50-60
Dry weight of sample (kg)	1.93	2.66	1.56
Pomatias elegans (Müller)	2	13	7
Acicula fusca (Montagu)	—	1	1
Carychium spp.	—	16	24
Cochlicopa spp.	3	1	3
Vertigo pygmaea (Draparnaud)	1	1	2
Pupilla muscorum (Linnaeus)	6	12	23
Vallonia costata (Müller)	6	—	—
Vallonia cf. pulchella (Müller)	—	—	2
Vallonia excentrica (Sterki)	—	3	5
Vallonia spp.	—	2	5
Discus rotundatus (Müller)	13	64	67
Vitrina pellucida (Müller)	2	2	7
Vitrea spp.	3	80	70
Nesovitrea hammonis (Ström)	1	—	2
Aegopinella pura (Alder)	—	6	2
Aegopinella nitidula (Draparnaud)	—	2	
Oxychilus spp.	1	41	34
Deroceras spp.	1	3	1
Cecilioides acicula (Müller)	—	1	—
Macrogastra rolphii (Turton)	—	1	—
Clausilia bidentata (Ström)	1	—	—
Balea perversa (Linnaeus)	—	—	1
Trichia striolata (C. Pfeiffer)	1	12	4
Trichia hispida (Linnaeus)	3	28	3
Cepaea spp.	+	4	4
Helix aspersa (Müller)	—	—	3
Cochlodina laminata (Montagu)	—	—	1
Unidentified individuals	6	17	22
TOTALS*	50	309	293
Snails/kg of deposit*	26	116	188
Per cent shade-loving species	44	73	73
Per cent catholic species	18	16	6
Per cent open-country species	26	6	14

*Excluding *Cecilioides acicula*

TABLE 4. The Mollusca from Harting Beacon Ditch

	Samples-depth below modern land surface (cm)				
	5-15	20-30	40-50	50-60	70-80
Dry weight of sample (kg)	1.89	1.63	1.96	1.80	1.95
Pomatius elegans (Müller)	1	2	7	2	3
Acicula fusca (Montagu)	—	—	5	3	17
Carychium spp.	—	2	35	81	116
Cochlicopa spp.	9	1	12	9	3
Vertigo pygmaea (Draparnaud)	5	3	—	—	—
Pupilla muscorum (Linnaeus)	10	5	5	1	—
Vallonia costata (Müller)	23	—	—	—	—
Vallonia cf. pulchella (Müller)	1	1	2	—	—
Vallonia excentrica (Sterki)	1	—	—	—	—
Acanthinula aculeata (Müller)	—	—	1	—	3
Ena obscura (Müller)	—	1	1	—	—
Punctum pygmaeum (Draparnaud)	—	—	—	—	1
Discus rotundatus (Müller)	1	6	63	27	45
Vitrina pellucida (Müller)	1	1	15	2	4
Vitrea spp.	3	—	37	39	58
Nesovitrea hammonis (Ström)	1	—	—	—	—
Aegopinella pura (Alder)	—	1	69	49	33
Aegopinella nitidula (Draparnaud)	—	—	42	27	7
Oxychilus spp.	—	—	14	8	4
Deroceras spp.	2	—	—	—	—
Cecilioides acicula (Müller)	3	—	—	—	—
Cochlodina laminata (Montagu)	—	3	3	4	2
Macrogastra rolphii (Turton)	1	1	2	1	—
Clausilia bidentata (Ström)	—	1	4	1	2
Balea Perversa (Linnaeus)	—	1	1	—	—
Trichia striolata (C. Pfeiffer)	5	4	5	3	2
Trichia hispida (Linnaeus)	1	1	28	12	21
Helicodonta obvoluta (Müller)	—	—	4	2	2
Arianta arbustorum (Linnaeus)	—	—	+	—	—
Cepaea spp.	+	3	3	+	+
Helix aspersa (Müller)	1	—	1	—	—
Unidentified individuals	5	2	12	3	22
TOTALS*	71	38	371	274	345
Snails/kg of deposit*	38	23	189	152	177
Per cent shade-loving species	17	55	81	90	86
Per cent catholic species	18	16	13	8	8
Per cent open-country species	56	24	2	0.4	—

*Excluding *Cecilioides acicula*

TABLE 5. The Mollusca from Harting Beacon Ditch: Re-cut and Primary Silts

	Samples-depth below modern land surface				
	Recut area of ditch (cm)			Primary silts	
	23-33	44-54	59-69	55-65	83-103
Dry weight of sample (kg)	2.12	1.79	1.69	2.39	2.12
Pomatius elegans (Müller)	5	12	10	3	0
Acicula fusca (Montagu)	—	7	10	1	—
Carychium spp.	8	98	180	67	2
Cochlicopa spp.	2	7	10	2	1
Vertigo pygmaea (Draparnaud)	—	2	9	1	—
Pupilla muscorum (Linnaeus)	2	3	8	2	—
Vallonia costata (Müller)	—	—	—	1	1
Vallonia cf. pulchella (Müller)	—	—	—	2	—
Vallonia excentrica (Sterki)	—	—	1	—	2
Vallonia spp.	—	2	1	1	—
Acanthinula aculeata (Müller)	—	2	1	—	—
Ena obscura (Müller)	5	—	—	—	—
Punctum pygmaeum (Draparnaud)	—	—	1	—	—
Discus rotundatus (Müller)	22	47	29	6	—
Vitrina pellucida (Müller)	3	23	14	1	1
Vitrea spp.	3	39	65	32	5
Nesovitrea hammonis (Ström)	—	5	2	—	—
Aegopinella pura (Alder)	4	47	42	6	—
Aegopinella nitidula (Draparnaud)	6	30	10	1	1
Oxychilus spp.	2	16	10	4	2
Deroceras spp.	1	1	1	—	—
Cecilioides acicula (Müller)	1	—	—	—	—
Cochlodina laminata (Montagu)	2	3	1	—	—
Macrogastra rolphii (Turton)	4	1	2	—	—
Cochlicella acuta (Müller)	—	—	1	—	—
Trichia striolata (C. Pfeiffer)	3	13	6	—	2
Trichia hispida (Linnaeus)	3	19	49	2	1
Helicodonta obvoluta (Müller)	1	3	—	—	—
Cepaea spp.	8	4	2	—	2
Unidentified individuals	4	32	20	7	—
TOTALS*	90	418	488	140	20
Snails/kg of deposit*	42	234	287	59	9
Per cent shade-loving species	72	81	77	84	65
Per cent catholic species	21	10	15	5	20
Per cent open-country species	2	2	4	5	15

*Excluding *Cecilioides acicula*

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THE FÉCAMP-STYLE REFORTIFICATION OF HIGH ROCKS

by T. K. Green, Dip.Arch.

In 1974, Iron Age studies received a major blessing from the publishing house of Routledge & Kegan Paul, who were safely delivered of twins. These were strictly non-identical, however, being Prof. Barry Cunliffe's *Iron Age Communities in Britain* and Dr. Dennis Harding's *The Iron Age in Lowland Britain.* (For an extensive and rigorous review of their virtues and short-comings, see *Archaeol. Journal* vol. 131 (1974), pp. 392-7). Whilst "comparing and contrasting" them I found both repeating the view that the refortification of High Rocks hill-fort[1] is in the Fécamp style and should be associated with Belgic influences. I wish to examine this point a little.

The Fécamp type of fortification was identified in 1938-9 by the late Sir Mortimer (then Dr. R. E. M.) Wheeler and Miss K. M. Richardson[2] as a distinct form peculiar to an area of N. France lying between the Seine and the Marne. They wrote: "The characters of the type are these: *(a)* a preference for commanding promontories, which are cut off by a huge rampart, 20-30ft. high, and a broad, flat, or bluntly rounded, canal-like ditch, with steep external sides sometimes reinforced by a small counterscarp bank . . .; and *(b)* formidable entrances often flanked by bold in-turns of the main rampart."[3] The general interpretation after examining a number of French hill-forts was that these and other, complementary forms of defence (*murus Gallicus)* represented anti-Roman constructions, built specifically for thwarting Caesar's battering-rams in the campaigns of 58-51 B.C. An article in *Antiquaries Journal,* vol. XXI (1941) foreshadowed the main, post-war publication and Ward Perkins was able to cite it as a parallel when interpreting his findings at Oldbury, which he published in 1944.[4] The specific analogy is to Site 4, the N.E. gate, where the original entrance was realigned. External earthworks complicated the approach—a "hornwork" and an "outer earthwork"—including some timbering (fencing or palisades, perhaps). The stone-rubble rampart, faced with clay, was covered by sand and faced with stones. A dry-stone wall near the top suggested a fighting platform, with a palisade behind indicated by a large posthole. The rampart's face swept smoothly down to the flat-bottomed ditch below, covering in the earlier hollow ditch with its tail. Wheeler and Richardson returned the compliment by citing Oldbury in their definitive publication.[5]

In his second report on excavations at the Caburn, Dr. A. E. Wilson in 1939 had drawn attention already to the similarity of the apparently contemporary, wide, flat-bottomed ditches at Oldbury and his own site.[6] Wilson again made the parallel in 1955, but now he brought High Rocks in[7] as Money had called attention to the apparent similarity of the ditches there to the Oldbury ones.[8] These views were taken up and expanded further, to include the hill-fort at Hammer Wood, Iping, by Mrs. M. Aylwyn Cotton in her paper "*Observations on the Classification of Hill-forts in Southern England,*" read in December 1958[9]: Boyden's report appearing a few weeks later.[10] One of her principal themes was that the finding of ramparts separated by wide, flat-bottomed ditches could be seen as a positive sign of those Belgae too discontented to stay in Gaul under Roman

rule—or, at least, of their descendants—responding with similar structures to the arrival of Claudius' Army of Conquest in A.D. 43. Her definition of this hill-fort group's characteristics needs noting, however, as they differ in subtle but significant ways from Wheeler and Richardson's originals.

She took Oldbury as her type-site, it being the best excavated one off the Chalk in S.E. England: she considered the non-Chalk hill-forts of Essex, Herts, Kent, Surrey and Berks. had what seemed a different cultural and structural sequence from those on it.[11] Only the Oldbury II phase concerns us here. In it, earlier dump-construction banks were rebuilt or partial bivallation occurred, and entrances were elaborated. Three sub-classes were seen: Oldbury II *strictu sensu,* High Rocks II and Caburn III.

The first one had heightened ramparts, now stone-crested, overlying the earlier ditch, its own was wide-bottomed and there were additional earthworks at the main entrance. Although the ramparts were high, in the Fécamp manner, this was chiefly because they lay on top of the Oldbury I bank; a "huge rampart" was not a required feature.

The High Rocks II sub-class differed in that, as the original bank "was too close to the edge of the sandstone outcrop to permit of an additional outer defence," the inside of the Period I bank was cut away to make a flat-bottomed ditch and the Period II rampart built inside it. The stone cresting of the latter was found tumbled into the Period II ditch. An inturned entrance with elaborate outworks was built on the side of easiest access. At Hammer Wood, Iping, there was again stone cresting fallen into the ditch. The Caburn III defences had a new bank with a palisade, set in the former ditch, and a new flat-bottomed, wide one outside.

Certain problems were foreseen.

a) The bulk of the sites chosen were then but sparsely excavated, and included nothing like all the region's hill-forts.

b) There was a ninety years' lapse between the building of the last Gaulish Fécamp-style hill-fort and the date of Oldbury II and Caburn III. (These latter had early post-Conquest Roman pottery in the first silts to form in their new ditches).

c) While it is possible to identify the centres of the areas settled by these Belgae in Britain, the defences there do not have these characteristic forms of rampart.

In 1957, meanwhile, Money had returned to High Rocks. He got round to exploring the main entrance in 1960-61: however his final report, covering five years' work, obviously took time to prepare and only came out in 1968 in volume 106 of the Sussex Archaeological Collections. The fact that his 1961 results contradicted his 1940 ones in some crucial respects was thus unknown—or, at least, unpublished—at a time when Hawkes was writing his paper "New Thoughts on the Belgae."[12] Having endorsed the view, first put forward by Hachmann (*pace* Harding, p. 12), that Fécamp-style rampart building was peculiarly localised in that province assigned by Caesar to the "Belgian" tribes, Hawkes cited with approval Mrs. Cotton's paper as presenting the hill-fort evidence for Belgic extension into "maritime" Britain (Caesar's own phrase)—whilst re-emphasising the pitfalls. He credited her with seeing the flat-bottomed ditch model as primarily Kentish Belgic. Yet, with the supplementary sites she tentatively put forward later in her paper (Squerries Camp: St. George's Hill, Weybridge; Caesar's Camp, Easthampstead; Grimsbury, Hermitage), she covered an area that was not Primary Belgic at all: but Wealden in contrast.

The next major reference to the theme is in Cunliffe's paper delivered at the 1971 Southampton Conference in honour of the late Sir Mortimer Wheeler.[13] We find High Rocks classed among those hill-forts "which show signs of defensive measures, or at the least intensive

occupation, at the time of the Roman invasion of A.D. 43" (p. 67) and marked, along with the Caburn, Oldbury, Hulberry and Bigberry, on his Fig. 19 as "defended" in the invasion of A.D. 43-47. As there was no Roman pottery found in a context suggesting a direct anti-Roman date for the Period II defences—the only Roman-period sherds coming from inside the fort[14]—one must assume he was drawing on the rampart style for his evidence and following Mrs. Cotton, like Prof. Hawkes, Cunliffe omits Hammer Wood, Iping, however, neither marking it as "defended" or "undefended" on Fig. 19.

We now come to the books I referred to in my first paragraph. Cunliffe's references are more extensive, so I shall give Harding's first. There is a seven line summary of Hawke's 1968 paper on p. 12. On p. 65, Fécamp-style ramparts are regarded as certainly tactical, as opposed to *glacis*-fronted dump ramparts. He cites Avery's view[15] that the latter were adopted, on the fringes of the Belgic settlement areas in a late-second-to-early-first-century context, for the speedy defence of centres threatened by refugees turned out by the Belgae. A further discussion of the points made by Hawkes occurs on p. 73; while on p. 225 he raises the contentious view that the Catuvellauni were a native, not a Belgic tribe, and that the Fécamp-style ramparts, concentrating "south of the Thames, notably at Hammer Wood, High Rocks, Oldbury and the Caburn," represent Belgic defences in an anti-Catuvellaunian context.

Cunliffe refers implicitly to the Fécamp-style ramparts at High Rocks on p. 72, noting a "wide flat-bottomed ditch." Fig. 5:7 shows profiles of Fécamp-type earthworks at High Rocks, the Caburn[16] and Oldbury. The first is derived from the section at Money's Site F[17] but the width of the inner, Period 2 ditch is exaggerated. In the text there is again a reference to the Period 2 rampart being *"within* the earlier defences," as there was "little space on the plateau outside to fit in the new circuit." Profiles of the ramparts near to the gate, which cut off the neck of the promontory, are not chosen for illustration, however. Having found a flat-bottomed ditch at Danebury, which can be given a firm post-A.D. 30 date, and noted a similar ditch in the just-post-Conquest fortification at Silchester, he concludes (p. 73): "That Fécamp defences were in use at the time of the invasion may now safely be accepted."

In the discussion on p. 92ff of tribal regions, the fact that "several of the East Sussex and Wealden sites, like those of Kent, show evidence of continuous occupation" is taken to support the idea that a fragmentation of the earlier Atrebatic territory was taking place in the first century A.D. As part of this, he suggests that the Weald and the Downland east of the Ouse had thrown in their lot with anti-Verican groups to the eastward, by the time of the Roman arrival; hence the need for the storming of the Caburn in order to consolidate the regime of Cogidubnus and with it the flank of the Second Legion pushing down to the South-West.

Oldbury, High Rocks and the Caburn are quoted again specifically on p. 122 as parallels to the hill-forts in the West Country which were defended against the Roman Army, the Fécamp-style defences being given as the identifying feature. Finally, on p. 250, High Rocks and Hammer Wood are chosen as representatives of the Wealden-style hill-forts, making optimum use of the characteristic dissected countryside by occupying promontories. Plans of the sites, based on Money (1968), Fig. 2 and Boyden (1958—not the quoted 1957), Fig. 1, appear as Fig. 13:16 on p. 253. Earlier and later phases are not distinguished.

Although two further major hill-fort studies[18] appeared in 1976, neither discusses the topic of Fécamp-style defences and I believe the above summarises fairly the published discussion about my subject. From it, I hope the following development of ideas can be seen.

a) The Fécamp-style defences were recognised as having both definite chronological and cultural significance in Northern France.
b) Parallels were seen in the "maritime" region of Britain to which emigrating/invading groups crossed from Gaul.
c) Excavation results at Oldbury and the Caburn suggest the transfer of dates from a Caesarian to a Claudian invasion context, even though this raises a credibility gap over the persistence of ideas. (N.B. Ward Perkins (1944, p. 141) did not believe this gap ever existed, since the classic French camps were occupied until the second quarter of the 1st century A.D. by native settlements).
d) Money's 1940 results lead to the inclusion of High Rocks among the group, purely on stylistic grounds.
e) The identification of a hypothetical Kentish Belgic group of hill forts, characterised by stone-crested ramparts and wide, flat-bottomed ditches, having influences stretching even to the far western Weald and the Kennet valley possibly, is suggested by Mrs. Cotton.
f) The Kentish Belgic group idea receives strong endorsement from that authoritative source, Professor Hawkes.
g) Cunliffe and Harding take up Mrs. Cotton's ideas and Hawkes' endorsement of them, and weave them strongly into their major textbooks. Cunliffe quietly drops Hammer Wood from the group, however, and makes an odd choice when illustrating High Rocks.
h) Harding posits that Fécamp-style ramparts are an anti-Catuvellaunian measure. Cunliffe hovers between anti-Roman, anti-Catuvellaunian and anti-Verican explanations, but dates them firmly to the second quarter of the first century A.D.

If the reader has followed me thus far, he may have sensed that I am not altogether happy about the state of affairs, particularly on what has been written in two books destined to become the text-books for Iron Age students for the next quarter century. I do not quarrel with many of the ideas put forward in what I have quoted. What worries me is that the implications of Money's 1968 publication for the validity of Mrs. Cotton's 1958 hypothesis seem still to have been overlooked, along with the validity of the diagnostic features she claimed for the group as a whole. In the present discussion, it is fitting to concentrate on the Sussex aspects, of course, leaving aside the ones with significance only further afield.

One must start by the differences in interpreting High Rocks which must be made on the basis of Money's 1940 interim report and his 1968 final one. Fig. 1a shows the section he gave in his first, while 1b shows one, at the opposite side of the entrance, from his second. The features of section 1a which are most important are the flat-bottomed inner ditch, the tumbled revetments, the "hornwork" and the "outer earthwork." These are obviously suggestive of links with Oldbury, even though the outer ditch is hollow and the position of the flat ditch, supposedly to thwart the practice of rapidly filling up a ditch with brushwood, is oddly placed behind ramparts which could be taken in precisely this way. The revetments do not help to give the ramparts that gentle, smooth face which defeated a Roman battering ram, either. They have a sharp foot and lie behind berms, even on the inner rampart. This is quite unlike the facing at Oldbury and even less so the true stone cresting at Le Chatellier, Duclair, the *only* one of the French hill-forts where Wheeler reported finding it (Fig. 1c, 1d).

The outer ditch in Fig. 1a looks hardly worthwhile; but the 1968 report shows it to have been sectioned (by a narrow trench) across a causeway of very hard rock.[19] Fig. 1e gives a truly typical section.

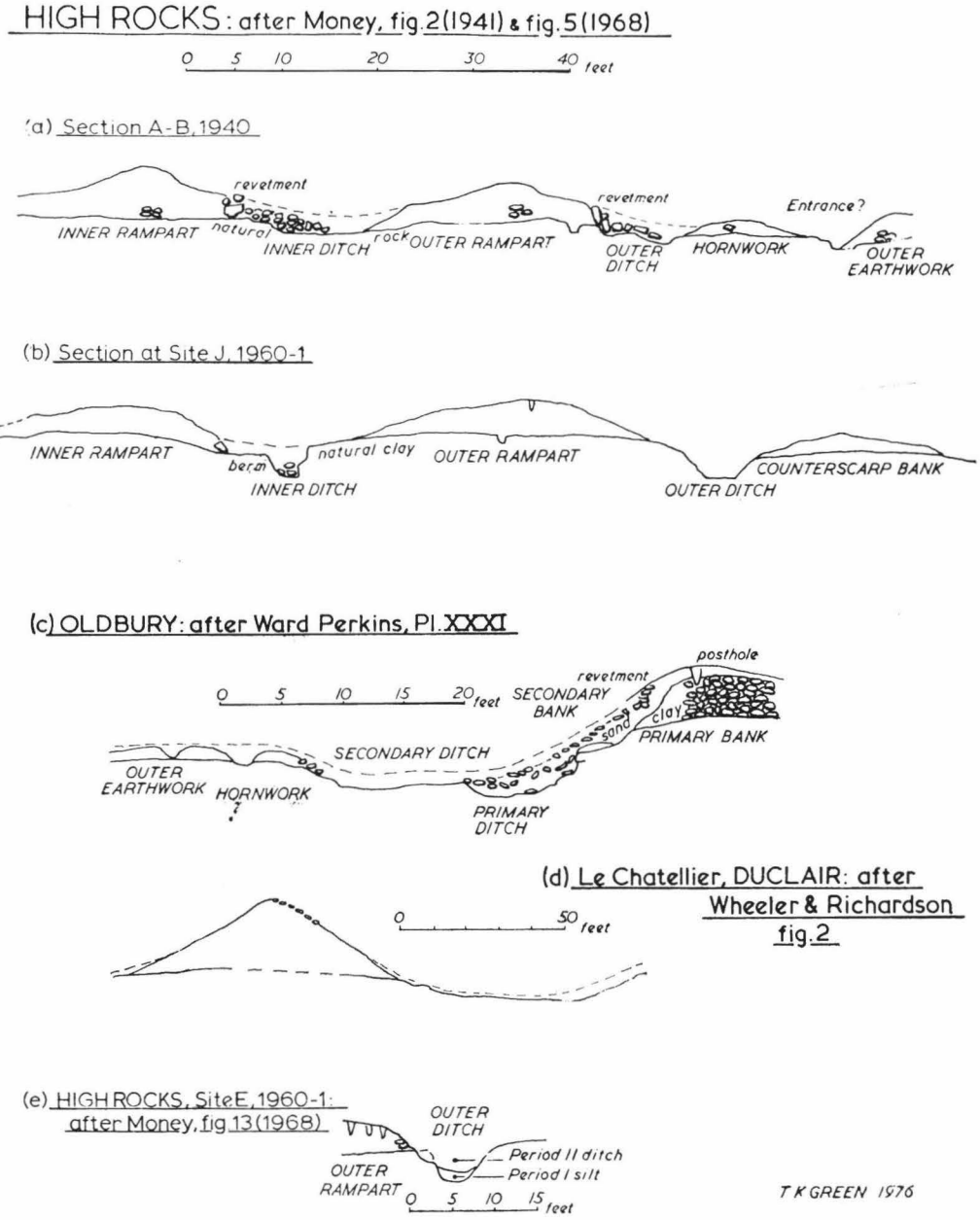
HIGH ROCKS : after Money, fig.2(1941) & fig.5(1968)
0 5 10 20 30 40 feet
(a) Section A-B, 1940
revetment
revetment
Entrance?
INNER RAMPART
natural rock
INNER DITCH
OUTER RAMPART
OUTER DITCH
HORNWORK
OUTER EARTHWORK
(b) Section at Site J, 1960-1
INNER RAMPART
berm
natural clay
OUTER RAMPART
COUNTERSCARP BANK
INNER DITCH
OUTER DITCH
(c) OLDBURY: after Ward Perkins, Pl. XXXI
posthole
revetment
0 5 10 15 20 feet
SECONDARY BANK
clay
sand
PRIMARY BANK
SECONDARY DITCH
OUTER EARTHWORK
HORNWORK
PRIMARY DITCH
(d) Le Chatellier, DUCLAIR: after Wheeler & Richardson fig.2
0 50 feet
(e) HIGH ROCKS, Site E, 1960-1: after Money, fig.13(1968)
OUTER DITCH
Period II ditch
Period I silt
OUTER RAMPART
0 5 10 15 feet
T K GREEN 1976

Fig. 1

The "hornwork" and "outer earthwork" need not detain us long, for, in Money's own words, they "were found in 1960/61 to be natural clay and stone, and not in any way artificial."[20] This is not to say that they were not present when the hill-fort was in its prime, but they were not germane to its defences.

When we compare Figs. 1a and 1b now, mentally erasing the "hornwork" and "outer earthwork" and deepening the outer ditch on the former, it is only surprising how the shape of the inner ditch differs. The 1940 section, made left of the entrance when facing towards the camp, certainly shows the flat bottom which caused the Fécamp analogy—via Oldbury—to be made. Fig 1b's section, made roughly the same distance the other side of the entrance, shows no features whatever that would suggest analogies in that direction. Are we dealing with a camp built by schizophrenics—a semi-Fécamp one? (Or, since the left-hand outer rampart isn't of Fécamp style, a demi-semi-Fécamp affair??).

The answer Money provided is much more sober. "The ground on which the entrance lies slopes down from north to south and is situated at the junction of the clay and the sandstone. . The builders, therefore, were working sometimes in rock, sometimes in clay and sometimes in a mixture of the two. On one side of the entrance, for example, the outer ditch ... was cut out of the rock, whereas a few yards away on the other side it was dug from the clay." He goes on to say that the Period I ditches were cut U-shaped regardless of the underlying material, in Period II they were adapted to it.[21] Further away to the left of the entrance, at Site K, the inner ditch was again met with and, though wide and shallow, its shape was not easy to determine: this was due to its base being "very uneven, with the rock cut away in places by quarrying and projecting in others."[22] Might this not be just another case to add to those, noticed by Feachem,[23] where the hill-fort ditches were not completely excavated? This could happen either through lack of time, manpower—or inclination.[24] One is tempted to speculate whether the relatively inconsequential ditches at High Rocks in Period II may not be explained by the reconstruction Money offers of the contemporary ramparts.[25] If the posts sticking up between the stones stood higher and were pointed,[26] more than enough problems would be posed to anyone trying to climb the defended bank. (Such a facing would, of course, have been wrecked by a Roman battering ram: but I—for one—don't believe that was a consideration when they were built). That wooden *chevaux de frises* were used in the defences of hill-forts has been summarised best by Harbison.[27]

I now want to turn my attention to the section Cunliffe chose to illustrate the Fécamp features of High Rocks. I have already made the point that his Fig. 5:7 exaggerates the Period II ditch's width. My view is based on Money's comment that, though the inner rampart had been faced with blocks of sandstone, "All this revetment and part of the dumped rampart material was nevertheless found to have collapsed into the ditch."[28] The profile published suggests this stone facing rose behind a narrow berm, leaving a shallow, U-shaped ditch. The ditch shape given by Cunliffe, besides being at a location which Wheeler and Richardson said was never occupied by Fécamp-style banks and ditches—viz. around the slope—hardly recalls the *locus classicus*.[29] It is only fair to add that Money himself claimed an analogy between these Period II defences and Fécamp-style ones.[30] One may be allowed to suspect, perhaps, that this was somewhat out of *pietas* towards the preparer of his specialist pottery reports, Mrs. Cotton.

One of the features which caused comment by Mrs. Cotton,[31] Money[32] and Cunliffe[33] is the way that the Period II defences, at places like Site F in particular, lay inside the earlier ones. This is really not so surprising when it is noticed that the contour lines on the general plan[34] show, beyond Site F, a drop of 50ft. over a horizontal distance of a little over 100ft. Ramparts *outside* the earlier

ones would have been hopelessly impractical, incapable of unopposed reinforcement etc. The wonder, surely, is that the first defences weren't built along the crest of the hillside, occupying the optimum position. One's own movements inside the fort would then be hidden from the enemy, who would have to make the ascent of the full slope under observation and probable attack. Yet it is an undoubted fact that these promontory hill-forts on the sandstones and gravels of South East England often have just a ditch cut down the slope and a bank thrown outwards i.e. on the down-hill side, on all but the neck of the promontory. Sites where this definitely occurs are the Caesar's Camps at Easthampstead and Farnham, St. Ann's Hill, Chertsey, States House Camp at Medmenham and, for its outer defences at least, Hammer Wood, Iping.[35] High Rocks differs in that the rampart is inside the ditch: at the first three sites I give, personal observation shows the inner face of the ditch was merely made very steep, up to the front of a low bank on the crest, and the outer, counterscarp bank was given steep sides too. At the Farnham site, in fact, there seems to have been just a very steep bank cut round the northern sides, without any ditch at all.

Having disposed of the "elaborate outworks" which Mrs. Cotton claimed High Rocks showed, it is a pity one cannot decide either way about the "inturned entrance." Money's plan[36] does show an apparent ridge running back left of the inner rampart's entrance, but into an area where no excavation was permitted in 1960-61. As it is, the base of this "spur" was found to be disturbed; the masonry lining the entrance passage does not follow it and it could be a more recent feature. On the bank opposite no such spur was recorded and the stonework just seems to blunt the rampart's end. As no Period II gate was located, this could lie at the end of an entrance passage which, being set obliquely, would have a longer left-hand than right-hand wall. A slightly more massive earthen bank would then have lain left of the passage, without the entrance being specifically inturned.

Whilst on the topic of interpreting High Rocks, I feel something needs to be said about Mrs. Cotton's use of the term "stone cresting." She refers to it as a feature of the Oldbury II group in subclasses *a* and *b* (Oldbury II, High Rocks/Hammer Wood). The implication seems to be that this cresting is a further trait of the Oldbury II hill-fort group. If so, it is a somewhat tenebrous notion: the only hill-fort Wheeler and Richardson illustrate as having any sort of solid stone (as opposed to chalk rubble) facing on the rampart-front is Le Chatellier, Duclair.[37] Here there was a capping of flints, one stone thick, from the very crest to a quarter way down the front, retained at the lower end by a single line of chalk blocks; parallels were quoted at Oldbury and Poundbury in the report.[38] Apart from the use of stones to face the rampart material, it is difficult to see why the analogy needs to be drawn. At Le Chatellier it is merely superficial capping, while at Oldbury it is part of a revetted, flat-topped fighting platform having a timber palisade behind, the stone spread extending down to the verge of the ditch. Ward Perkins could not make up his mind whether this spread is tumble from above or deliberate cladding. It seems best to allow for the top of the revetment wall to have gone and perhaps a stone pavement for the platform, but to regard the rest as a real facing reinforcing the Period II mound material. This, it should be noted, was sand, whereas the primary bank was stone with a clay front. Surely we do not have to invoke invasion hypotheses to account for people getting the idea that stones are intrinsically more stable than sand?

At High Rocks we again meet stones in the Period II defences. But they are not "cresting." Money's conjectural reconstruction does not have any stones on the crest at all but only on the forward face.[25] At Hammer Wood, Boyden favoured an interpretation of stones covering the rampart fronts and inner face of the ditches. Along with the wide separation of the ramparts across the ridge, the stonework was a feature Mrs. Cotton saw as pointing to an Oldbury II/Fécamp link. She called it "stone cresting" again, which is really very misleading, though its Fécamp associations

are weakened, perhaps, if it is termed "revetting." And, though the ramparts do lie far apart across the ridge, they were fronted by V-shaped ditches, not flat-bottomed ones.

Now, what does this add up to in summary?

My personal view is that High Rocks' refortification does not, of itself, argue for its inclusion in any group of hill-forts derivative from the Fécamp-style group in northern France. This sets it apart from Oldbury and Caburn, where apparently convincing parallels can be drawn in that particular direction and where anti-Claudian dates may fairly be postulated, if not proved.

The dating of High Rocks II cannot be fixed really precisely, for no associated contemporary material was found. Some possible scenarios, as Money and Cunliffe have pointed out, are Cunobelin's take-over of Kent in the A.D. 20s, the break-up of Verica's kingdom centred on the Chichester area around A.D. 40, or the Roman invasion of A.D. 43. It could, however, be a relic of some more local conflict and it could be, quite conceivably, of earlier date. The lack of evidence of Belgic penetration into the Wealden area, as evidenced by the pottery found at High Rocks,[39] must surely argue against Harding's suggestion that the Fécamp-style hill-forts mark Belgic resistance to counter-attack from *indigenous* Catuvellauni.[40] And without High Rocks (and Hammer Wood) in between, Oldbury II and Caburn III represent a pretty sorry "group" for Harding to rest his case on. Similarly, without High Rocks, the Caburn III defences must sustain on their own Cunliffe's attractive concept of disruptive elements requiring Roman suppression in A.D. 43.

ACKNOWLEDGEMENTS

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[1] J. H. Money, "Excavations in the Iron Age Hill Fort at High Rocks, near Tunbridge Wells, 1957-1961," *Sussex Archaeological Collections* (hereafter abbreviated to *S.A.C.)*, vol. 106 (1968), pp. 158-205.

[2] R. E. M. Wheeler and K. M. Richardson, *Hill-forts of Northern France* (1957).

[3] ibid., p. 11.

[4] J. B. Ward Perkins, "Excavations on the Iron Age Hill-fort of Oldbury, near Ightham, Kent," *Archaeologia*, vol. 90 (1944), pp. 127-176.

[5] op. cit., pp. xv, 77.

[6] A. E. Wilson, "Excavations at the Caburn, 1938," *S.A.C.*, vol. 80 (1939) p. 194.

[7] Idem, "Sussex on the eve of the Roman Conquest," *S.A.C.*, vol. 93 (1955), p. 77.

[8] J. H. Money, "An interim report on excavations at High Rocks, Tunbridge Wells 1940," *S.A.C.*, vol. 82 (1941), p. 108.

[9] M. Aylwyn Cotton, in: S.S. Frere ed., *Problems of the Iron Age in Southern Britain* (1961), pp. 61-8.

[10] J. R. Boyden, "Excavations at Hammer Wood, Iping: 1957," *S.A.C.*, vol. 96 (1958), pp. 149-163.

[11] Cotton, op. cit., p. 61.

[12] C. F. C. Hawkes, "New thoughts on the Belgae," *Antiquity*, vol. 42 (1968), pp. 6-16.

[13] B. W. Cunliffe, "Some Aspects of Hill-forts and their Cultural Environments," in: D. Hill and M. Jesson eds., *The Iron Age and its Hill-forts* (1971), pp. 53-69.

[14] Money (1968), pp. 191-2.

[15] D. M. E. Avery *et al.*, "Rainsborough, Northants, England: excavations 1961-5," *Proc. Prehistoric Soc.*, vol. 33 (1968), p. 292.

[16] The correct source for the Caburn profile is:—A. E. Wilson "Excavations in the ramparts and gateway of the Caburn, August-October 1937," *S.A.C.*, vol. 79 (1938), Pl. 1. The timber revetment, shown in plan and section in Pl. 1, and reconstructed in Fig. 12 on p. 186 there, which is reminiscent of Oldbury II, is ignored.

[17] Money (1968), Fig. 3.
[18] D. W. Harding ed., *Hillforts: Later Prehistoric Earthworks in Britain and Ireland* (1976); J. Forde-Johnson, *Hillforts of the Iron Age in England and Wales: a survey of the surface evidence* (1976).
[19] Money (1968), p. 162.
[20] loc. cit.
[21] ibid., p. 178.
[22] ibid., p. 170.
[23] R. W. Feachem, "Unfinished Hill-forts," in D. Hill and M. Jesson, op, cit., p. 20.
[24] This last is the only explanation for the partially-dug ditch in front of Hadrian's Wall at Limestone Corner (Sir Ian Richmond, ed., *Handbook to the Roman Wall,* 12th edn. (1966), p. 98-9), with a garrison stationed at nearby Chesters for over 200 years.
[25] Money (1968), App. E, pp. 201-3 and Fig. 18.
[26] As is postulated at Niederneuendorf, Germany: see C. F. C. Hawkes, "Fence, Wall Dump, from Troy to Hod," in D. Hill and M. Jesson, op. cit., Fig. 1c.
[27] P. Harbison, "Wooden and Stone *chevaux-de-frises* in Central and Western Europe," *Proc. Prehistoric Soc.,* vol. 37, Pt. 1 (1971) p. 195ff.
[28] Money (1968), p. 164-5.
[29] Wheeler and Richardson, op. cit., p. 63 and Pl. XXVIII.
[30] Money (1968), p. 165.
[31] Cotton, op. cit., p. 64.
[32] Money (1968), p. 164.
[33] Cunliffe (1974), p. 72.
[34] Money (1968), Fig. 2.
[35] Boyden, op. cit., p. 153.
[36] Money (1968), Fig. 14.
[37] Wheeler and Richardson, ibid.; also R. E. M. Wheeler, "Hill Forts of Northern France: . . .," *Antiquaries Journal,* vol. 21 (1941), p. 265-70. esp. Pls. LV & LVI.
[38] K. M. Richardson, "Excavations at Poundbury, Dorchester, Dorset, 1939," in *Antiquaries Journal,* vol. 20, (1940), p. 433 and Pl. LXXI Site G.
[39] Ward Perkins, op, cit., p. 138-9.
[40] Boyden, op. cit., p. 153-4.

In the four years which have elapsed since this paper was written, two events related to its theme have occurred. Firstly, Frere's *Problems of the Iron Age . . .* has been reprinted. More significantly, a second, revised edition of Cunliffe's *Iron Age Communities . . .* appeared in 1978. References in this paper are to the first edition throughout; however, the views subjected to criticism all appear unaltered in the second, although a rearrangement of chapters and contents means that page numbers do not correspond. A concordance follows, giving first/second edition entries:— p. 72/283; Fig. 5:7/13:28; p. 73/283; p. 92/93; p. 122/130; p. 250/263; Fig. 13:16/13:17; p. 253/269.

THE EXCAVATION OF THREE ROMAN BLOOMERY FURNACES AT HARTFIELD, SUSSEX

by *C. F. Tebbutt, F.S.A.*

INTRODUCTION

The site, at TQ 452 309, is on heathland known as the Cow Park which was until 1696 part of Ashdown Forest. It had been planted with conifers which were cut down during 1914-18. Its situation is halfway up a west facing slope on the east side of the Millbrook valley, after the stream has passed through the chain of artificial lakes on the Pippingford estate. At the site itself is a natural terrace which appears to have been further artificially levelled and is demarcated by distinctive surface vegetation. This consists of fine grasses in the midst of an area of coarse grass and bracken. Excavation showed that this definition coincided with heavy charcoal soil impregnation. About 36 m to the south-east is a strong spring which continued to run during the drought conditions of 1976.

The site commands distant views in all directions except to the east, and in view are Garden Hill *c.* 1250 m to the north-west, site of an Iron Age and Roman settlement,[1] Pippingford Bloomery *c.* 750 m to the west-north-west,[2] and East Wood Bloomery *c.* 950 m to the south-west.[3] All these sites are of probable first to second century AD date. Over the hill *c.* 900 m to the north-north-east is Stickridge Gill Bloomery, at TQ 456 317, as yet undated.[4] The whole area is on Ashdown Sand but presumably the iron workers obtained their mineral from pockets of iron ore derived from the once overlying Wadhurst Clay and often found locally exposed in stream beds and other cuttings, or more improbably from iron pan in the Ashdown Sand itself. A further feature of the site, on its north side, is the long straight bank of a 'pillow mound' (rabbit warren) whose south ditch just missed destroying part of the site. This is probably of late seventeenth century date.

The site seemed a promising one for excavation, being on open heath now devoid of trees and unlikely ever to have been under cultivation in modern times.[5] A long-term excavation research, currently going on under the direction of J. H. Money at nearby Garden Hill, seems to point to that settlement being some sort of centre for iron working in the Roman period and it seems likely that this site was a satellite. A working floor was revealed at 40 cm when a trial metre square was dug. Permission to dig was readily given by the army authorities, and the field section of the Wealden Iron Research Group agreed to adopt it as an excavation project.

For shelter on the site a turf hut was built, from turves stripped from the site, in the fashion of a charcoal burner's hut. As the excavation went on for more than a year we were able to experience the most extreme weather conditions that obtained on this very exposed windswept hillside, and to form a judgement as to how permanent such a hut could be and whether the work there was likely to have been continuous or seasonal.

THE EXCAVATION

After the removal of the turf, the working area was trowelled down to the level of the working floor and finally through this to the undisturbed subsoil. The working floor was easily recognised,

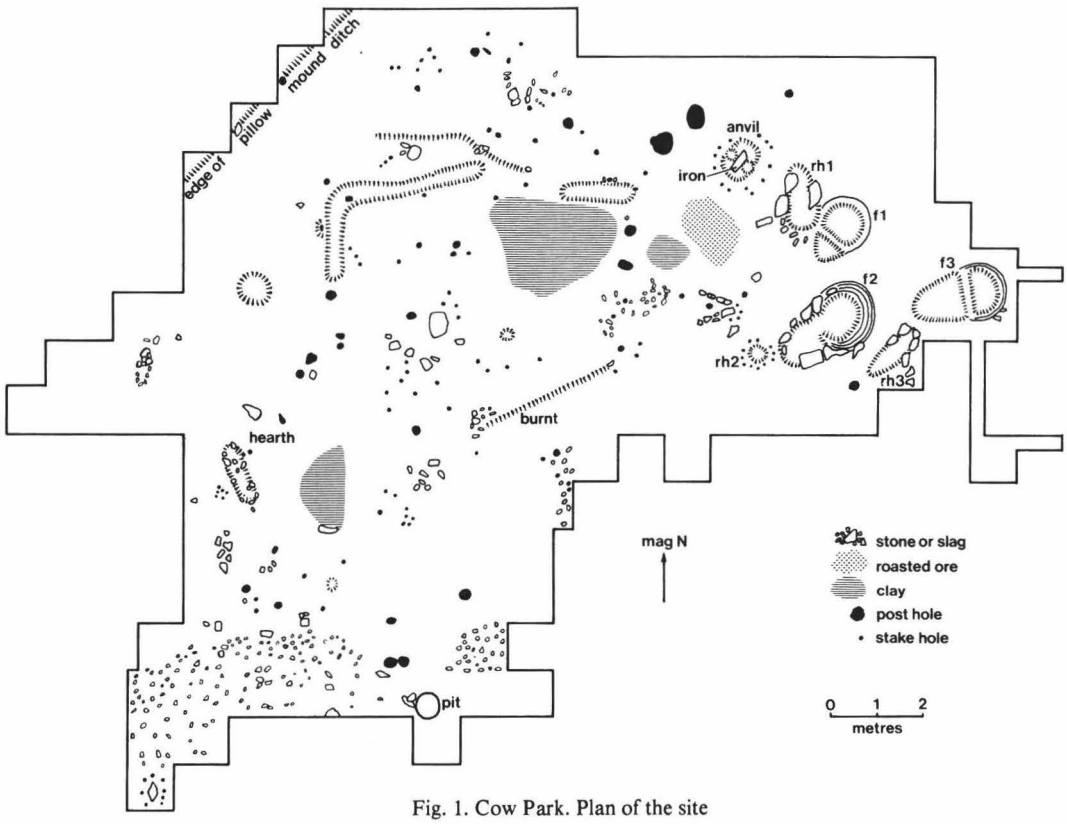

Fig. 1. Cow Park. Plan of the site

being stamped hard and containing charcoal and small slag nodules and being pierced by many apparently uncoordinated post and stake holes. In no place did the edge form a definite line, but it was easy to see when the edge had been passed. In many places lumps of slag and cinder had been dumped just outside the edge. The excavation was continued in all directions until the edge had been reached. From the plan it might appear that we had not gone sufficiently far beyond the three furnaces to be sure that there were not more in that direction. It was quite clear, however, during excavation that beyond there was a virgin area with no signs of any sort of human or industrial activity, and indeed they were on the edge of the levelled platform. Several small test holes confirmed this.

Over the main part of the area away from the furnaces the working floor was found to be covered to a depth of about 30 cm by extremely fine black soil heavily impregnated with charcoal dust and containing only quite small lumps of slag and cinder. There were, however, larger sandstone blocks lying on the actual floor. It was amongst this material that almost all the pottery, mainly in small sherds, was found. Careful examination convinced us that this soil was the waste from sieving to separate larger sized material, some of which lay round the perimeter of the site.

The Furnaces

As can be seen from the site plan (Fig. 1), all three furnaces were constructed on the extreme north-east edge of the working area, and are numbered 1-3 in order of discovery. All are of the

same type, although no. 1 and 3 approximate in shape and size and no. 2 is larger. Little of the structure has survived above ground, and none up to the height of possible tuyere insertion. Each has its accompanying reheating hearth, but of differing patterns.

The last use of nos. 1 and 3 seems to have been the same. They were left full of slag and cinder up to contemporary ground level and the superstructure was removed. In the case of no. 2 however, no solid slag was found in the interior and the superstructure had collapsed into and around the furnace. After excavation the interiors of all three filled with water during the winter but dried out in the summer.

Some sort of rainproof shelter was clearly necessary to protect the bellows operators. No sign of any such shelter structure was found. However, if the site was shortlived or seasonal, wattled hurdles would probably have sufficed and would have left no trace. It should be recorded that no sign or part of any tuyere was found in the course of the excavation.

Furnace no. 1 (Fig. 2 & 3; Plate 1)

This furnace, like the other two, was built at one end of a shallow oval pit, one end of the pit being occupied by the furnace and the other serving as the tapping pit. The lower part of the clay walls of the furnace were thus supported for about three quarters of their circumference by the solid walls of the pit. The front, facing the open pit, was supported at its base by two large equal sized and roughly shaped sandstone blocks, set in the pit sides butted together in the centre, and separated by a small aperture. As exactly the same method of construction was repeated in the front of furnace no. 3, it seems likely that it was deliberate. This aperture was clearly not a tuyere hole. No tapping arch was found in the surviving level of the furnace and it must therefore have been at a higher level, well above the aperture. When found, the aperture was blocked by solidified tap slag but could possibly have been used, in conjunction with bellows, for lighting the furnace. The two sandstone blocks formed a solid bridge across the pit on which to build the furnace front, which would probably need rebuilding each time a bloom was extracted.

When excavated, the furnace was found to be full to contemporary ground level with solid cinder which required a hammer and cold chisel to remove it. The furnace floor below the cinder was concave, following the curve of the pit sides, and was brick hard. It was noted that this floor level was below the lowest level in the tapping end of the pit.

The tapping pit contained no slag or cinder but was burnt red from hot material of some sort coming from the furnace. In the furnaces no clay lining survived above contemporary ground level, but on some parts of the sides the solid slag, lining the inside of the walls, still remained at a slightly higher level.

Furnace no. 2 (Fig. 2 & 3)

This furnace was much larger than the other two and had a proportionately larger tapping pit. It also differed in other ways, particularly in its filling when it was abandoned. The bottom half of this filling, about 30 cm deep, consisted of almost pure charcoal dust among which were thinly stratified layers consisting of small pieces of clay lining and scraps of rusty slag that was fairly magnetic. Above the charcoal filling was another 30 cm thickness consisting of collapsed clay furnace wall, much of it in large pieces up to 28 cm in length. It was quite evident that, unlike the other two furnaces, here the walls had been left standing on abandonment and had collapsed naturally.

Another differing feature was in the renewal of the existing clay walls. These had been renewed four times, a new lining being applied to the old. As the broken-down above-ground walls were

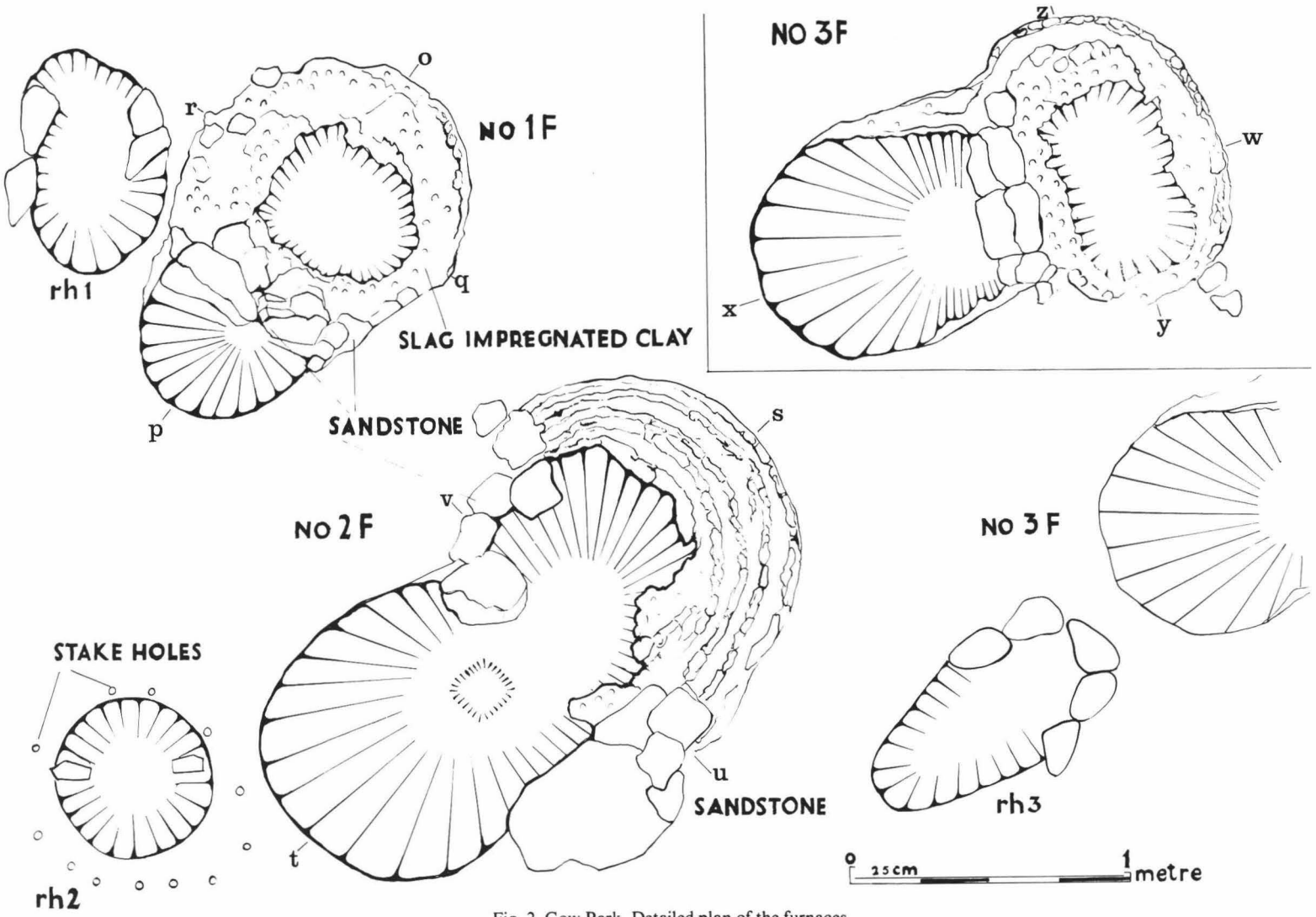

Fig. 2. Cow Park. Detailed plan of the furnaces

available for study, the method of their construction was found to be of great interest. They had been formed by putting together 'sausages' of clay (Plate 4), as in primitive pottery making, to form a wall and then plastering over the inside to provide a smooth surface. In some cases this inner lining had separated during firing and the 'sausages' were found covered by green glaze caused by the effect of smelting heat on the sand in the clay.

As in the other furnaces the brick-hard base was concave, following the curve of the pit sides, and was lower than the lowest level in the tapping pit. The front of this furnace, when found, was completely open to the tapping pit although supported by large stone blocks on each side. Indeed, the charcoal filling had flowed out into the pit, and like the furnace the pit contained no appreciable amount of slag.

Furnace no. 3 (Fig. 2 & 3; Plate 2)

This furnace resembles no. 1 in both size and condition when abandoned, being full to contemporary ground level with solid cinder requiring a hammer and cold chisel to remove it. As in no. 1, two roughly shaped sandstone blocks with a slight aperture between them formed the foundation for the front wall. The main difference between this furnace and no. 1 was in the tapping pit. When it was already half filled with a mixture of charcoal and loose slag pieces, liquid slag had run into it from the furnace forming a solid layer. This seems to have flowed from above the two stone blocks, to which some still adhered. The aperture between the blocks was also filled. This slag layer was at a lower level than that inside the furnace.

Like the others, the furnace base was concave and lower than that of the tapping pit.

The Reheating Hearths (Fig. 2)

Each of the three furnaces had beside it a reheating hearth (marked rh on the plan) of which little remained but a burnt red hollow in the subsoil; this may have originally had low clay surrounding walls. As with the furnaces, the hearths associated with furnaces nos. 1 and 3 were similar but that belonging to no. 2 was quite different in shape and construction.

Hearth rh 1 Associated with Furnace 1. This appeared to have occupied part of an already much burnt and larger hollow area, perhaps the vestigial remains of an earlier furnace, on the west side of Furnace 1. It had two large sandstone blocks on its west side and one on its east side, and was elongated in shape. It contained much charcoal and fragmented cinder.

Hearth rh 2 Associated with Furnace 2. As this furnace differed from the other two, so this hearth was quite unlike the others both in construction and position. It was circular in shape and placed just off the end of the tapping pit. It consisted of a heavily burnt hollow, round which a clay wall had been built. This could be inferred from the circle of small reinforcing peg or stake holes which survived.

Hearth rh 3 Associated with Furnace 3. This hearth was narrow and pear-shaped and had large sandstone blocks round its broad north-east end. A post hole just off its opposite end might have had some connection with a bellows support, but was not paralleled in the other hearths.

The Smithy Area (Plate 3)

About 2 m north-west of Furnace 1 was undoubtedly the site of the smithy area, where blooms extracted from the furnaces were forged. This comprised one, and probably three, anvils. A shallow

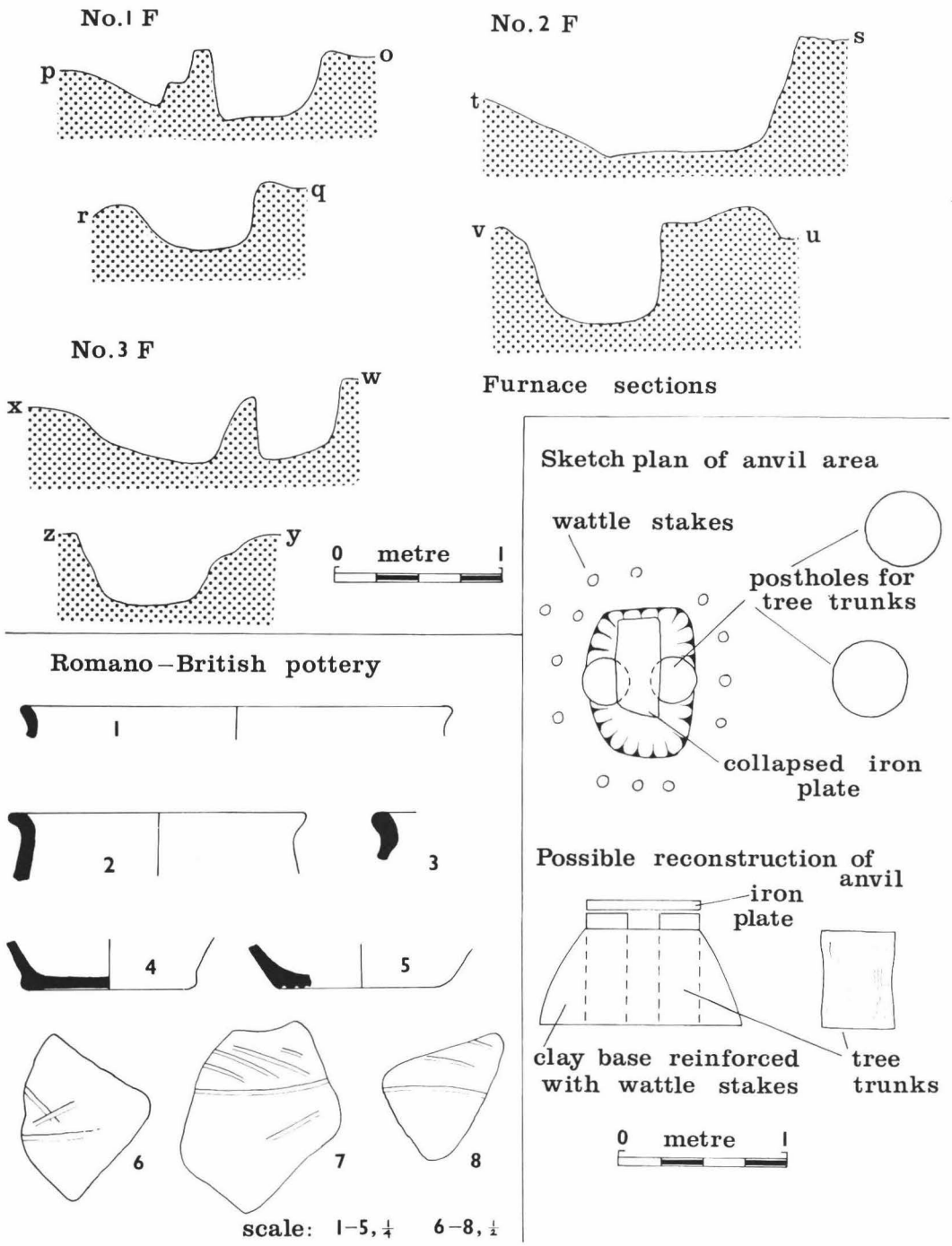

Fig. 3. Cow Park. Furnace sections and pottery

rectangular hollow contained, close together, two shallow postholes; fallen across them could be seen the 'ghost' of a thick rectangular iron plate. Although this was barely more than a staining of rust, it was still faintly magnetic over much of its surface and could be measured as 23 cm broad, 59 cm long, and 4 cm thick. Surrounding this assemblage were a circle of stake or peg holes which I interpret as having held wooden reinforcing rods for a solid clay base, stabilising the two posts supporting a flat-topped anvil. A suggested reconstruction of this anvil appears in Fig. 3. Somewhat similar flat-topped Roman anvils are illustrated in plates 5 and 6. There was a scatter of magnetic hammer scale on the working floor surrounding the anvil. It might be argued that a smith standing outside a clay base as suggested above would be too far away from the anvil. However it must be remembered that a red-hot bloom, direct from the furnace, would have a large bulk of slag attached and this would scatter widely at the first blow of the hammer. A long-handled hammer and tongs would probably be necessary for this work.

It will be seen from the plan that there were two large postholes about 1 m north-west of the above anvil. These again were surrounded by hammer scale and I suggest that they were part of the smithy. The holes were only 20 cm deep and there was no sign of a clay base, but it seems likely that the posts either supported smaller anvils or were used without a metal top, as blacksmiths still do today for some operations.

This, as far as I am aware, is a unique find in relation to iron smelting in this country.

Remainder of the Working Area

On the remainder of the working area there was little to indicate what actually took place at a particular spot, or where possible buildings, shelters or windbreaks were situated. The relatively few postholes, occurring in no particular pattern, and the large number of stake holes suggest temporary buildings. Supplies for the furnaces were however quite definitely represented by heaps of clay for construction and repair, and roasted ore brought in from elsewhere, there being no sign of roasting on the site.

The hearth on the south-west showed no signs of intense heat and was thus probably for domestic cooking. Some irregular hollows suggest soakaway drains, but in each case they had been filled to make a level floor above. On the north side were some changes in floor level along fairly straight lines. Here there had evidently been barriers, as the floor colour was different on each level.

The small group of postholes on the extreme south were outside the working area and I suggest they held tethering posts for pack animals.

Construction, use and type of furnaces

From the description of the furnaces given above, it is obvious that, while differing in size, and in spite of the fact that no part of any one of them has survived above ground level, they are all of similar construction and type. Below ground they are all constructed at one end of an oval pit, with the original furnace base at the bottom of the pit and at a lower level than its opposite end into which slag was tapped. Had smelting taken place at this floor level, no slag could have been made to run into the tapping end. Furthermore, no tapping arches have survived and therefore they must have been placed above ground level. This fact is borne out in no. 3 furnace where slag can be seen to have flowed from above over the large stones forming the front of the furnace, leaving tap slag adhering to the stones. At this furnace tap slag also remained in the tapping pit, confirming its function. The condition of the furnaces when found would explain this apparent inconsistency. Each furnace was filled up to ground level, nos. 1 and 3 with slag and no. 2 with charcoal, and by using this higher level as a base molten slag could have been run out into the tapping pit.

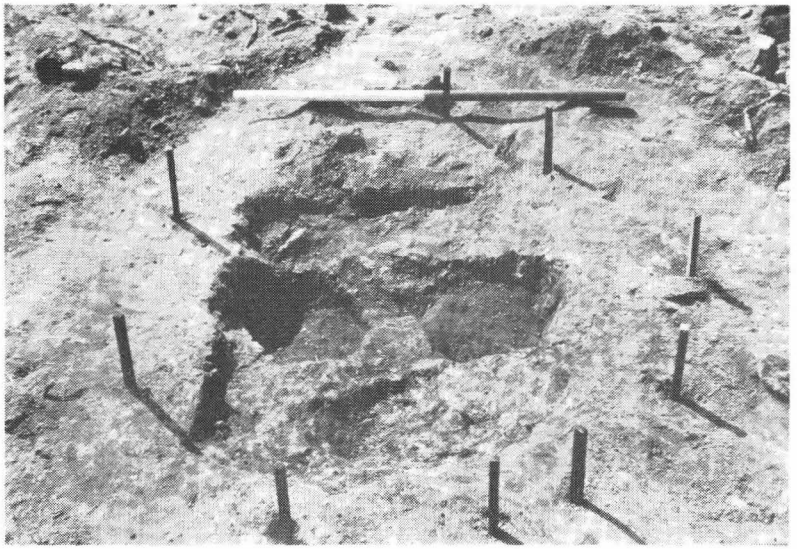

Plate 3. Cow Park. Anvil site; scale 1 m

Plate 4. Cow Park. Section of No. 2 furnace wall, showing coil construction

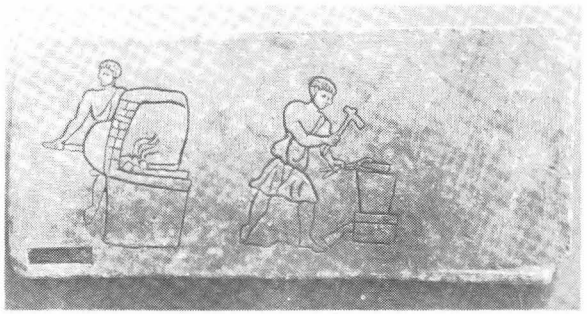

Plate 5. Graffito showing Roman blacksmith's workshop; from the catacomb of Domitilla, Rome; showing tree-trunk as anvil

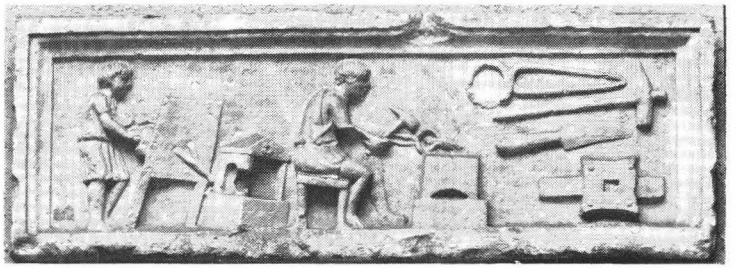

Plate 6. Roman blacksmith's workshop showing an iron plate as anvil. (Relief from Aquiliea; cast in Museo della Civilta. Rome)

Organisation

Until much more research has been done on the iron industry in the central Weald in Roman times, ideas as to possible organisation must be mainly speculative. We know from the research of Mr. H. Cleere that such organisation almost certainly did exist in the eastern Weald under the direction of the Classis Britannica.[10] Elsewhere some different organisation obtained. At the nearby Garden Hill settlement have been found signs of luxury living and iron working contemporary with the operation of this site.[11] On present evidence, everything points to Garden Hill being an organisational centre in the charge of a highly paid official controlling a number of sites such as the one we have excavated.

Subsequent history

Interesting developments obviously took place very soon after the iron making operations ceased, of which there is the following evidence. First, it is obvious that the amount of slag remaining is very small and in no way commensurate with the work that had been done. For instance there is much less than that remaining at Pippingford Bloomery[12] where there was only one furnace, which had not been relined. Secondly, all over the western half of the working area the floor was covered, to a depth of 30 cm, by waste from sieving slag to discard the charcoal dust and small pieces. This was done before turf had time to cover the abandoned site. Just over 2 km to the east is the Lewes to London Roman road across Ashdown Forest,[13] the course of which can still be traced by the bloomery slag used as a surface. I suggest that this was the destination of most of the slag produced here.

Dating

The two sources of dating are the pottery and archaeomagnetic measurements. From these it would appear that no precise date can be assigned to the furnaces but that they can safely be placed within the period A.D. 50-155.

SPECIALIST REPORTS

The Pottery (Fig. 3)

This was kindly examined by Dr. M. G. Fulford who reported as under:—'All but one sherd belongs to the East Sussex/Wealden group of grog-tempered largely hand-made wares. The body sherd (from a flagon) is wheel-thrown and in yellow sandy fabric. The collection could quite happily be lost among the Garden Hill material.[14] The Newhaven material also offers a good comparative collection.[15] As to date, this is very difficult. The one wheel-thrown sherd suggests a post-conquest date, but grog-tempered wares, which one might have supposed died out early in the Roman period, continue well into the second century if not beyond (see Garden Hill). One or two body sherds seem to have 'eye-brow' decoration which continues at least to the Neronian-Flavian period.'[16] Dr. Fulford went on to say that his first choice of date would be the second half of the first century, and secondly $c100 \pm 50$ (A.D.).

Archaeomagnetic Measurements

Samples were taken by A. J. Clark of the Ancient Monuments Laboratory, D. o. E., using the disc method *(Journal of Archaeological Science,* forthcoming), and measured under the direction of M. Noel in the Department of Geophysics and Planetary Physics, University of Newcastle upon Tyne.

Two sets of samples were obtained. Both were orientated by theodolite, using in the first case a timed sun shot, and in the second the built-in magnetic compass of the theodolite. The first set was taken in continuous heavy rain which flooded the lower parts of the furnaces so that it was only possible to sample the upper walls of Furnace 2 a succession of heavily burnt clay linings encrusted with slag. Ten samples produced a mean direction of Declination $7.4° \pm 6.1°$ E; Inclination $63.5° \pm 2.8°$ (single standard error; normalised to Meriden). On a later and drier occasion, a group of 11 samples from the floors of Furnaces 2 and 3 produced a mean direction of Declination $0.6° \pm 5.1°$ E; Inclination $65.7° \pm 2.2°$.

The second sample fits satisfactorily to the Romano-British directional curve as at present known, and indicates a date within the range A.D. 60-160; the first set is slightly displaced to the east of the curve and, although it overlaps the second set, on its own would suggest a range of dates entirely within the second century. Most of the error in both sets is due to the spread of declination values, and there was one explicable wild value in each set tending to separate them: one, a sample of iron slag, and the other incorrectly reassembled after breakage. Excluding these, the inclinations are much more precise and both sets are in good agreement, the overall mean being $64.6° \pm 0.9°$. Magnetic refraction—distortion of the magnetising field by the structure itself—should not have affected the inclination of the first set, which were taken mainly from the east end of the furnace but the second set, from the floors, could have been slightly shallow.[17] However,

the small standard error of the combined values shows that this effect must be minimal, and, accordingly allowing a very small bias for this, the inclination values indicate a date in the range A.D. 120-155.

Analysis of Roasted Clay-ironstone, by Dr. P. Ovenden

Adhering clay was carefully removed from the lumps of ironstone which were crushed to give a representative sample (20 g). This was rendered further to pass 63u. An aliquot of the sample (1 g) was ignited at 950 deg. C. to constant weight and a portion (0.1 g) dissolved in a mixture of hydrochloric and hydrofluoric acids. Excess fluorine was taken up with trimethyl borate and the following components determined by atomic spectrometry.

Component	%	
SiO_2	5.57	
Al_2O_3	3.39	
Fe_2O_3	80.6	
CaO	1.73	
MgO	2.44	
MnO	1.99	
K_2O	.093	
Na_2O	.007	
TiO_2	.29	
P_2O_5	1.05	
SO_3	.12	
H_2O, CO_2	2.93	*(Loss in weight)*

Dr. R. F. Tylecote comments on the above analysis as follows:—

'This is very good quality and must have been well roasted to give such a low LOI. Is it magnetic?[18] The quality is given by the low total $SiO_2+Al_2O_3+CaO+MgO$. The MnO will have replaced some iron in the slag, and I would expect the iron to have contained about 0.1-0.2% phosphorus.This would have made it a relatively poor metal for conversion to steel.'

Plant Remains

A series of soil samples were taken by Mrs. P. Hinton at varying levels over the working area near the furnaces. Unfortunately reliable results were negative.

Charcoal

A number of samples of charcoal were taken from inside Furnace 2, the working floor between the furnaces, and a post hole in the anvil area. They were examined by Ms. C. R. Cartwright who identified all as oak (*Quercus* sp.).

ACKNOWLEDGEMENTS

It is a pleasure to acknowlege the help and assistance of so many people, especially the Army authorities for permission to dig and Messrs. A. and R. Morriss who discovered and informed me of the site and afforded access. Among many members of the Wealden Iron Research Group who worked there I must mention R. Adams, L. Batchelor, P., D. and S. Combes, V. and B. Herbert, S. and G. Swift and M. Tebbutt.

I am grateful for advice generously given by Dr. R. F. Tylecote and Mr. H. Cleere, and for specialist reports from Dr. R. M. Fulford, Dr. P. Ovenden, Mr. A. J. Clark, Ms. C. R. Cartwright and Mrs. P. Hinton. Drawings were contributed by Mr. R. Cottingham, Miss L. Funnell and Mrs. M. Tebbutt, and photography by Mrs. E. Crossley and Mr. D. Combes.

The finds will be deposited at Barbican House Museum, Lewes.

[1] C. F. Tebbutt, 'Garden Hill Camp, Hartfield' *Sussex Archaeological Collections,* Vol. 108 (1970), 39-49.

[2] C. F. Tebbutt, 'A Romano-British Bloomery at Pippingford, Hartfield' *Sussex Archaeological Collections,* Vol. 111 (1973), 27-40.

[3] *Wealden Iron. Bulletin of the Wealden Iron Research Group,* 7 (1974), 11.

[4] *Ibid* 20.

[5] Except for the 'pillow mound' the only evidence found of other human activity on the site was a thin scatter of flint flakes, probably belonging to the Neolithic or Bronze Age.

[6] J. H. Money, 'Iron Age and Romano-British Iron Working Site in Minepit Wood, Rotherfield, Sussex' *Historic Metallurgy,* Vol. 8, 1—20.

[7] See note 2.

[8] H. F. Cleere, *Antiquaries Journal,* Vol. 52 (1972), 8-23.

[9] See notes 2, 3.

[10] *Archaeological Journal,* Vol. 131 (1974), 171-199.

[11] J. H. Money, 'Garden Hill' *Current Archaeology,* Vol. 41, 185-8, and forthcoming.

[12] See note 2.

[13] I. D. Margary, *Roman Ways in the Weald* (London 1965), 124.

[14] See note 11.

[15] Martin Bell, 'The Excavation of an Early Romano-British Site at Newhaven, Sussex' *Sussex Archaeological Collections,* Vol. 114 (1976), 259-62.

[16] See note 15.

[17] Aitken, M. J. and Hawley, H. N., 'Archaeo-magnetism: evidence for magnetic refraction in kiln structures' *Archaeometry,* Vol. 13, 83-85.

[18] Other samples of this ore were highly magnetic.

A ROMANO-BRITISH POTTERY KILN AT POLHILL'S FARM, ARLINGTON

by *E. W. Holden, F.S.A.*
(with a contribution by J. Holmes, M.A., F.S.A.)

INTRODUCTION

During the construction of a reservoir at Arlington in September 1969, topsoil and Weald Clay subsoil were removed mechanically on the west side of the small river Cuckmere (Fig. 1, 1) to a depth of at least 12 in (0.3 m), possibly more. In one place dark patches were seen in the exposed clay and a few potsherds were collected by the Site Engineer, Mr C. R. Robinson, of Messrs Binnie and Partners. We are indebted to Mr Robinson for bringing the matter to the notice of the Society and for arranging that the area was kept clear of machines for a few days to enable a salvage excavation to take place. Romano-British finds north of Chilver Bridge and elsewhere on the farm had been made by the Rev. W. Budgen and others including our late member Major D. H. de Pass, who had farmed the land and lived nearby for more than forty years.[1] The latter informed the writer that he had never recovered archaeological objects of any kind from the kiln area, probably because that particular meadow had rarely been ploughed.

The clay was extremely hard because of the prolonged sunshine and compression by heavy machines, these factors preventing the whole of the kiln flues and stokeholes being excavated in the time available. All is now covered by the water in the reservoir.

THE SITE (Fig. 1, 1 & 2)

The kiln lay at Nat. Grid Ref. TQ 5300 0743 near the top of a gentle slope which fell away eastwards towards the river some 300 ft (91 m) away. The general level of the kiln area was *c.*70 ft (21 m) above Ordnance Datum.

The following additional features were noted and dug by the excavators. (Feature numbers, preceded by the letter 'F', are not in numerical order, but are as in the site notebook):—

F.4. The dark outline of a structure some 20 ft (6 m) north-east of the kiln, possibly a potter's workshop.

F.3. A scatter of sherds in dark clay, *c.*38 ft (11.6 m) north of Feature 4.

Features 1, 3 and 4 are considered to be coeval.

OTHER FEATURES. A group of eighteen features, all much truncated by the soil removal, were located (mostly by Mrs H. G. Holden) to the south of the kiln, the distance from the latter to the centre of the group being about 230 ft (70 m). They spread over an area *c.*180 ft (55 m) N-S and 130 ft (40 m) E-W. Some may be the bases of postholes, others the bottoms of pits, and there were two places where cooking had apparently been conducted. Four, or perhaps five, of these features appear from the dating of pottery found with them to be contemporary with the kiln to the north, but the remainder belong to an occupation about two centuries earlier.[2]

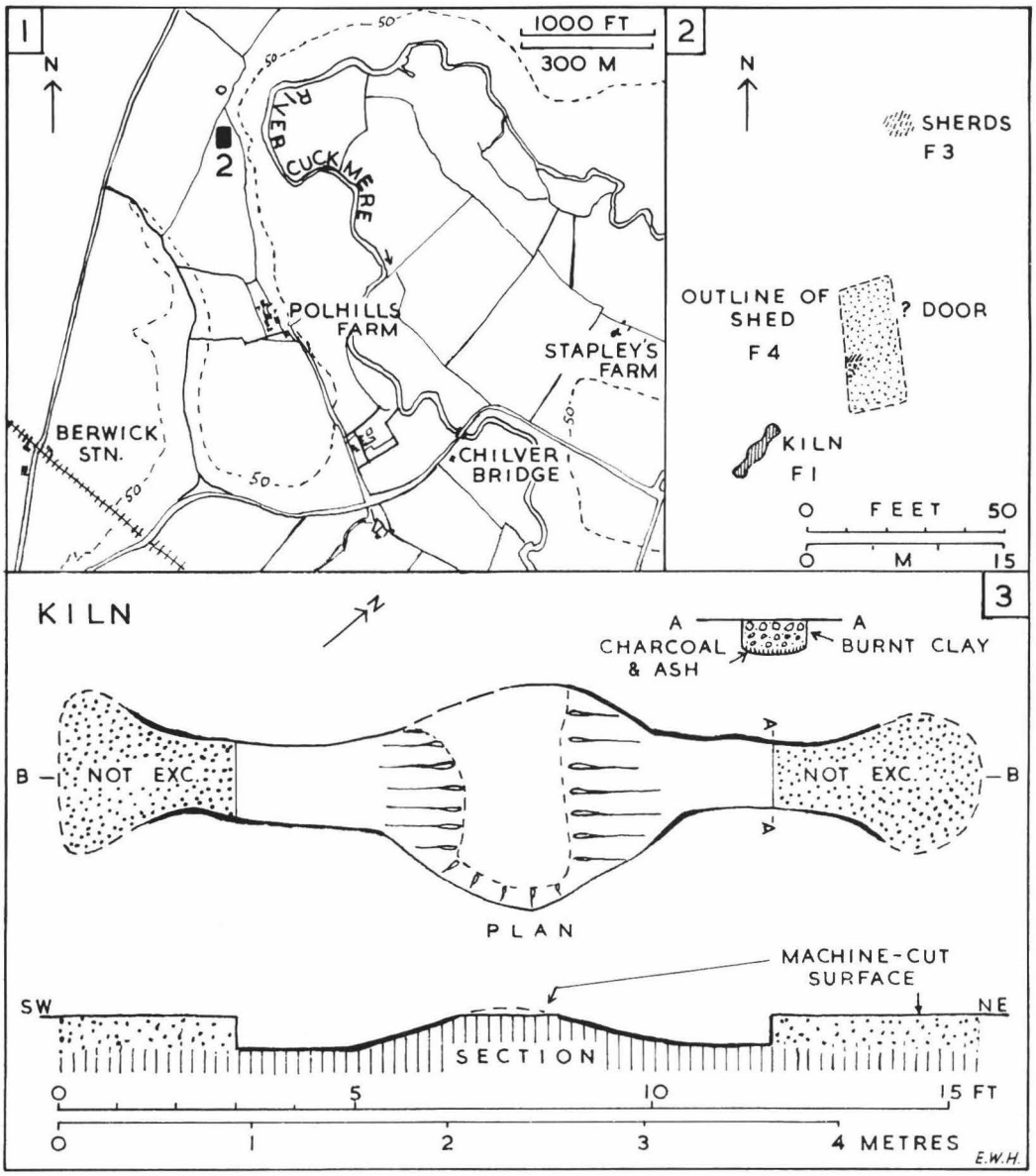

Fig. 1. Arlington. 1. Location plan before construction of the reservoir (adapted from 6 in O.S., 1910 edition). 2. Features 1, 3 and 4. 3. Plan and sections of Romano-British pottery kiln.

THE KILN (Fig. 1, 2 & 3, F.1). Soil discolouration depicted an oval area *c.*5 ft long by 3 ft wide (1.52 m by 1.14 m) with two opposing flue trenches, orientated SW-NE, some 15 in (0.4 m) wide, 3-4 ft (0.9-1.2 m) long, of which the bottom 6 in (0.15 m) remained. These expanded at the extreme ends into what are assumed to be stokeholes. The oven area and about half of each flue were excavated. The bottoms of the trenches and around the oven base had been subjected to considerable heat which caused the natural yellowish clay to redden. The sides of the flues were fire-marked and in places (where the lines have been thickened in Fig. 1, 3) baked brick-hard. The filling of the flues was of brownish, very hard clay, becoming progressively redder in colour and in small lumps below the first 2 in (50 mm). Flecks of charcoal were visible throughout and the bottoms of the trenches were covered with $\frac{1}{2}$ in (12 mm) of black ash. Broken potsherds were recovered, mostly from the north-east flue trench.

The floor of the oven had been shaved off, the superstructure lost and there were no constructional features from which could be deduced a raised perforated floor. The surviving evidence suggests that the Arlington kiln was similar to fourth century examples in the Farnham/Alice Holt area.[3] With this form of kiln pots were stacked on the oven floor and both flues fired simultaneously.[4] As for the superstructure, a permanent dome presents stacking problems and experiments have demonstrated that satisfactory results can be achieved by making the oven with vertical walls, left open at the top, the load having a temporary cover during the firing process.[5]

The site of the kiln would appear to be a suitable one for firing pottery. There was an abundance of readily available clay, a water supply from the nearby river, adequate provision of timber for fuel from the heavily wooded Weald, a source of sand for tempering clay, if required, from the Lower Greensand less than a half-mile (0.8 km) away, while for communications, a minor Roman road ran east-west only a short distance south of the site.[6] It may also have been an advantage for the kiln to be sited just below the crest of a slope on the leeward side of the prevailing winds from the south-west and thus afforded some protection from the full force of gales, yet not too sheltered. Some workers have considered that kilns should be exposed to the strongest winds, but experiments suggest that fires are very difficult to control when the wind is strong and blustery.[7]

THE POTTER'S WORKSHOP (Fig. 1, 2, F.4). North-east of the kiln the dark area seen in the clay was scraped, revealing a more or less rectangular area *c.*32 ft (9.75 m) long by 15 ft (4.57 m) at one end and 12 ft 6 in (3.8 m) at the other. In one long side near the north-east corner there appeared to have been an entrance, while in the other long side the darker hatching in the plan depicts where reddening of the clay suggested some form of fireplace with a screen wall on its north side. The only evidence for any feature was in the differential colouring of the clay, yellow-ochre where natural and grey within the rectangle apart from the fire area. The possible doorway showed up as grey clay extending a short distance outside the perimeter. The absence of deep postholes suggests a wall structure based on timber uprights, possibly with panels of wattle and clay between them. The removal of topsoil and subsoil had effectively destroyed any postholes or continuous trench that there might have been to take the bases of the posts. The structure is interpreted as the potter's workshop (for further discussion of this point by Mr J. Holmes, see below).

POTTERY SCATTER (Fig. 1, 2, F.3). A small number of sherds were in a dark patch of clay between 3 ft (0.9 m) and 4 ft (1.2 m) both ways. Mr. Holmes considers that the sherds may be fourth century, but are insufficient for closer dating. This feature may be all that remained of a rubbish pit.

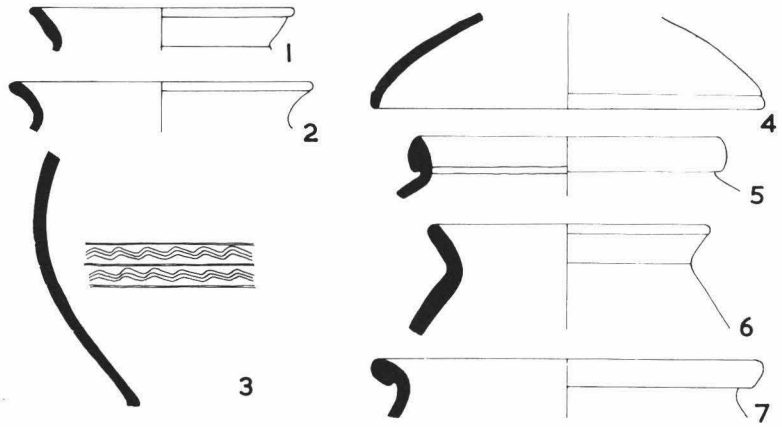

Fig. 2. Arlington. Fourth century A.D. pottery from the kiln (drawn by J. Holmes). Scale $\frac{1}{4}$.

THE POTTERY *(by John Holmes, M.A., F.S.A.)*

THE KILN (Fig. 2). Pieces of seven vessels were found in excavating the kiln; the rim no. 6 was found on the bottom of the kiln. It is likely that all these pieces came from vessels which had been fired in the kiln and that they were waste pieces which had been left behind when it was unloaded.

1. Four joining rim fragments of a jar with large recurved rim. The lip of the rim is turned flat and there is a slight hollow at the junction of rim and neck. This rim can be matched by jars made in the Overwey kilns in the Farnham region.[8]

2. Several joining rim fragments of a jar. The recurved form of the rim can again be matched among the vessels made in the Overwey kilns.[9]

3. Many joining fragments of the side of a large storage jar, decorated with a double band of wavy lines tooled with a 3-toothed comb. There is not sufficient of this piece to decide for certain which way up it should go and it may have been drawn upside down.

4. Many joining fragments of a lid.

5. Rim of a large narrow-mouthed storage jar. The rim is heavy and rounded and is turned over to leave a groove beneath it, suitable for a cord used to tie on a cover. Jars like these were a common product of the kilns of the Farnham region and this rim can be matched at the 'Site 507' kiln.[10]

6. Large piece of rim and shoulder of a vessel with a narrow mouth. The ware is thick and heavy. The vessel will have had a body narrower than its height, giving it a form more like a carafe than a jar. Similar but smaller narrow-mouthed jars were produced at the Overwey kilns.[11] These six pieces are all made of the same hard, sandy, dark brown fabric. There is plenty of fine grit in the body but much grit has been lost, giving the fabric a pitted appearance. The surface is a reddish-brown colour (Study Group colour chart yellow/brown B no. 3) but is burnt black in places. The pieces have apparently been mis-fired and oxidized, instead of being reduced to the intended grey colour. It is apparent also that these pieces are in the 'biscuit' stage, having undergone the first firing only; they were intended to be coated with slip and fired a second time had they not been spoiled.

7. This piece of jar rim is in the finished state. The fabric is similar to that of the other pieces but it has been properly fired and reduced to the intended grey colour. The rim has been coated over the outside and for an inch (25 mm) or so over the inside with a grey slip (Study Group colour chart neutral no. 5).

The vessels represented by these seven pieces of pottery are all fine kitchen wares, not intended to be heated over a fire. They are a small sample of the products of the kiln. A great variety of jars, bowls and dishes in fine, slip-coated wares was produced in most of the kilns of Alice Holt/Farnham region and marketed over a wide area, including Sussex. The pots found with the Arlington kiln resemble quite closely the products of Kiln III at Overwey. The Overwey kilns were attributed to the latter part of the fourth century on the evidence of a coin of Gratian (A.D. 367-383) and the fact that much pottery of Overwey types was found at the Chatley Farm villa which was thought to have ended about that time.[12]

The jars nos. 1 and 2 may be compared with well-known fourth century types such as those found at the Park Street Roman villa, Herts.[13] The narrow-mouthed storage jars, too, are common in fourth century groups of pottery and no. 5 is not unlike some jars from Verulamium Theatre. The jar no. 7 is of a type which was common in mid-fourth century deposits at the Park Street villa, the Lockleys villa and Verulamium Theatre.[14]

Comparisons such as these serve only to confirm that the Arlington group of pottery should be dated to the fourth century but they are not exact and they tell nothing of the economic significance of the kiln or of the reason for its existence on this site. It is not part of a local industry and indeed there never was any pottery manufacture on an industrial scale in Sussex. Roman Sussex got its pottery from several sources outside Sussex and most of the mass-produced wares found in Sussex were manufactured at kilns in the Alice Holt/Farnham region.[15] It may be suggested, from the resemblance between the products of the Arlington kiln and the products of the Overwey kiln, that one of the Farnham potters who was already marketing his wares in Sussex came to Arlington and established a kiln there, on a site adjacent to the Roman road which serves Pevensey,[16] in order to meet the sudden increased demand created by the building of the Pevensey fort. If a late date for the Pevensey fort is acceptable and if it can be related to the visit of Constans in A.D. 343, then this would date the kiln to the mid-fourth century, in agreement with the probable date of the pottery found with it. It may be significant that the kiln is but one feature in an industrial area of considerable size, which was discovered and destroyed by the construction of the new reservoir here in 1968.

THE POTTER'S WORKSHOP. There can be little doubt that the rectangular structure F.4 north-east of the kiln was the potter's workshop. A few scraps of pottery were recovered from the site but these were too indeterminate to be of use for dating the feature; there were three rim fragments of grey ware dishes, probably of fourth century types, and some other waterworn fragments, including a piece of samian ware.

Buildings have seldom been recorded in connection with kilns but a complete potter's establishment of early fourth century date was excavated in 1969 at Stibbington in the Nene Valley. It comprised a half-timbered workshop and two kilns, also a well near the south-west corner of the building. The workshop measured 40 ft (12.2 m) and 21 ft (6.4 m) wide, which is slightly larger than the ground plan of the Arlington building but in the same proportion.[17]

ACKNOWLEDGMENTS

Thanks are offered to Mr C. R. Robinson, The Eastbourne Waterworks Company, and volunteer diggers who assisted at the site. Miss J. Biggar gave material help in processing some of the pottery. The writer is especially indebted to Mr John Holmes who, in addition to drawing and reporting on the pottery, together with a note on the workshop, read the ms. in draft. His constructive criticisms and suggestions have been incorporated into the final text. Any errors, however, remain the responsibility of the writer.

THE FINDS

These will be deposited in the Society's Museum of Sussex Archaeology, Barbican House, Lewes.

It should be noted that the late Major de Pass' collection of archaeological material picked up over many years from Polhills Farm was given by Mrs de Pass, after his death in 1973, to the authorities at Arlington church. To the best of the recollection of the writer who saw the finds about fifteen years ago, they consisted of prehistoric worked flints and a little pottery, Romano-British, Saxon or Saxo-Norman and medieval pottery and a Romano-British bronze brooch which was dated by Mr J. Knight of the then Ministry of Public Building and Works, Ancient Monuments Inspectorate, to the second half of the second century A.D. There was also some samian ware, including a sherd stamped ATTILI M.

[1] *Sussex Notes and Queries* 7(1938-9), 245-6; ibid., 14(1954-7), 68, 104; ibid., 16(1963-7), 288.

[2] Pottery dating by Mr J. Holmes. It is hoped to include details of these features jointly by E.W.H. and J.H. in a future report by Mr Holmes on various other archaeological sites and discoveries made over a larger area of the reservoir during the construction period and for some time before.

[3] A. J. Clark, 'The Fourth Century Romano-British Pottery Kilns at Overwey, Tilford,' *Surrey Archaeological Collections,* 51(1949), 29-56.

[4] Ibid., p.43.

[5] G. F. Bryant, 'Experimental Romano-British Kiln Firings,' in A. Detsicas, ed., 'Current Research in Romano-British Pottery,' *Council for British Archaeology Research Report,* no. 10 (1973), 149-60; G. F. Bryant, 'Experimental kiln firings at Barton-on-Humber, S. Humberside 1971,' *Medieval Archaeology,* 21(1977), 106-123, see pp. 109-10.

[6] I. D. Margary, *Roman Ways in the Weald* (1948), 188 and 191.

[7] G. F. Bryant, 1977, op. cit., 121. Cf. P. Mayes, 'The Firing of a Pottery Kiln of a Romano-British Type at Boston, Lincs.,' *Archaeometry,* 4(1961), 4-19, see p.7.

[8] A. J. Clark, op. cit., fig. 7, 38; A. W. G. Lowther, *A Survey of the Prehistory of the Farnham District* (Surrey Archaeol. Soc. 1939), 'Roman and Saxon Periods,' 218-259, R95.

[9] A. J. Clark, op. cit., fig. 7, 34; A. W. G. Lowther, op. cit., R99.

[10] A. W. G. Lowther, op. cit., R3.

[11] A. J. Clark, op. cit., fig. 7, 29.

[12] A. J. Clark, op. cit., 55.

[13] P. Corder, 'Pottery from Stratified Deposits,' in H. E. O'Neil, 'The Roman Villa at Park Street, near St. Albans, Hertfordshire,' *Archaeological Journal,* 102(1945), 77-96, fig. 19, 39, 40.

[14] Discussed in P. Corder, op. cit., 90 with fig. 19.

[15] This idea has recently been worked out in some detail for the Roman site at Bishopstone. See C. M. Green in *Sussex Archaeological Collections* (hereafter *S.A.C.*), 115(1977) fig. 80.

[16] I. D. Margary, 'Roman Roads from Pevensey,' *S.A.C.,* 80(1939), 29-61, see pp. 37-44.

[17] A brief description of the Stibbington workshop was published in 'Roman Britain in 1969,' in *Britannia,* 1(1970), 287; J. P. Wild, 'A Fourth Century Potter's Workshop and Kilns at Stibbington, Peterborough,' in A. Detsicas, ed., 1973, op. cit., 135-8.

A GAZETTEER OF ROMAN SITES AND FINDS ON THE WEST SUSSEX COASTAL PLAIN[n1]

by *M. W. Pitts*

ABBREVIATIONS

Ant.J.	*Antiquaries Journal*
Arch.J.	*Archaeological Journal*
C.D.M.	Chichester District Museum
C.D.M. card	index card in the C.D.M.
Copley (1958)	G. J. Copley, *An Archaeology of South-east England,* Phoenix House (1958)
Cunliffe (1971)	B. W. Cunliffe, *Excavations at Fishbourne,* Society of Antiquaries (1971)
Cunliffe (1973)	B. W. Cunliffe, *The Regni,* Duckworth (1973)
Dallaway (1815)	J. Dallaway, *A History of the Western Division of the County of Sussex: the Rape of Chichester* (1815)
Dixon (1878)	F. Dixon, *The Geology of Sussex* (1878)
Done (1953)	W. E. P. Done, *Looking back in Sussex,* Faber and Faber (1953)
Down (1974)	A. Down, *Chichester Excavations 2,* Phillimore (1974)
Down and Rule (1971)	A. Down and M. Rule, *Chichester Excavations 1,* Chichester Civic Society Excavations Committee (1971)
Exc. Com.	*Report of the Chichester Civic Society Excavations Committee*
Fleming (1949)	L. Fleming, *History of Pagham in Sussex II,* Ditchling Press (1949)
Heron-Allen (1911)	E. Heron-Allen, *Selsey Bill: Historic and Prehistoric,* Duckworth (1911)
J.A.C.B.	*Bulletin of the Joint Archaeological Committee*
J.B.A.A.	*Journal of the British Archaeological Association*
J.R.S.	*Journal of Roman Studies*
O.S. card	Ordnance Survey index card
P.G.A.	*Proceedings of the Geological Association*
P.H.F.C.	*Proceedings of the Hampshire Field Club*
S.A.C.	*Sussex Archaeological Collections*
S.N.Q.	*Sussex Notes and Queries*
V.C.H. 2 (1907), *3* (1953) and *4* (1953)	volumes of the *Victoria County History of Sussex*

[n1] The text of this paper stands as submitted in March 1976. Since that date, a number of relevant publications have appeared, including A. Down, *Chichester Excavations 3,* Phillimore (1978). See also *S.A.C.,* Vol. 116.

INTRODUCTION

Although this Gazetteer contains a fair amount of material that has only come to light recently, a great number of the sites were discovered further back in the past, and are confirmed by a continuous series of notes and articles published over the past century or so. A greater number still, despite a similar antiquity, have never been systematically published at all, and since such sites are intimately bound up with the history of the museums of the area, this topic seems a suitable point at which to begin.

There were until recently three museums in the area covered by this Gazetteer, at Bognor Regis, Littlehampton and Chichester. Of these, only the latter is now active, and it is this museum that is of greatest significance in terms of collections of archaeological artifacts from the area. The history of the museums of Chichester is the fairly common story of the fruits of the enthusiasm and energy of one or more individuals being dissipated after their departure.

The first museum belonged to the Chichester Literary and Philosophical Society (later merged with the Mechanics' Institute),[1] which was formed in 1831, and had premises in North Street. Amongst objects acquired at an early date were the Avisford burial cists[2] (Gazetteer nos. 98 and i) and a block of tessellated floor from the Broyle (Gazetteer no. 5). Following the decline of the Institute's original fervour and idealism, as early as 1891, objects began to be dispersed from the collections: amongst other things, an offer was presented for two tattooed heads from New Zealand (this, in fact, was turned down, although no such heads appear to be in the Chichester museum today!). Acquisitions, as well as being sold (in 1903, £66 was realised from the sale of objects to local people or dealers), were seemingly also stolen. When, in 1924, 'Chichester was so unmindful of her illustrious past that she actually sold her Museum'[n2] it appears that most of its contents had been dissipated, although a reference a decade later to the 'Museum storeroom in North Street' suggests that the premises continued to be used.[3]

In 1932, a pamphlet was printed regarding a proposed museum for Chichester in what was then still known as the Old Jury Room, in Priory Park, the use of which the City Corporation had granted as 'temporary accommodation.' Despite the efforts of Miss G. M. White (now Mrs. J. G. D. Clark) and her father, however, who in the words of the Chichester Civic Society Excavations Committee's Report for 1954-1955, 'had worked unceasingly before the war to restart a Museum in the City,' progress was slow. Indeed, when one writer expressed the hope that 'one day Chichester will have a museum worthy of housing' the objects he was reporting on,[4] 20 years had passed. Not that these two decades were uneventful. In a letter to the writer, Mrs. Clark writes: 'Towards the end of the war, when my father, Mr. W. Ll. White, was already incapacitated by illness, the collections were, without warning, transferred to the top floor of the Cricket Pavilion in the Park and there suffered the attentions of mice and decay, so that labels and maps were reduced to shreds.' Several of the items listed in this Gazetteer could only be identified by such shreds.

In 1947, the Chichester Civic Society Excavations Committee was established, which in 1953 assumed responsibility for displays in the Guildhall Museum, as the 'Old Jury Room' had by then come to be called. Finally, on the 25th of July, 1955, the Museum was formally opened. It was reported that 'brightness and cleanliness are everywhere apparent'[5] and it seemed that, at last, the battle had been won. A few years later, on the 10th of November, 1962, the present Chichester District Museum was temporarily opened in premises made available by Mr. Stanley Roth. The Friends of Chichester Museum was inaugurated, bracing itself for the task of dealing with 'an immense backlog of sorting, cataloguing, cleaning and restoring.' The following year, the

Chichester Museum Society (together with the Bognor Regis Natural Science Society) joined the Joint Archaeological Committee, an organisation formed in the late 1950s to 'stimulate and co-ordinate the archaeological work of the Museums and Societies which are its members,' claiming as its special concern 'the recording of ancient field boundaries.'[6] In 1964, the formation by the Chichester Museum of an Archaeological Correspondents Group was announced, in the image of the then youthful Worthing Group, whose mandate was 'to observe and report on any "disturbance" ... in the area covered by the museum' (i.e., approximately the area of this Gazetteer). The six inch maps and card index of sites now in the museum are the work of this Group. It is to be regretted, however, that in one crucial aspect—publication—the Chichester Group failed to match its Worthing counterpart. Furthermore, its efforts inevitably added to the 'immense backlog.'

The state of the Museums' collections, then, has been one stimulus to the compilation of this Gazetteer, and it is hoped that it will itself lead to the publication by others of similar lists of material of other periods. One might mention in particular the Bronze Age (there are at least seven hoards, none adequately published) and Medieval periods as being particularly promising in their potential value. More cheerfully, Mr. A. Down's work in Chichester and in the Chilgrove valley, a shining example to all who work in the area, should gain from the background which this corpus will provide. The final decision to publish was precipitated by the accumulation in the writer's hands of Roman material from recent 'disturbances,' which, while too trivial to publish by themselves, would help to fill out a general pattern that a gazetteer can furnish.

The system followed has been to give each site a name, which is followed by the parish in which the site lies. Where distinction is thought necessary, the writer's comments on published material have been italicised; it should be borne in mind that some of the older records may not be as reliable in their accuracy as one would like. The area covered extends north to the E-W grid line 070 and west to the N-S line 800, extending beyond this to cover the whole of the Selsey peninsula. This area (*c.* 220 square km.) is the same as that covered by the writer's gazetteer of Mesolithic finds[7] (Fig. 1).

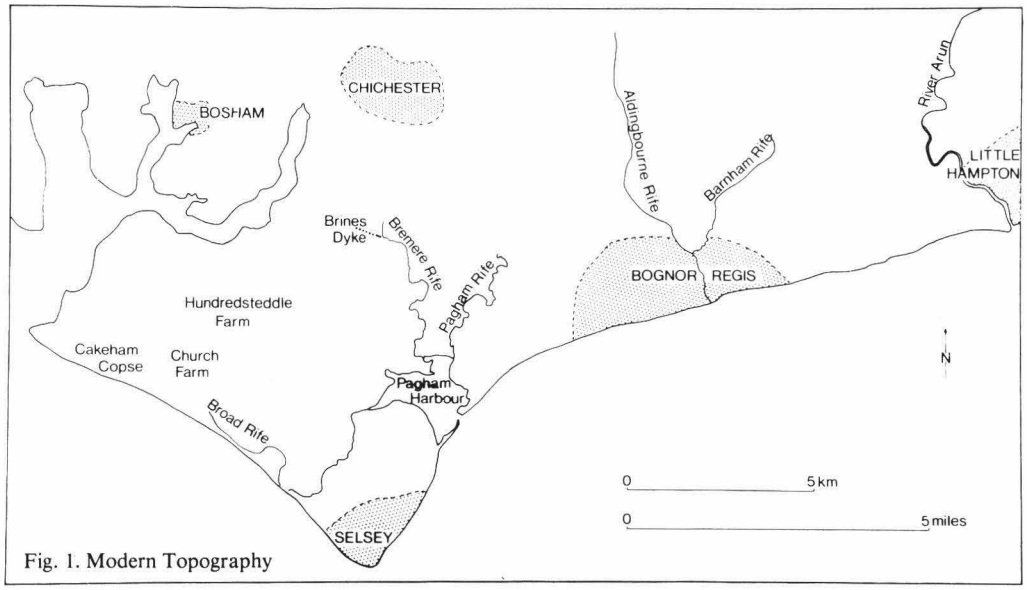

Fig. 1. Modern Topography

One site from outside this area has been included for its obvious relevance, and this is listed separately from the main numbered series (site no. i). Extra-mural sites in the gazetteer for Chichester[8] have been marked on the map (Fig. 2) with dots. The Samian identifications for all but one of the sites (Gazetteer no. 65) are the work of Mr. G. B. Dannell (cf nos. 55, 56, 66, 76, 77, 94 and 105). Mr. A. Down has contributed a number of entries (nos. 10, 15, 64, 100 and 103). Mr. A. C. King contributed comments on the pottery from sites 57 and 59, and provided the associated drawings.

A NOTE ON THE MAP (FIG. 2)

The topographical appearance of the Coastal Plain has changed considerably during the ten millennia or so since the final climatic warming which marked the close of the Devensian glaciation. A rising sea level caused the river and stream channels, graded to a low level during cold periods in the Pleistocene, to become, first, submerged, creating a landscape dissected by narrow marine inlets. With the sea at its highest level, the Arun valley would have contained a depth of water of anything up to 100ft. (30m.) or more;[9] the valley of the Aldingbourne Rife at least ten feet (3m.), and probably considerably more.[10] Thus it seems that the larger streams would have been easily navigable, at least in their lower and middle reaches, in craft of greater draft than a simple canoe. At the same time, silt was being deposited in these inlets: the valleys of the Arun, and the Barnham, Aldingbourne, Pagham, Bremere and Broad Rifes, are now almost totally filled. It is noticeable that the inlets around Chichester and Bosham, protected by the Isle of Wight from the severe erosion inflicted on the western coast of the Selsey peninsula, are still tidal. It is likely that the accumulation of eastward drifting beach material at the mouths of the Arun and the rifes listed above is partly responsible for their earlier silting and colonisation by dry land plants.

The chronology of submergence, silting and erosion, probably both contemporary and continuous processes, can be little more than guessed at, as there is as yet no local evidence. The general picture along the English Channel seems to be that the sea had risen to more or less its present level by *c.* 3000 b.c.[11] At the time of submergence, the valleys of the rifes were clothed in forest.[12] Were samples of preserved wood to be subjected to C14 dating, it is not unlikely that dates similar to those obtained for the submerged forest at Pett in E. Sussex (*c.* 3300 b.c.)[13] would result. That Chichester harbour at least was navigable in Roman times is strongly implied by the location of the palace and earlier military buildings at Fishbourne, and the tile clamps along the east coast of the inlet (Gazetteer no. 11).

Bede, writing in the 8th century A.D. about events which occurred some three centuries before, described Selsey as 'a place surrounded by the sea on all sides except to the west, where there is an approach about a sling's cast in width.'[14] If we allow for one km. of coastal erosion since Bede's time, it is possible to 'recreate' his island, assuming that the inlets were then still tidal. The valley of the Broad Rife can be interpolated so that the small stretch of estuarine alluvium south of Church Farm, East Wittering (SZ 970803) becomes the most distant extension of an inlet that met the open sea at Pagham harbour. The most southerly bend of this extension could well come within a 'sling's cast' of the coast (at *c.* SZ 950802), thus producing Bede's isthmus; the resultant 'island' is an L-shaped piece of land, with its long arm orientated NW-SE, and its short (the only part still surviving) SW-NE. Bede notes that Ethelwalh granted Wilfrid 87 hides of land.[15] The Selsey island (*c.* 15 square km.) would require these hides to be *c.* 18 hectares (*c.* seven acres) in extent, which, even admitting the dangers inherent in working from hides to areal units, does seem excessively small.[16] If we include all the land south and west of 'Brines Dyke,'[17] we arrive at a figure of *c.* 70 ha.

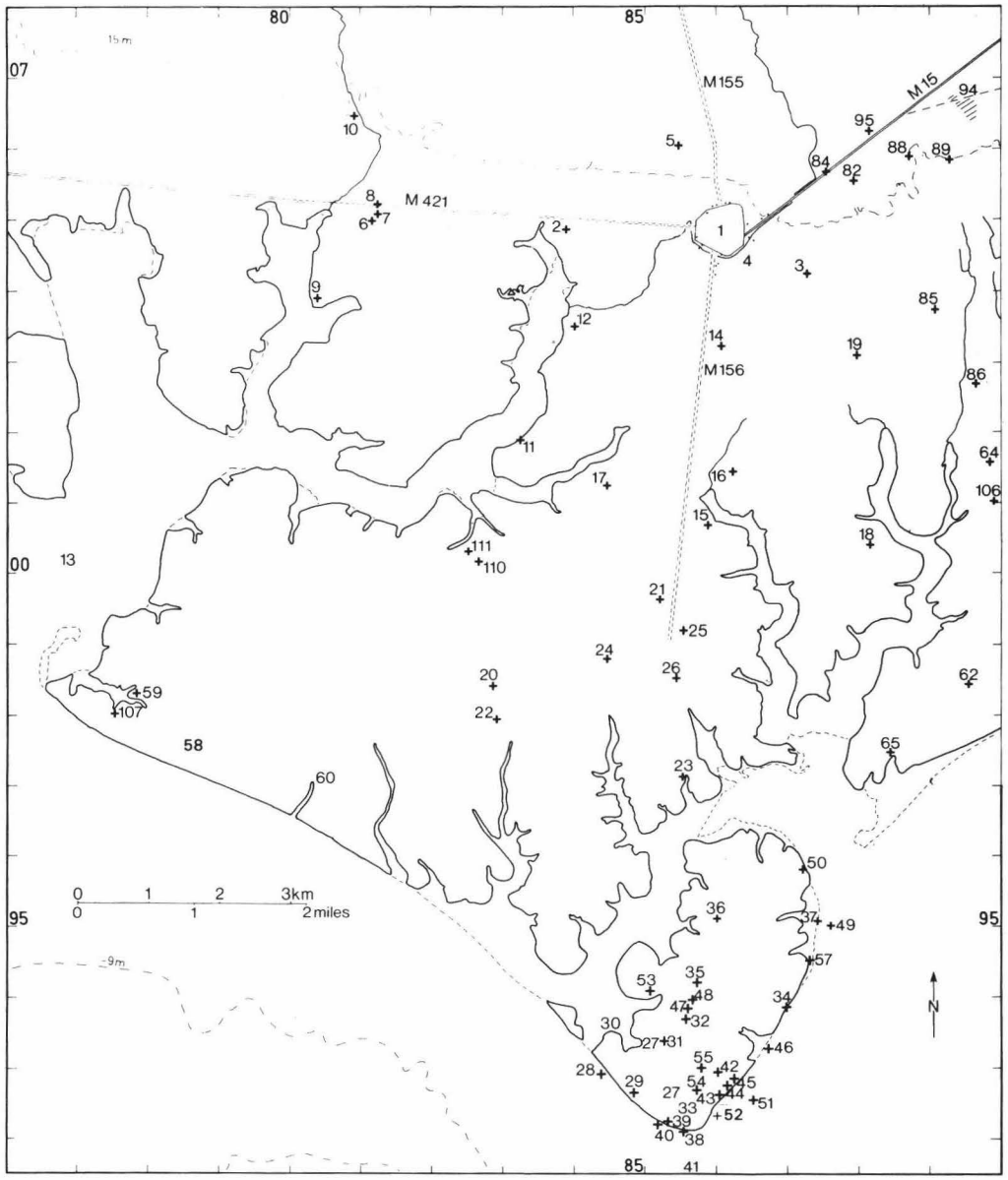

Fig. 2a. Location map of Roman sites and finds

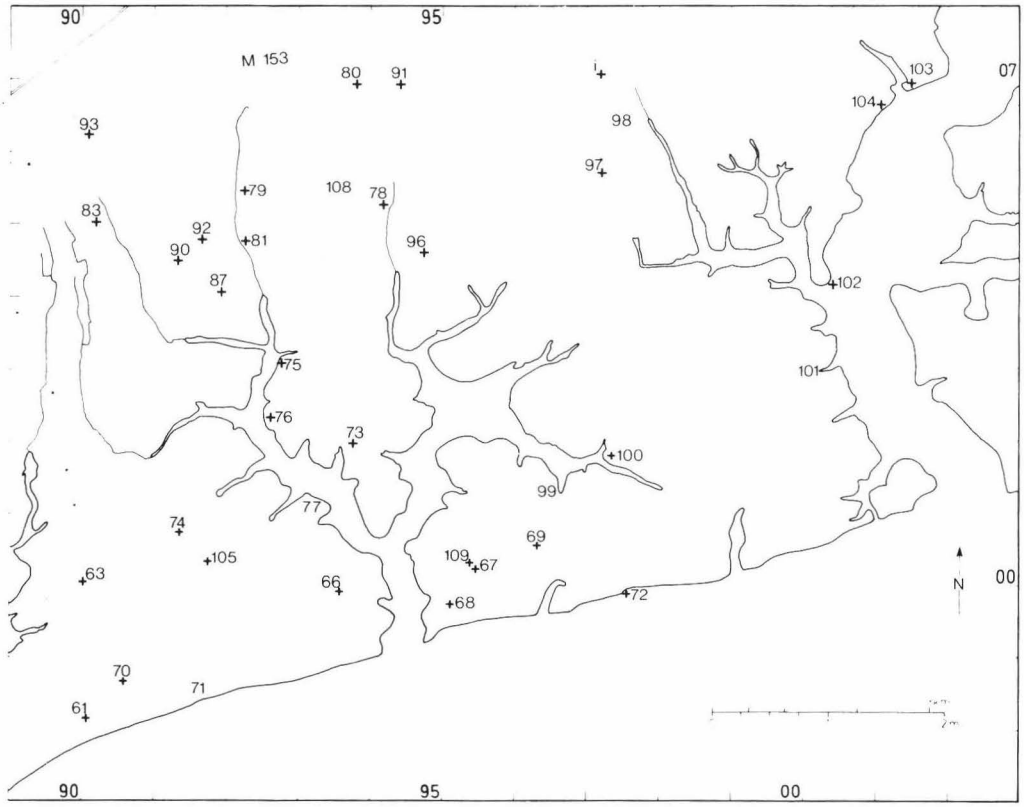

Fig. 2b. Location map of Roman sites and finds

(*c.* 28 ac.) per hide. It must be admitted, however, that while providing an alternative context for Brines Dyke,[18] this interpretation (spreading the 87 hides over the whole Selsey peninsula, while restricting Bede's topographical description to the Selsey island itself) is apparently at variance with the text. An alternative approach would be to allow for greater erosion of the coast to the south—something in the order of an enormous 10km. (six miles). Whatever the case, it seems fair to extract the implication from Bede's text that the Broad Rife inlet was, in his time, tidal, and accessible through Pagham harbour.

In sum, then, it seems likely that the estuarine inlets of the Plain would have been tidal at least between 3000 b.c. and the 8th century A.D. On the base map (Fig. 2), the coast has been carried inland along the boundaries of these inlets as indicated by the present extent of estuarine alluvium.[19] It should be stressed that the resultant picture is not meant to be taken as an accurate representation of the Roman coast-line. The amount of subsequent seaward erosion is unknown, as is the then degree of silting in these inlets. That the sea level was not constant even during this short period is suggested by evidence from Fishbourne indicating flooding in late Roman times.[20] The main point of the map is to impress that conditions *have* changed. Elucidation of the details of this change awaits future work.

THE LAVANT

Not only has the coast changed since Roman times, but the major stream (albeit, now at least, seasonal) flowing from the Downs, now follows a different course. The distribution of freshwater alluvium indicates that the Lavant once flowed out to sea at Pagham harbour. Its modern (or rather 18th century) course is mapped in Fig. 2. It would seem most likely that the change was brought about by deliberate diversion (at the point where the Lavant meets Stane Street) but the date of this act is not known. Aldsworth and Freke, [21] following Johnston,[22] suggest a medieval context, while Bradley[23] and Cunliffe[24] favour a Roman date. If in fact the latter is correct, it may be imagined that one reason for the diversion would have been the drainage of what is now known to have been a marshy area to the south of the town walls. However, such conjecture should really be reserved until the date of the diversion be determined.

ROADS[25]

M421. Chichester-Bitterne.

There is no published evidence for this route immediately outside Chichester, but its presence further west has been demonstrated.[26]

M155. Chichester-Silchester.

Margary[27] accepted the evidence of aerial photographs and of Down's excavations,[28] which indicate a route leaving the town along the modern A286, rather than on the line of the B2178 which Margary originally suggested.

M15. Chichester-London (Stane Street).

Two sections through this road within the area of this Gazetteer have been described.[29] At SU 875056[30] the metalling was apparently about 30ft. (*c.* 10m.) wide, with flanking ditches 90ft. (*c.* 30m.) apart. An iron linch-pin was found on the berm (reminiscent of Childe's nut on Haverstock Hill!) and, just outside the northern ditch, one or more cremation burials (Gazetteer no. 84).

M156. Chichester-Sidlesham.

The route exists today as a combination of alignments, place-name evidence and crop-marks. *J.A.C.B. n.s., Vol. 1* (1965), notes that 'metalling can be plainly seen across ploughed fields at the present time at Kipson Bank (SU 856007).' Unlike Stane Street, and to a lesser extent roads M421 and M155, this route is almost entirely ignored by the modern road network.

Other routes

The existence in Roman times of various additional roads in the area has been postulated. The main one is the Chichester-Brighton route (M153) which branched off Stane Street, or possibly began as an independent road at Chichester.[31] The argument for this route is dependent on modern alignments alone, which Margary, in Alfred Watkins' vein, believed too straight to be anything but Roman in origin. However, the route (which is not as straight as known metalled ones) was an integral part of the 18th C. network, running along the upper Coastal Plain and linking a number of N-S tracks that connected (as they still do) the Plain with the Downs. Any evidence indicating it to be a Roman creation has yet to be produced.

Cunliffe[32] maps a road linking the palace at Fishbourne with the east gate of Chichester. In pre-Margary times, it was thought that a road headed north from Chichester, skirting the west side of the Trundle.[33] Done [34] believed in a Roman road from Birdham to Bracklesham; for short stretches such as this, more than straight lines on a map are obviously necessary as evidence.

FIELD SYSTEMS

The words 'Field System' appear on O.S. maps of the area in the parishes of Sidlesham (SZ 835985 area) and West Wittering (SZ 790995 area), and references by archaeologists and others are occasionally made to prehistoric or Roman fields on the Plain. During the compilation of this gazetteer, aerial photographs in County Hall, Chichester (vertical covers at *c.* 1:10,000, taken in 1949, 1963, 1965 and 1971) and record maps in the Barbican House Museum, Lewes, were scanned with a view to producing a map of these fields. However, with the exception of a few small ditches at Cakeham Copse, West Wittering (SZ 786977) and north of Hundredsteddle Farm, Birdham (SZ 817992) all the crop-marks seen, and all those drawn on the Society's maps in Barbican House, relate to boundaries mapped by Yeakell and Gardner in the late 18th century. Experience has shown, particularly during the drought of 1976, that Roman or earlier features are most unlikely to appear as crop-marks on the brickearth, which covers the greater part of the area under consideration.

Housing development in North Bersted (Gazetteer no. 77) is at present gradually exposing a system of early Roman fields, that appear to be small in size, and thin and rectangular in shape. In this general description, they are comparable to the Roman fields recorded by Lewis[35] on the Plain east of the Arun, at West Tarring, Worthing. These fields have very similar counterparts in the 18th century landscape (for example, a group in the area of South Bersted), but evidence for any continuity is not forthcoming. At North Bersted and West Tarring, the Roman fields bear no obvious relationship to later boundaries. The same impression is given by some odd stretches recently exposed in Bognor (Gazetteer no. 66).

It is perhaps of interest to note that evidence has been claimed for centuriation not only at Ripe in East Sussex, but also over the whole of the Sussex Coastal Plain, from Itchenor to Worthing, as well as in other areas of England.[36] There can be no denial that there are a number of intriguingly long field alignments in the area, but to explain this through the

invocation of centuriation is blanketing a complicated and drawn-out process of landscape evolution with a simplistic device for which there is no real evidence.

GAZETTEER

1. *Noviomagus Regnensium.* Down and Rule (1971) and Down (1974), with refs.
The earliest activity recognised on the site of the Roman town to date is associated with pre-Flavian timber buildings of military origin. The street grid appears to have been initiated towards the end of the 1st C., about a century before the construction of the earliest earth rampart. The latter was enlarged with stone fortifications around the mid 3rd C. A large cemetery has been explored outside the East Gate, in use from *c.* 70 A.D. to possibly as late as the early 4th C. A second cemetery has recently been recognised outside the North gate. There is no evidence to suggest that a third existed to the south of the town, the burial reported in 1819 (Chichester Roman Gazetteer no. 28) being likely to belong to an estate outside the city (A. Down).

2. *New Fishbourne, Chichester.* SU 839048. Cunliffe (1971).
Excavations revealed a sequence of activity beginning at the time of the Conquest (with two military store buildings) and ending in the late 3rd C. The military development was quickly replaced by civil, including a complex of rooms and a bath suite around a courtyard. In *c.* 75 A.D., a large system of four wings enclosing a formal garden (possibly Cogidubnus' palace) was set out. Reduction in the inhabited area during the 2nd C. was followed by a fire in *c.* 280, after which activity on the site seems to have ceased. Roman material in the area covers 35 to 50 acres.

3. *Whyke, Chichester,* SU 872042(?), 1. *Exc. Com.* (1954-55); 2. *S.N.Q. 14* (1957), p. 288.
(1). Stone burial cist found in gravel pit, containing three jugs dated to *c.* 100 A.D.
(2). Cist now in the C.D.M.
S.A.C. 48 (1905), p. 152, notes that 'several interesting Roman coins have occurred of late at Whyke,' including a Valens denarius. There is a complete jar in the Guildhall Museum, with a note recording its date and place of discovery (1955, at 'Wyck' gravel pit) and date of purchase (1966), quite probably from the cist.

4. *Rumboldswhyke, Chichester.* SU 8604. 1. *S.A.C. 17* (1865), p. 255; 2. *S.A.C. 47* (1904), p. 151; 3. *J.B.A.A. 24* (1868), p. 215.
(1). Two Roman pots found at Rumboldswhyke when digging ballast for the railway.
(2). A second brass of Tiberius and a third brass of Constantinian.
(3). Roman tile present in the chancel arch of Rumboldswhyke church.

5. *Whitehouse Farm, Broyle Road, Chichester.* SU 854060. Heron-Allen (1911), p. 83.
Roman (and pre-Roman) occupation revealed in railway cutting.
Steer[37] refers to an unidentified newspaper cutting of 1848 which records the presentation of 'a piece of Roman tesselated pavement dug up on the Broyle' to the museum of that date in Chichester.

6. *Broadbridge, Bosham.* SU 810051. *S.A.C. 18* (1866), pp. 1-4.
The foundations of a Roman building on an E-W alignment were discovered in 1832. Four rooms were exposed, including one enclosing a circular bath. Coins of Antoninus were found in the wall mortar.
Two marble heads have been found in Bosham, both in private gardens and thus presumably collectors' pieces; it is possible that they came from this (or another) local site:
i. *S.A.C. 53* (1910), p. 272; marble head dug up *c.* 1850 (SU 811054). Cf. *Ant.J. 45* (1965), pp. 178-82: head described as of late-Augustan or Tiberian style.
ii. Heron-Allen (1911), p. 84: marble portrait of ?Vespasian found in garden (SU 804038).

7. *Broadbridge, Bosham.* SU 810052. *J.R.S. 58* (1968), pp. 202-3.
Excavations by Mrs. M. H. Rule in 1967 about 65 yards N-E of the site of the villa (Gazetteer no. 6) revealed three phases of timber constructions. A substantial palisade was succeeded in the late 3rd C. by a rectangular two-roomed building, which on being burnt down in the early 4th C. was replaced by a wattle-and-daub structure.

8. *Broadbridge, Bosham.* SU 812052. *S.A.C. 18* (1866), pp. 1-4.
Considerable foundations found in 1832, in which were embedded a coin of Honorius.

9. *Bosham Church, Bosham.* SU 804039. *S.A.C. 18* (1866), pp. 1-4.
Roman pottery fragments under the church and Roman tiles in the wall. *Perhaps to be treated with a little reserve: the bases of the Church piers were also pronounced as Roman.*

10. *Ratham Mill, Funtington.* SU 809064.
Double rectangular enclosure, interpreted as a Romano-British temple, seen from the air by J. R. Boyden. Visited by A. Down in 1965, who found surface scatter of Roman sherds and tiles.

11. *Dell Quay, Appledram.* SU 832019. 1. Heron-Allen (1911), p. 83; 2. *J.R.S. 33* (1943), p. 76; 3. *J.R.S. 58* (1968), p. 203; 4. Cunliffe (1973), p. 120.

The waste products of a Roman tile manufacturing centre appear to be scattered along the shore between Dell Quay and Copperas Point, a distance of somewhat more than one kilometre (*c.* three-quarters of a mile). The clamp(s) provided for the 2nd C. bath building at Fishbourne (4).

12. *Apuldram, Appledram. c.* SU 840034.

There is a small tin containing four Roman sherds in the C.D.M. labelled 'Ex.d by R. R. Clarke, 1/50.' A C.D.M. card records Roman coins (including one each of Maximianus I, Antonianus and Diocletian) from Apuldram, with no further details.

13. *Chichester Harbour? Arch.J. 115* (1960), p. 73.

Legionary helmet said to have been dredged up near Chichester (now in Barbican House Museum).

14. *Donnington.* SU 860032(?). 1. Dallaway (1815), addition to p. 53; 2. *S.A.C. 103* (1965), p. 28.

Cubic lead burial cist, 14 inches (1) or 18 inches (2) square, found during the excavation of the Portsmouth-Arun canal. Inside the cist was a large glass vessel containing a cremation. Amongst the pottery found in the surrounding earth was a small bronze lamp. The cist is listed as No. 22 in Toller's[38] corpus of lead ossuaria.

15. *Peckham's Farm, Hunston.* SU 858006.

A well and two parallel ditches 59 feet apart found during cutting of North Sea Gas pipe trench in 1969. The well probably is not Roman, but the position of the ditches suggests that they might have bounded the road to Selsey. No sign of metalling was seen, however. Roman pottery found in ditch. (A. Down).

16. *Hunston Farm, Hunston.* SU 862013. O.S. card.

Scatter of tile, pottery (including Samian and 2nd C. coarse wares) and tegulae fragments found in 1952.

17. *Whopham's Lane, Birdham.* SU 844011.

Roman finds, pottery, tegulae, imbrices and tesserae found, and a small ditch aligned N-S (revealed during road widening and reported to the C.D.M. by D. Barnes; observed by A. Down).

18. *Manor Farm, North Mundham.* SU 881004. *Gentleman's Magazine* (1836), Pt. 2, p. 418.

Silver coin of Didia Clara.

19. *Leythorne Park, North Mundham.* SU 879031. O.S. card.

Roman roof tiles and four sherds (including one dated by Dr. A. E. Wilson to 1st C. native overlap).

20. *Batchmere, Earnley.* SZ 827984.

Roman pits excavated in the garden of No. 111 Second Avenue, Batchmere, in 1965 (Land Settlement); owner, Mr. Lill (A. Down).

21. *Cloverlands, Chalder Lane, Sidlesham.* SU 856992.

Roman pottery, including a fragment of an amphora handle, found in 1937 (in the C.D.M.).

22. *Almodington, Sidlesham.* SZ 828979. *Gentleman's Magazine* (1836), Pt. 2, p. 418.

Hoard of 840 denarii in a pot, including coins ranging from Caracalla to Gallienus (c. 211-268).

23. *Keynor Farm, Sidlesham.* SZ 855970. *S.A.C. 111* (1973), pp. 1-19.

Two-suite bath house of a villa excavated in 1951. Occupation of the site lasted from the 1st C. to the mid 4th C. O.S. card (1971) notes that 'one or two pieces of roofing tile which are lying about appear to be wasters.'

The following records may be related to the villa:

Heron-Allen (1911), p. 86: Roman pot found at Charity Farm, c. 1870 (SZ 8697).

C.D.M. cards: 1. Possible Roman drain of sandstone slabs and Roman pottery (SZ 856968); 2. Roman ditches found when road-widening (SZ 856972).

24. *Highleigh Farm, Sidlesham.* SZ 843987. C.D.M. card.

Roman pottery found when digging cess-pit, 1955-65.

25. *Sidlesham.* SZ 855991. O.S. card.

Vespasian dupondius found 1954.

26. *Littleton Barn, Sidlesham.* SZ 854984. Done (1953), p. 165.

Roman pottery and 2nd C. coin found in the late 1940's.

27. *Large Acres, Small Acres, Faith's Croft, Willshire's Croft, The Knap and Paddock Lane Fifteen Acres, Selsey.* SZ 851934 and 853927. Heron-Allen (1911), pp. 338-340; *S.A.C. 53* (1910), pp. 272-3.

Heron-Allen records the finding of nineteen Roman coins, 1906-09, mainly in two groups of fields centred on the given grid references, during building operations; he notes that of these nineteen, 'a few . . . have been found by fishermen along the shore, and by farm labourers in the fields.' The coins were of Augustus, Nero, Vespasian, Domitian (2), Trajan (2), Hadrian, Antoninus Pius (3), Faustina snr., Marcus Aurelius, Faustina jnr., Lucilla, Commodus (2), Aurelian and Diocletian.

S.A.C. 53 (1910), p. 317: consular denarius of Oemilia family from SZ 851934.

There is a case of pottery, mostly Roman, in the C.D.M., labelled 'Found in the Gravel Pit, "Large Acres," July 1910.'

28. *Coastguard Station, Selsey.* SZ 843928. O.S. card.
Roman pottery found in 1914 and in 1918.

29. *Selsey.* SZ 848926. O.S.card.
Roman pottery found in 1930.

30. *The Mill, Selsey.* SZ 844934. Dixon (1878), p. 18.
Large brass of Sabina found with several brass coins of Hadrian, Marcus Aurelius, Faustina etc. *(Possibly a mid 2nd C. hoard?).*

31. *Small Acres, Selsey.* SZ 853934. *S.A.C. 55* (1912), p. 318. Roman pottery. *(Cf. Gazetteer no. 27).*

32. *Near the church, Selsey.* c. SZ 856937. Dallaway (1815), p. 5.
Roman tiles and bricks in walls of rectory; fragments of Roman pottery found near churchyard and rectory.

33. *Selsey.* SZ 8592.
S.A.C. 55 (1912), p. 317: coins of Hadrian and Septimius Severus.
S.A.C. 67 (1926), p. 229: coins of Victorinus and Theodora.
S.N.Q. 14 (1954), p. 69: Roman well and pits washed away by the sea. C.D.M.'s accessions register notes a bronze fibula (pin missing), first half of the 2nd C., Selsey (Ac. no. 2000). The whole pin is missing now (1975).

34. *East Beach, Selsey.* c. SZ 869938. *S.A.C. 60* (1919), p. 144.
Three coins (in bad condition): Julius Caesar, Antoninus Pius, Clodius Albinus.

35. *Golf Links Lane gravel pit, Selsey.* SZ 858942.
Heron-Allen (1911, p. 84) recorded the presence of large quantities of pre-Roman and Roman pottery from this area. There is a box of mainly Roman pottery in the C.D.M., with loose labels marked 'Found in the Brickearth at the Gravel Pit at North Common Farm, Selsey, July-Aug: 1909,' in Heron-Allen's handwriting (Acc. no. 634). This is probably some of the material referred to. Heron-Allen (1911, p. 21) also writes of 'evidence of a hypocaust' in the gravel pit.

Miss White (*Ant.J. 14* (1934), pp. 40-52) has described evidence for Iron Age and Roman settlement in the same place, uncovered in 1931. Roman material dated from mid to late 1st C. (without any Samian).

Heron-Allen (1911), p. 340: fake denarius of Antoninus Pius in tin and lead alloy found near the golf links.

36. *Coles Farm, Selsey.* SZ 860950. Heron-Allen (1911), p. 340.
Coin of Constantine I.

37. *Church Norton, Selsey.* SZ 874950. O.S. card.
Roman pottery found 1930.

38. *Selsey Bill, Selsey.* SZ 855921. *J.A.C.B.* (Spring 1967).
Small well pit, with dry stone lining, cut from the buried Roman land surface, exposed by winter gales.

39. *Selsey Bill, Selsey.* SZ 854922. *V.C.H. 3* (1953), p. 66.
Roman rubbish pit on shore edge.

40. *Selsey Bill, Selsey.* SZ 853922. O.S. card.
Two necks of large Roman amphorae washed up, 1917.

41. *Selsey.* SZ 8591 (?). *V.C.H. 3* (1953), p. 66.
Four glass vessels dredged up off Selsey c. 1860.

42. *Cotland Field, Selsey.* SZ 860929. *J.A.C.B. 9* (1962).
Roman well lined with sandstone slabs bonded in clay. Timber lining preserved at bottom.

43. *Fishshop Farm, Selsey.* SZ 860927. O.S. card.
Roman pottery found 1929.

44. *Fish Lane, Selsey.* SZ 861927. *S.A.C. 55* (1912), p. 318.
Fragments of Roman pottery found.

45. *Halton, Selsey.* SZ 862928. 1. *S.A.C. 74* (1933), pp. 140-163; 2. *Exc. Com. 3* (1951-52).
(1). Pot containing 975 coins, A.D. 220-270, found 1932. The hoard consisted of coins of, amongst others, Valerianus I (41), Gallienus (91), Salonia (47), Postumus (513) and Victorinus (110). Discoverers of the hoard also found quantities of Roman pottery fragments and the foundations of two parallel walls.
(2). Roman pottery collected from the site.

46. *Beach Tramway Station, Selsey.* SZ 867932. Heron-Allen (1911), p. 86.
'Large numbers of Roman coins' discovered, including some of Aurelian and of Diocletian.

47. *Trojan Brickfield, Selsey.* SZ 856939. *S.N.Q. 3* (1931), p. 222.
Three pots, largest containing a cremation, dated by Miss G. M. White to the 1st or 2nd Cs. *The identification of this site as the Trojan Brickfield rests on a pencil drawing of a pot (vessel 'A' in the published figure) in the C.D.M., with the subscript* 'Romano-British burial group from Trojan Brickfield, Selsey, given by Miss G. H. White (*sic*),' *and a reference to S.N.Q. c. 1930-32. A box of 3rd-4th C. pottery, containing an envelope addressed to Mr. W. Ll. White labelled* 'Trojan Brickfield, 1938, Selsey, Sussex,' *is probably from the same site or nearby.*

48. *Manor Farm, Selsey.* SZ 857939. *S.A.C. 67* (1926), pp. 219-20.
Hoard of 21 coins, mid 4th C., found 1925: Victorinus (8), Tetricus snr. (2), Tetricus jnr., Probus, Constantine I (3), Constantius II, Magnentius and Valens (4).

49. *Church Norton, Selsey.* SZ 875949. *Ant.J. 6* (1926), p. 321.
Roman pewter flagon found in 1923.

50. *Church Norton earthwork, Selsey.* SZ 872957. *S.A.C. 55* (1912), pp. 56-62.
A trench through the rampart produced pieces of Roman tile and pottery (including a single sherd of Samian) at its base.

51. *Lifeboat Station, Selsey.* SZ 865926. *Ant.J. 4* (1924), p. 61; *J.R.S. 12* (1922), p. 275.
Coin of Hadrian and 1st and 2nd C. pottery (including Samian) found at a new lifeboat slipway. Similar pottery found some 500yds. away. An O.S. card records Roman pottery in a midden found at SZ 864926 in 1923-33, in addition to the material given in the former two references.

52. *Selsey Bill, Selsey.* SZ 862924. *S.N.Q. 3* (1931), p. 222.
A Roman pot with a cremation was found in the cliffs at Selsey in 1929.

53. *Warner's Farm, Selsey.* SZ 850940. O.S. card.
Roman urn found in 1893.

54. *James Street, Selsey.* c. SZ 858927.
Complete (though broken) pot in C.D.M., shape similar to no. 180a from St. Pancras cemetery, Chichester (Down and Rule 1971, Fig. 5.24), in sandy grey-buff fabric.

55. *Grafton Road, Selsey.* SZ 858930.
A group of pottery was recovered in 1959 from a drainage ditch dug during housing development at number 3, Grafton Road, Selsey. It consists of a shallow buff dish, a beaker of thin cream fabric, a squat globular beaker of grey to buff fabric, a grey flanged bowl and fragments of a similar vessel, the base of a grey ware jar, two Samian dishes (forms 36, Flavian?, and 33, 2nd century?) and fragments of a third (form 36). Most, if not all, of the breaks in these pots appear to be recent. They are all very worn, and probably form the grave goods of one or more burials (all finds in the C.D.M.).

56. *Crookhaven, Selsey.* (Location not known).
Tibero-Claudian or Claudian Samian plate, with a two-line stamp reading CΛN—S / IVS——. 'Crookhaven, Selsey. 20.3.33' is written on this piece; nothing else is known about it (C.D.M. ac. no. 237).

57. *Greenlease Farm, Selsey.* SZ 873944. *S.A.C. 58* (1916), p. 196.
'Several bronze coins of Diocletian and Constantine the Great' are reported, together with a Roman gold ring. This ring is catalogued as No. 777 in Henig's *British Archaeological Report 8* (1974), where the motif is described as a *dextrarum iunctio,* and a third century date tentatively suggested.
'Near the same spot,' two amphorae necks were found in 1915, 'one of the circular handled and one of the high-shouldered angular type,' the latter encrusted with barnacles and worm-tubes. The description of the second amphora fits

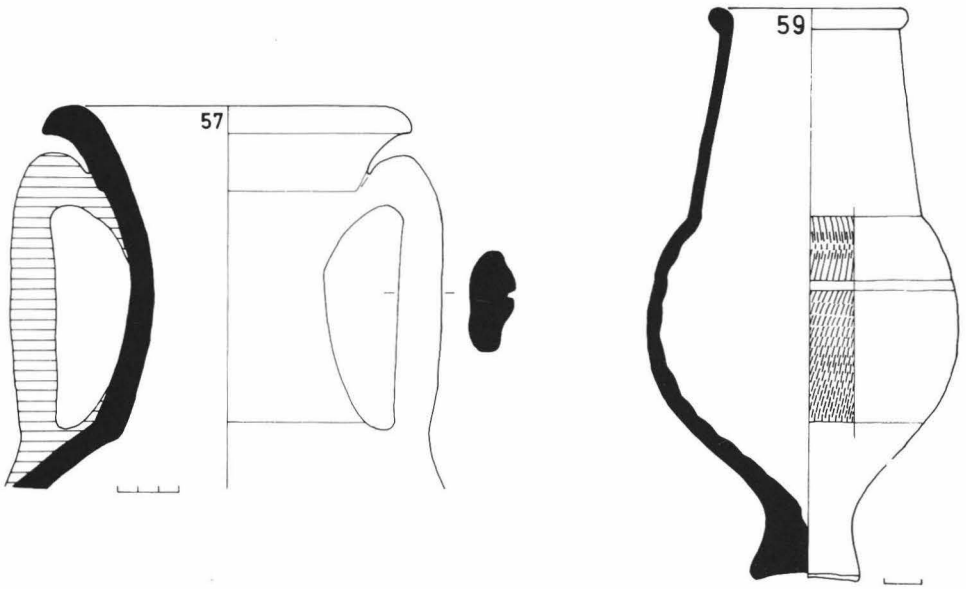

Fig. 3. Claudio-Neronian amphora neck from Selsey (57, scale 3 cm) and 4th C beaker from West Wittering (59, scale 1 cm).

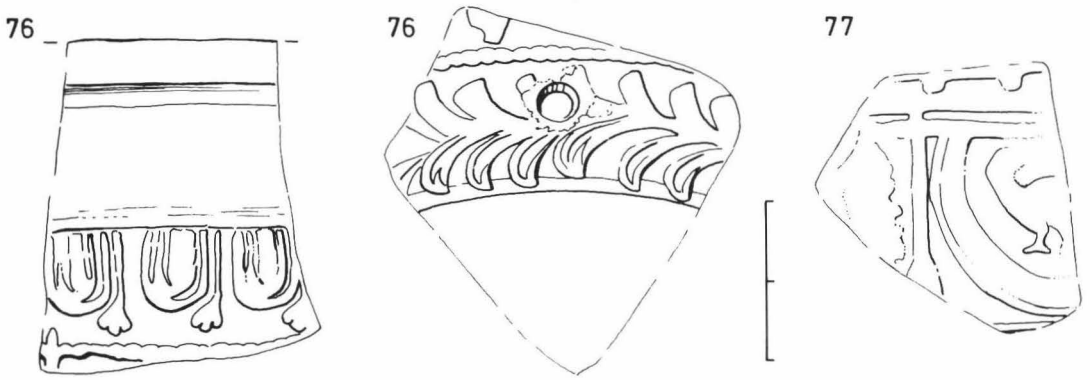

Fig. 4. Decorated Samian sherds from Poplars Barn (76) and Hazel Road (77), Bersted. All form 37 (Flavian). The central sherd has a repair hole. Scale 2 cm.

a piece in the Guildhall Museum, Chichester (Fig. 3), which bears a label reading 'Neck and ears of Roman amphora washed out of the brickearth on the coast of Sussex at Selsey. November 1911. One of two (2)'; the handwriting is Heron-Allen's (Ac. no. 1204). A. King reports that this is a Callender Form 9/ Camulodunum Type 186 B/ Dressel Form 7 (or perhaps a narrow-necked form of 9), and is considered by Callender[39] to be Claudio-Neronian in date, possibly Italian and probably used mainly for *garum* and other similar suaces (as suggested by the *tituli picti* and the wide mouth of the type).

58. *Cakeham, West Wittering.* SZ 7897. 1. *J.B.A.A. 2* (1847), p. 199; 2. *S.A.C. 8* (1856), p. 290.
(1). Two complete Roman pots dug up, as well as many fragments.
(2). 12 Roman coins found: Constantius (4), Magnentius, Julian II, Valentinian I (5) and Magnus Maximus.

59. *The Wad, West Wittering.* SZ 779983. *J.A.C.B. 10* (1962).
Two complete (though broken) Roman pots found on a building site.
There is a fine beaker on display in the Guildhall Museum (C.D.M. accession no. 1730) which the register makes clear is one of the two vessels referred to above. Although not listed by Fulford in his corpus,[40] it would seem to be a fourth century New Forest product, in his fabric 1b, similar in form to 30.1, but with the unusual feature of fine rouletting (Fig. 3).

60. *East Wittering, West Wittering.* c. SZ 8097.
There are a few Roman sherds in the C.D.M. which the accessions register records as having come from East Wittering (no. 636). The day book also notes the finding of a Roman coin (?Hadrian) at this location (entry for 6.9.73).

61. *Bay Estate, Pagham.* c. SZ 902983.
C.D.M. accessions register records the finding of Roman pottery on the Bay Estate, Pagham (217/74).

62. *Nyetimber, Pagham.* SZ 895984. *J.A.C.B. 9* (1962).
Roman pottery found in housing development trenches.

63. *Crimsham, Pagham.* SU 901001. *S.N.Q. 15* (1962), pp. 351-2.
2nd-early 3rd C. burial group consisting of three pots (one identified as a New Forest beaker) found in 1958.

64. *Newlands Farm, Pagham.* SU 898015.
Roman pottery and tile found in 1970 during ploughing. Fragments of white tesserae, probably from a mosaic border, found near greenhouses and handed to A. Down.

65. *Becket's Barn, Pagham.* SZ 884974. 1. *S.A.C. 96* (1958), p. 147; 2. *V.C.H. 3* (1953), p. 62; 3. Fleming (1949), p. 625; 4. *Bulletin of the Institute of Archaeology* (London) *12* (1975), pp. 42-5.
A report (1) on excavations by A. H. Collins and L. Fleming refers to some Roman pottery, including two Samian sherds. There is a large box of Roman pottery, mostly grey wares, in the C.D.M., marked 'Lindsay Fleming, Pagham.' In this there are two pieces of Samian, of forms 18 (1st C.) and 33 (Trajanic?), which could be the same sherds referred to above.
Winbolt (2) recorded the finding of Roman pottery near Pagham church (c. 100m. n-w of the Barn); (3), without having seen the finds, considered them to be more likely of Medieval date.
Excavations in 1974 (4) produced further Roman pottery, including 'several 2nd C. Samian forms ... e.g. forms 31R, 27 and 33.' A 'Roman cremation urn' has been found in the same field as the Barn (4).

66. *A29/A259 junction, Bognor.* SU 935000.
A watch kept on extensive roadworks in 1975 by Mr. M. Reed and the writer resulted in the discovery of a series of Roman ditches, on a NW-SE exis, containing quantities of 2nd-3rd C. pottery and a few tile fragments. Other finds include some Samian sherds (pre-Flavian and 1st C. scraps, forms 37—Hadrianic?, 38—Antonine and 31R—late Antonine), a shale handle lug, possibly from a dish, and a fragment of slag-encrusted crucible. All finds in the C.D.M.

67. *Felpham, Bognor.* SU 956003. *J.A.C.B. n.s. 2* (1965-66).
Roman pottery found during housing development.

68. *Felpham Manor, Bognor.* SZ 952998.
An O.S. card records the discovery in 1959 of a 1st C Roman lamp (retained by finder). Mr. B. T. Wedmore provided the writer with photographs of this object, which form the basis for the description that follows. It is of Wheeler's Type III a, to which he gave a date bracket of c 70-120 AD. It is of orange-brown fabric, has no handle and has two fairly prominent lugs at the sides. There is no stamp, but the lamp is decorated with simple raised lines on the shoulder, which radiate out from the centre.

69. *Felpham, Bognor.* SU 964004. O.S. card.
Roman jar handle found in 1956.

70. *Aldwick, Bognor.* SZ 907987. O.S. card.
4th C rubbish pit found in 1953.

71. *Bognor.* SZ 9198 (?).
Dixon (1878), p. 71 : Agrippina brass found in 1842.
S.A.C. 66 (1925), p. 227: a Julian coin and a third brass of Claudius II.

72. *Middleton-on-Sea.* SZ 976999. *S.A.C. 73* (1932), p. 204.
Two Roman pots found in the cliff in 1931. O.S. card records the finding of a Roman jar in the cliff (SZ 9799) in 1916.

73. *Shripney, Bersted.* SU 938020. *S.A.C. 70* (1929), p. 217.
Iron Age and Roman pottery found. *Examination of the material in Barbican House Museum, Lewes, by the writer suggests that nothing need be pre-Roman in date.*

74. *Tinhale Barn, Bersted.* SU 914007.
3rd-4th C pottery found on field surface in 1973 by M. Reed (C.D.M. 88/73).

75. *Bersted.* SU 928031.
Roman pottery found on field surface by M. Reed in 1973 (now in the C.D.M.).

76. *Poplars Barn, Bersted.* SU 926023.
A small excavation by Messrs D. Barber, J. Deen and M. Reed in 1973 revealed a flint-cobbled area of considerable extent overlying a ditch system of 2nd C date. Finds included much pottery, animal bones, some small glass fragments, a bronze brooch, a solidified lump of molten metal, a small piece of iron tap slag, a socketed iron point, a Samian sherd shaped into a circular counter and the following Samian forms: 18R (Claudian), 18 R and Ritt. 12 (pre-Flavian), 18 R (Flavian, x2), 18 (Flavian, x2), 18 (2) (Flavian, x2), 27 (Flavian), 37 (Flavian, x2; Fig. 4), 18 (1st C, x2), 23 (1st C, x2), 27 (1st C), 42 (1st C), 18/31 (Trajanic, x3), 27 (Trajanic) and 33 (2nd C ?). The excavators report a scatter of Roman pottery adjacent to the site at SU 928023.

77. *Hazel Road, Bersted.* SU 930010.
Housing development (still in progress, 1979) revealed a complex of Iron Age and Roman ditches, the latter containing pottery of 1st to 3rd century dates, including the following Samian: forms 27 and Ritt. 9 (pre-Flavian), 24/5 (Tibero-Claudian), 37 (Flavian; Fig. 4), 18 (x2) and 30 (1st C), 18/31 (Trajanic) and 1st and 2nd century chips (finds in the possession of M. W. Pitts).
Two coins have recently been found near the site: to the south, at no. 17 Durleston Drive, a Valens bronze (in the C.D.M.) and to the east, in Oak Grove, a Claudius Caesar as or dupondius (retained by finder) (identifications by R. Lintott).

78. *The Westergate School, Aldingbourne.* SU 941053.
Roman pottery found by writer in pipe trench (1975). Placed in C.D.M.

79. *Near Aldingbourne church, Aldingbourne.* SU 922055.
Base of colour-coated beaker picked up on ploughed field by writer (1975). Placed in C.D.M.

80. *Hale's Barn, Alaıngbourne.* SU 938070. *S.A.C. 64* (1923), pp. 193-4.
Burial cist formed by five stone slabs (four sides and a lid, latter 2ft. by 3ft.) discovered in 1918 when ploughing and setting out sheep hurdles. The cist contained three glass vessels, one holding a cremation.

81. *Tote Copse, Aldingbourne.* SU 923048.
Roman pottery thrown up by shallow pipe trench running north of the castle mound in 1974.

82. *Portfield, Oving.* SU 881055. 1. *S.A.C. 86* (1947), pp. 137-40; 2. *Exc.Com. 1* (1948).
(1) Mid 1st to 3rd C settlement revealed by gravel working.
(2) Roman well exposed in 1948.

83. *Briarcroft, Oving.* SU 902050.
Roman pottery, including a sherd of Samian, found when Briarcroft house was built in 1958. In the possession of Mr. and Mrs. P. Whitaker, Oving Manor, Oving.

84. *Stane Street, Oving.* SU 875056. *S.A.C. 82* (1941), pp. 113-4.
Fragmentary cremation burial(s) found outside the northern ditch flanking the Roman road. Early 2nd C pot and fragments of a grey ware vessel with a cream-coloured slip.

85. *Merston, Oving.* SU 891036.
'Roman coins' found in ploughed field (information from Mr. L. Langmead, 1975).

86. *Merston Farm, Oving.* SU 896026.
'Roman lamp' found in ploughed field (information from Mr. L. Langmead, 1975).

87. *Littlereed Barn, Oving.* SU 920040.
2nd to 4th C pottery (including a scrap of 2nd C Samian) and possible quern fragment (Oving Survey, 1974-75).[41]

88. *Shopwyke Manor Farm, Oving.* SU 887058.
A few Roman sherds in field (Oving Survey, 1974-75).

89. *Copse Farm, Oving.* SU 893057.
A few Roman sherds in field (Oving Survey, 1974-75).

90. *Woodhorn Farm, Oving.* SU 914045.
A few Roman sherds in field (Oving Survey, 1974-75).

91. *Westergate, Aldingbourne.* SU 944070. 1. *Arch.J. 11* (1854), p. 25; 2. *S.A.C. 8* (1856), pp. 288-90; 3. *A Guide to the Antiquities of Roman Britain,* British Museum (1922), p. 98; 4. *V.C.H. 3* (1953), p. 67.
Sandstone burial cist (37in. x 30·5in. x 20in.) with lid, found 1850. Rich contents, including inurned cremation(s), a pottery lamp, a glass bottle and numerous glass fragments, a bronze ring, an iron ring, two bronze fibulae enriched with bright blue and yellow enamel (latter dated by (4) to c. 200 AD), etc. Around the cist were found several vessels of whitish ware and many pottery fragments (possibly the goods of a separate unencisted burial?). Dated to c. 150 AD (3) or the turn of the 2nd and 3rd centuries (4).

92. *Woodhorn Farm, Tangmere.* SU 917048.
2nd to 4th C pottery in field (Oving Survey, 1974-75).

93. *Tangmere.* SU 901062. O.S. card.
Roman pottery picked up off field in 1970. *V.C.H. 4* (1953), p. 238, notes presence of Roman bricks in the church (SU 902062).

94. *Maudlin Farm, Boxgrove.* SU 895064 area.
Dense scatter of weathered 2nd to 4th C pottery (including a few pieces of Samian: forms 37?—Flavian?, 27—1st C, 18—Trajanic (x2), 33—2nd C, 31?—2nd C, 35/6—2nd C, and some 2nd C scraps). A grey ware base sherd bears the fragmentary graffito 'XX...' or '... XX'. (Material in C.D.M.; Oving Survey, 1974-75). There is a complex of crop-marks extending beyond the area of pottery spread as at present known, visible in vertical air photographs in County Hall, Chichester. Most easily discernible are two ditched trackways. Most of these marks are unrelated to recent topographical features, so they may well be associated with the Roman settlement. The soil parent material is flint gravel.

95. *Westhampnett church, Westhampnett.* SU 881062. *S.A.C. 21* (1869), pp. 33-43.
Quantities of Roman bricks and tiles were revealed in the church fabric during the restoration in 1867.

96. *Eastergate.* SU 946046. O.S. card.
Quantities of Roman pottery from surface of ploughed field, 1952 and 1971. Aerial photograph RAE AP 60802 (dated 1925) shows a possible villa.
V.C.H. 2 (1907), p. 362, notes that the lower part of the south wall of Eastergate church (SU 945051) is largely composed of Roman bricks.

97. *Walberton church, Walberton.* SU 971057. *S.A.C. 87* (1948), p. 53.
Church walls largely composed of Roman bricks.

98. *Avisford, Walberton.* SU 9706. *S.A.C. 8* (1856), p. 291.
A stone cist (much broken) found at Avisford was exhibited at Chichester in 1853, with a one-handled grey ware vessel containing burnt bones. *It is not clear whether the cremation pot and the cist were originally associated; the cist is not the same as that listed here as Gazetteer no. i, the two originally being described in the same article.*

99. *Flansham, Yapton.* SU 9601. *S.N.Q. 6* (1937), p. 245.
Three coins: two 3rd C radiates and a 4th C Constantinopolis.

100. *Bilsham Corner, Yapton.* SU 975018. *J.A.C.B. 13* (1963).
Excavations by A. Down in area of extensive roadworks revealed a ditch, flint walling and rubbish pits, with pottery of Flavian to 3rd C date.

101. *Ford.* SU 0003. Copley (1958), p. 302.
Roman burials and building (destroyed). *No other references to this material could be found by the writer.*

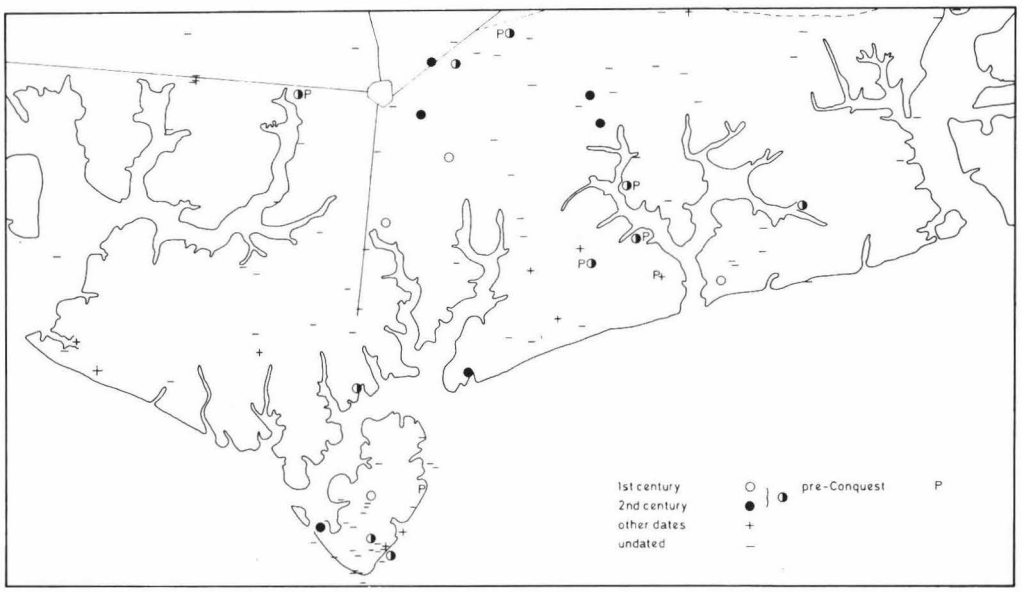

Fig. 5a. Map of sites up to 200A.D.

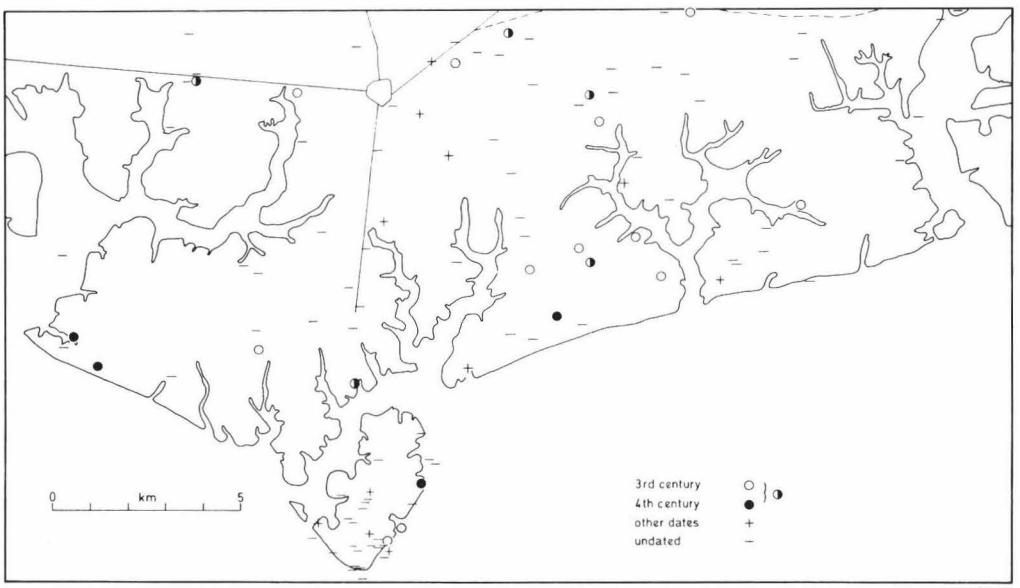

Fig. 5b. Map of sites after 200A.D.

102. *Tortington.* SU 005042. *S.A.C. 106* (1968), p. 135.
Trajan dupondius found on the mud-bank of the Arun.

103. *Tarant Street, Arundel.* TQ 015070.
S.A.C. 40 (1896), pp. 283-4: tesserae and Roman tiles found.
In 1968, this site came to light again when a telephone cable trench in front of nos. 60, 62 and 64 sectioned part of a hypocaust and a black and white mosaic. The alignment of features suggests a fairly substantial house fronting onto the river (A. Down).

104. *Arundel.* TQ 011067. O.S. card.
Roman pottery.

105. *Chalcroft Lane, Bersted.* SU 917003.
A small excavation by Mr. J. Deen in ground disturbed by the straightening of a bend in the road (1974-75) revealed Iron Age, Roman and Medieval settlement. The Roman material consisted of several pits containing pottery spanning the 1st to 4th centuries. Finds included the complete bottom stone of a rotary quern and the following Samian: a Claudian chip, and forms 27 and 29 (pre-Flavian), 35/6 and 35 (1st century) and 37 and 31R?(Antonine) (finds in the C.D.M.).

106. *Crimshan Farm Field, Pagham.* SU 899010.
70 Roman sherds picked up from surface of ploughed field by Mr. B. T. Wedmore in December, 1976, including two sherds of a colour-coated folded beaker.

107. *West Wittering, West Wittering.* c SZ 775982.
1. Copley (1958), p. 310; 2. *V.C.H. 3* (1953), p. 52.
(1) notes the existence of Roman cremations at this grid reference. This may be the same site referred to by (2) as 'a burnt burial and much Roman pottery' found about one mile from Cakeham.

108. *Nyton, Aldingbourne.* c SU 934055 (?).
The C.D.M. Accessions Register has a record of a cremation burial and Roman sherds from Nyton, Aldingbourne (214/74).

109. *Walberton Close, Felpham, Bognor.* SU 955004.
The Accessions Register in the C.D.M. lists Roman pottery from Walberton Close, Felpham, apparently including at least two complete vessels (191/74, 202-3/74).

110. *Birdham Straight, Birdham.* SU 827000.
The daybook in the C.D.M. has two records of Roman pottery found on the Birdham Straight: opposite the Birdham public house (1.12.72) and at Breeton Nurseries (29.3.73), the finds from the latter described as New Forest wear.

111. *St. James' Church, Birdham.* SU 824003.
There is a reference in the C.D.M. Accessions Register to two rim-sherds ('late 2nd/early 3rd century') from Birdham church (59/74).

i. *Avisford, Walberton.* SU 972071. *S.A.C. 8* (1856), pp. 290-1.
A sandstone burial cist, 3ft. 9in. x 2ft. 2in. x 1ft. 10in. with an 8in. thick lid, was hit when erecting hurdles in 1817. The contents included a square glass bottle containing a cremation, three pottery jugs as well as at least 28 other pottery vessels, two candle-holders, a small two-handled globular glass vessel and a pair of bronze-studded shoes. At one end of the cist, a shelf in each corner held a pottery lamp.
Dixon (1878), p. 91, refers to a 'very fine glass urn discovered at Warburton (sic) near Arundel ... containing burnt bones and a brass coin of Vespasian'. In view of the fact that 'several of the objects' were lost in 1856 (S.A.C. 8, p. 290), this could well be a reference to the cremation bottle from this Avisford cist.

DISCUSSION

Many of the finds listed above are little more than a few sherds or the odd coin, and there is clearly not much that can be said about these. The three maps are an attempt to summarise the information visually, Figs. 5a and b on a chronological basis and Fig. 6 on a thematic. The former two show an even and probably dense settlement over the whole area throughout the 1st to 4th centuries (individual coin finds, but not hoards, are treated as 'undated' on these maps. It is perhaps

worth noting that the three post-200 sites on the Selsey peninsula are all coin hoards). The third map shows a similar distribution of materials indicative of substantial settlement, presumably in most cases, if not all, farmsteads.

The Selsey island stands out as an area particularly rich in finds. E. Heron-Allen was probably more aware of this fact than most. In his major book (1911) he wrote that 'fragments of Roman pottery are to be found all over Selsey Bill, both in ploughing up the ground, and on the surfaces of the alluvium and the brickearth, exposed along the shore by the erosion of the cliffs'; and again, 'All over Selsey we find Roman coins in every state of preservation'.[42] The words 'on the surfaces of the alluvium and the brickearth' may be an indication that he was slightly carried away, for as yet, there is no record of any Roman finds from the former deposit. Some twenty years later, he had come to believe in the 'existence of a Roman villa ... of vast extent, extending in fact from Pagham Harbour to where the lifeboat ekes out a precarious and expensive existence, and probably further south as far as the point of the Bill'.[43] Vast, indeed—in fact some five hectares ($12\frac{1}{2}$ acres) in area! Heron-Allen's general observations are supported by Mrs. Clark, who wrote at about the same time that 'Romano-British pottery can be found at almost any point along the cliff eastwards from Medmerry Farm'.[44] However, there is no reason to believe that this picture is unrepresentative of the Plain as a whole. It is just as likely to result from the industrious activities of knowledgeable individuals (including the two writers quoted above) living in the area at the time when sites were disturbed. It is unusual for any major excavation on the Plain to produce no Roman finds at all.

The lower part of Fig. 7 is a histogram of the coins from the area (excluding Fishbourne), using the 16 main periods described by Reece.[45] As well as coins mentioned in the Gazetteer, the diagram includes the following pieces: coins of Allectus, Constantius, Vespasian and Gordianus from the Sidlesham villa (Gazetteer no. 23)[46] and a Gallienus (bronze antonianus) from Bersted (no. 77). Also marked (but not included in the bars of the histogram) are the rough chronological positions of the coin hoards, of which there are three definite and three possible, as follows (preceded by Gazetteer no.):

30 (?). 'several brass coins', mid to late 2nd C, from the Mill, Selsey.
22. 840 denarii, c 211-268, found in a pot at Almodington.
45. 975 coins, 220-270, also in a pot, from Halton, Selsey.
46 (?). 'large numbers of coins', late 3rd/early 4th C, from the Beach Tramway Station, Selsey. This may have been a hoard that was washed out of the cliff.
57 (?). 'several bronze coins of Diocletian and Constantine the Great', from Greenlease Farm, Selsey.
48. 21 coins, mid 4th C, from Manor Farm, Selsey.

The location of all the hoards on the Selsey peninsula is a notable feature (cf Fig. 6).

Bearing in mind that the number of coins in the list for the Plain is few, the pattern presented by Fig. 7 is extremely interesting, in that it deviates strongly from the usual situation in Britain, in which 'the majority of coins (c 80 per cent) . . . belong to the years 250 to 402'.[47] Reece has already emphasised the unique nature of the Fishbourne collection, with its high proportion of 1st C coins, and he suggested that the equally unique character of the site was the major factor. However, the lower histogram suggests that the distinctiveness of Fishbourne is shared by its surrounding area (or, if we accept Cunliffe's interpretation of the site as the palace of Cogidubnus, its political hinterland). What on a national level, then, becomes a relatively large quantity of coins in the 1st and 2nd centuries, finds a parallel in the relatively large number of sites which have produced pre-

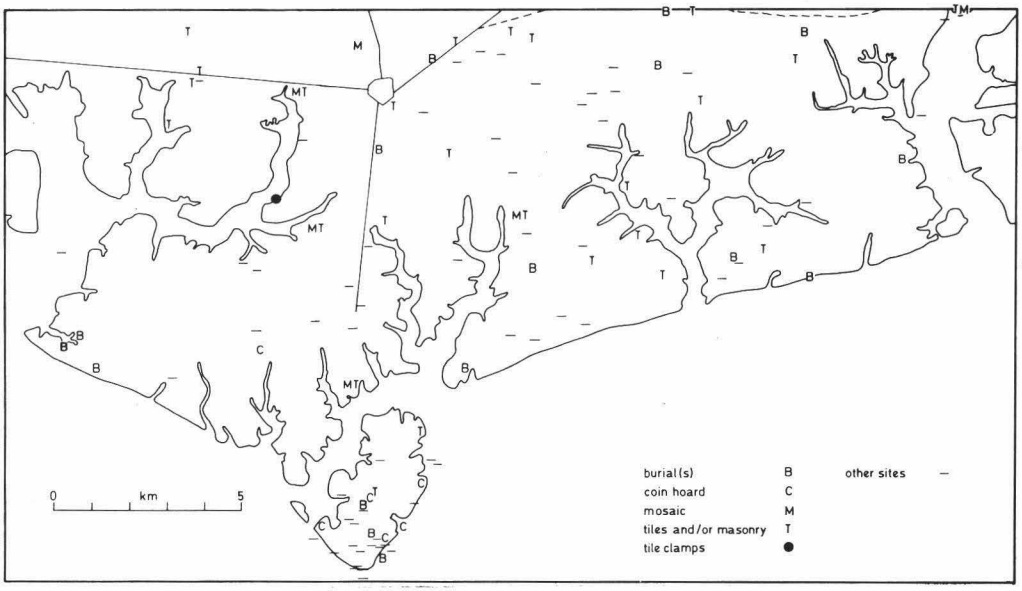

Fig. 6. Thematic map of sites

Conquest pottery (cf Fig. 5). One could find historical reasons to explain both the prominence of 1st and 2nd C material on the one hand, and the relative lack of 4th C finds on the other. Cunliffe has noted a similar picture for the territory of the Regni as a whole, where there are large numbers of 1st and 2nd C farmsteads, while few dating from the second half of the 4th C are known.[48] However, it would seem best to reserve detailed judgements for the area of this Gazetteer until at least one rural site spanning the whole period (and preferably extending outside it as well) has been scientifically studied in depth. As this article makes apparent, there should be many potential candidates.

ACKNOWLEDGEMENTS

It is a pleasure to be able to bring together the names of those friends and colleagues who have assited the writer during the compilation of this Gazetteer. A. Down kindly read through a preliminary draft and added his comments. G. B. Dannell patiently examined an irregular trickle of Samian sherds, and R. Lintott reported on some coins. A. C. King has offered me continual advice. The staff of the Chichester Museum gave me free access to their collections, and allowed me to borrow a considerable amount of material for detailed study. To these I extend my gratitude.

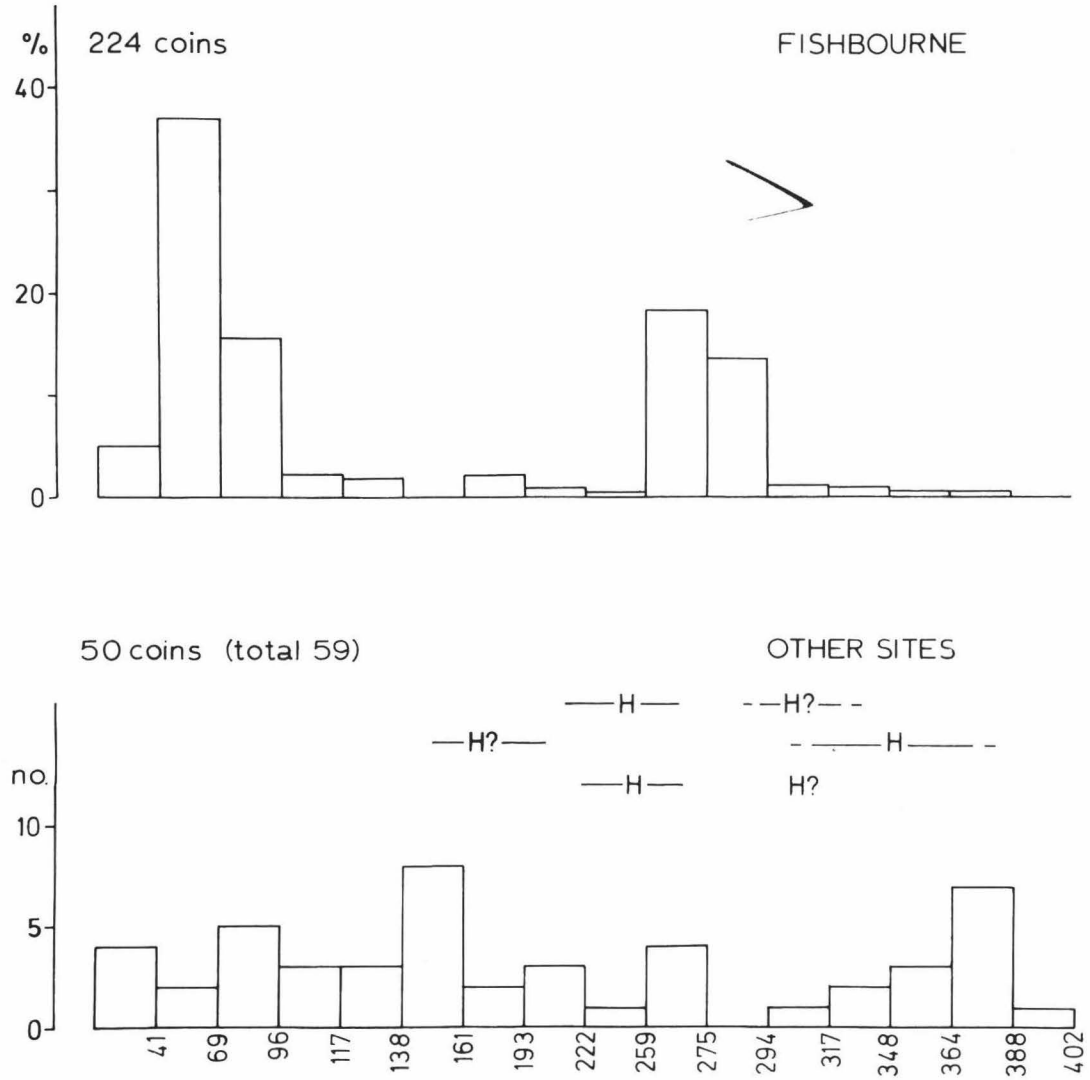

Fig. 7. Coin histograms, Data for Fishbourne from Reece, *Britannia 3* (1972), Table 1.

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[n2] E. C. Curwen, *The Archaeology of Sussex*, Methuen (1937), p. 290.

[3] *S.A.C.* Vol. 76 (1935), p. 135.

[4] *S.N.Q.* Vol. 13 (1951), p. 160.

[5] *S.N.Q.* Vol. 14 (1955), p. 121.

[6] *J.A.C.B.*, passim.

[7] M. W. Pitts, 'A gazetteer of Mesolithic finds on the West Sussex Coastal Plain,' *S.A.C.*, forthcoming.

[8] Down (1974); Down and Rule (1971).

[9] C. Reid, *Geology of the country around Chichester*, Mem. Geol. Survey U.K. (1903).

[10] E. M. Venables, 'Notes on the geology of Felpham, near Bognor Regis,' *P.G.A. 42* (1931), pp. 362-369.

[11] E. R. Shephard-Thorn, 'The Quaternary of the Weald—a review,' *P.G.A. 86* (1975), pp. 537-547.

[12] Rooted stumps and fallen trees have been observed offshore at Felpham (Dixon (1878), p. 71) and off Bognor (*op. cit.*, note 10, p. 368).

[13] *Radiocarbon 14* (1972), p. 332.

[14] Bede, *A History of the English Church and People*, Penguin Books (1968), Book IV, Ch. 13.

[15] *Op. cit.*, note 14.

[16] J. Morris, *The Age of Arthur* (1973), pp. 487-8. Ed. J. Morris, *Domesday Book: Sussex*, Phillimore (1976), Appendix.

[17] E. C. Curwen, *The Archaeology of Sussex*, 2nd ed. (1954), p. 309.

[18] Usually associated with the Chichester Dykes, of presumed Iron Age date; cf. R. Bradley in Cunliffe (1971), Pt. 1, pp. 17-36. The evidence for the dyke's existence rests principally on references in two Saxon charters (cf. note 17).

[19] J. M. Hodgson, *Soils of the West Sussex Coastal Plain*, Harpenden (1967).

[20] Cunliffe (1971), Pt. 1, p. 6.

[21] F. Aldsworth and D. Freke, *Historic Towns in Sussex*, Sussex Archaeological Field Unit (1975), pp. 19-20.

[22] G. D. Johnston, *S.N.Q.* Vol. 17 (1970), pp. 161-3.

[23] R. Bradley, in Cunliffe (1971), volume 1, pp. 29-30.

[24] Cunliffe (1973), pp. 56-7.

[25] The numbers (i.e. M421 etc.) are those of the late Mr. I. D. Margary, and refer to descriptions in his epic *Roman Roads in Britain*, 3rd ed., John Baker (1973).

[26] *P.H.F.C.* Vol. 25 (1968), pp. 19-26.

[27] Op. cit. (note 25), p. 521.

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[30] *S.A.C. loc. cit.*, note 29.

[31] *S.N.Q.* Vol. 11 (1947), pp. 141-6, 161-7.

[32] Cunliffe (1971), Pt. 1, Fig. 4.

[33] *S.A.C.* Vol. 58 (1916), p. 65.

[34] Done (1953), pp. 153 and 166.

[35] G. D. Lewis, *S.A.C.* Vol. 98 (1960), pp. 21-2. I am indebted to Mr. Lewis for providing me with a plan of the fields in advance of his publication of this site.

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[39] M. H. Callender, *Roman Amphorae*, Oxford Univ. Press (1965), pp. 17-18.

[40] M. G. Fulford, *New Forest Roman Pottery*, British Archaeological Reports 17 (1975).

[41] *Sussex Archaeological Society Newsletter 15* (1975), p. 68.

[42] Heron-Allen (1911), pp. 85 and 21-2.

[43] *S.A.C. 74* (1933), p. 153.

[44] *Ant.J. 14* (1934), p. 399.

[45] R. Reece, 'A short survey of the Roman coins found on fourteen sites in Britain', *Britannia 3* (1972), pp. 269-76.

[46] *S.A.C. 111* (1973), pp. 7 and 16.

[47] R. Reece, op. cit. note 45, p. 273.

[48] Cunliffe (1973), p. 130. An interesting idea has been put forward recently that proposes the presence of a pre-Conquest port in the area, involved in trade with the Continent; this would account for the early Samian material from various sites. G. B. Dannell, 'The Samian from Bagendon', *British Archaeological Reports, Supplementary Series* 30 (1977), pp. 229-34.

THE ANGLO-SAXON CEMETERY AT SAXONBURY, LEWES, EAST SUSSEX

by Jill Craddock, B.A.

In 1891, an Anglo-Saxon cemetery was found on the south-west edge of Lewes. Thirty-two or 33 inhumation burials were excavated over a period of several months. They were found in shallow graves about 18 inches deep, cut into the chalk subsoil. Most of the skeletons were oriented east-west, with one or two exceptions. The majority were supine. A large proportion of the grave-goods were weapons, although female ornaments were also found. The material from this site has never been fully described, and is now published for the first time.

INTRODUCTION

Information about pagan Anglo-Saxon settlement in Sussex is largely derived from archaeological material in the form of grave-goods, and also from place-name evidence. The excavation of a fifth-century cemetery at Rookery Hill, Bishopstone, East Sussex, revealed an associated settlement.[1]

Known pagan cemeteries in Sussex are, with a few exceptions, grouped around the main rivers, and along the coast from the mouth of the Arun to Pevensey (Fig. 1). The accessibility of the interior of Sussex from the sea at this time is clearly demonstrated.

In addition to the evidence presented by archaeology and place-names, there are also literary references. Among the most important of these is the *Anglo-Saxon Chronicle*. In the entry for the year 477, the *Chronicle* mentions the landing of Aelle and his three sons at *Cymenesora*. Both the time and the place of this event have been the subject of critical scrutiny. In his general assessment of ' Dark Age dates,' Morris would bring forward the landing by 20 years to 457.[2] It has also been suggested that *Cymenesora*, traditionally identified with the area around Selsey Bill in West Sussex, is more likely to lie in the area between the Ouse and the Cuckmere in East Sussex. In support of this claim, Welch has pointed out that five of the six well-authenticated fifth-century sites are found between these two rivers.[3] Since the site at Saxonbury is only a mile to the west of the Ouse (Figs. 1 and 10), it has been considered worthwhile to publish a fuller description of the finds from this cemetery than has hitherto been available.

THE ORIGINAL CIRCUMSTANCES OF THE FINDS

In 1891, during the building of a house at Kingston, just outside Lewes, Anglo-Saxon graves were uncovered (the house was later called Saxonbury). From the information presented in Sawyer's original report on the findings, it seems that the excavation of the graves was carried out by the workmen responsible for building the house.[4] Although in some instances their progress

[1] M. G. Bell, " Excavations at Bishopstone," *Sussex Archaeological Collections* (hereafter *S.A.C.*), Vol. 115 (1977).

[2] J. Morris, " Dark Age Dates," in *Britain and Rome*, edited by M. G. Jarrett and B. Dobson (1966), pp. 145-185.

[3] M. G. Welch, " Late Romans and Saxons in Sussex," *Brittania*, Vol. 2 (1972), pp. 232-7.

[4] J. Sawyer, " Important Discovery of Anglo-Saxon Remains at Kingston, Lewes," *S.A.C.*, Vol. 38 (1892), pp. 177-182.

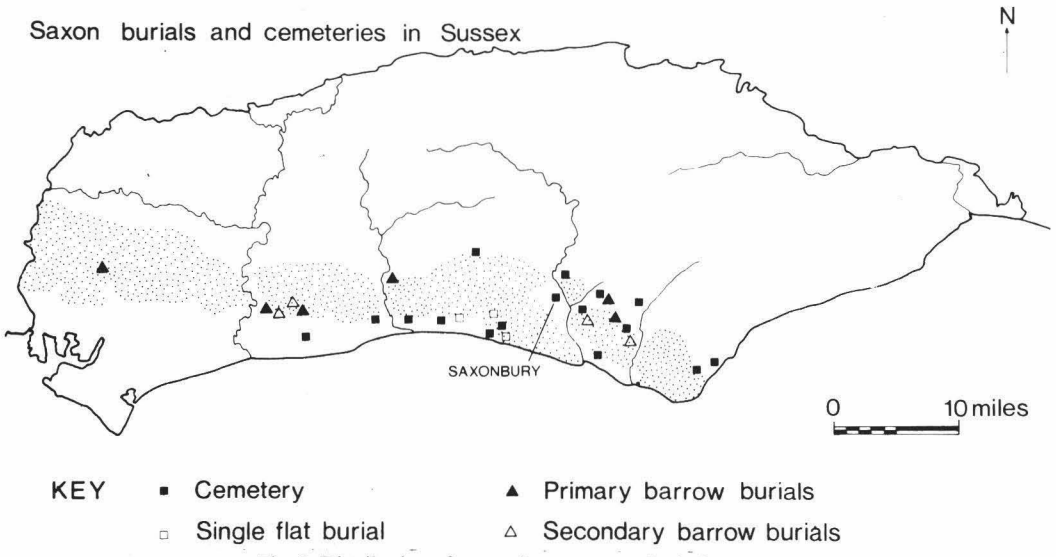


Fig. 1. Distribution of pagan Saxon cemeteries in Sussex

was watched by a representative from the local museum, this was not always the case. As a result, Sawyer's report is often inadequate or ambiguous; this means that it is not possible to sort the objects into grave groups with any degree of certainty. The plan included in the original report shows only seven of the graves and is not to scale.

Further information about the discovery of the cemetery comes from *The Antiquary*, a journal published from 1880 to 1915; however, the reports from this source do not always agree with Sawyer's descriptions. A further record of the finds is the museum accession register at Barbican House, Lewes.

This report takes the form of: (i) the arrangement, where possible, of material into grave groups; (ii) a catalogue, with a description of individual artefacts; and (iii) a short conclusion. A lengthy discussion has been avoided as Mr. M. G. Welch of the Ashmolean Museum is planning to publish shortly a complete account of all pagan Anglo-Saxon material from Sussex. It should be made clear that Mr. Welch and the author have jointly agreed on the grave groups presented here.

GRAVE GROUPS

Because of the inadequacy of the original records of the site, the following arrangement of material is at best tentative, and should be considered with this in mind. For example, in some cases the description of an object in Sawyer's 1892 report[5] allows reasonable certainty in identification, but in many instances this is not so.

In the following section, some references are mentioned many times. In order to save space, these are listed below, and are then identified by the single letter in brackets at the left.

(A) J. Sawyer, ' Important Discovery of Anglo-Saxon Remains at Kingston, Lewes,' *Sussex Archaeological Collections*, 38 (1892), 177-83.

(B) *The Antiquary*, 23 (1891), 186.

(C) *The Antiquary*, 23 (1891), 237.

[5] J. Sawyer, op. cit.

(D) *The Antiquary*, 24 (1891), 189.
(E) *The Antiquary*, 25 (1892), 4.
(F) Accessions Register of Lewes Museum, accession numbers 217-266.
(G) *The Antiquary*, 24 (1891), 7.
(H) Lewes Museum Catalogue.

Grave 1
Skeleton, male. Contracted position, on right side (A). About 18 inches under the turf (B). Oriented W/E (A).
Associations; Small urn or cup, 5 inches high and 4 inches in diameter. Black, without ornament, without rim, bottom flattened, smoothed all over; found between head and arm of the skeleton on side (B). Described in (A) as a small ' earthen ' food vessel or urn (the only pottery vessel found), 6 inches high and 6 inches in diameter, black, of medium thickness, globular, without foot or ornament. Fragmentary 3/4 remaining,
A leaf-shaped iron spearhead (A). 14 inches long, between head and arm (B). Referred to on the plan in (A); the pottery vessel is illustrated with grave 4. The accounts in (B) and (C) are consistent.

Graves 2, 3 and 4
Skeleton. Found 18 inches under the turf (B). Orientation W/E, with head at the west end (A).
Associations; None. Illustrated on the plan in (A).

Grave 5
Skeleton, male. Orientation S/W-N/E, with head at the S/W (A).
Associations; Iron shield boss on the centre of the body. Iron knife. Illustrated on the plan in (A).

Grave 6
Skeleton, male. Orientation S/N, with head at the south end (A).
Associations; Iron shield boss on the centre of the body. Iron knife.

(N.B. In reference (A), the plan shows graves 1-9, but grave 7 is omitted. This grave, however, is clearly mentioned in other sources, e.g. (H). To avoid confusion, therefore, this grave has been called no. 33 and placed at the end of this list.)

Grave 7
Skeleton; skull and upper part of the trunk perished, rest of the skeleton partly so (A). Found to the south-east of the house. Right arm parallel to the body, and left forearm across the chest. Consistent with the plan in (A). Orientation E/W, with head at the west end (A).
Associations; Iron knife near the spot where the hand would have rested (G) *but* iron knife near the spot where the *head* would have rested (A). The plan in (A) shows grave 7 with a knife in the left hand, and is therefore not consistent with its accompanying text. The accounts in (A) and (G) state that the knife was the only relic. Thus (G) is probably the more accurate account, and the word ' head ' in (A) could be a misprint.

Grave 8
Skeleton, male. Left leg bent, left arm across the chest.
Associations; Iron spear head, bent, long leaf shape; iron knife at side of body (A).

Grave 9
Skeleton; skull was somewhat long, brittle, and broken. The left hand was placed across the thigh. The depth of the grave was 18 inches, and the chalk had been scooped out to receive the head. Orientation W/E, with the head at the west end (A).
Associations; Iron knife in the left hand; small, green glass bottle, Roman, with its lip broken; part of an iron knife blade and handle, described as Medieval (A). The last two objects were ' found near ' the grave (A); this could mean that the objects were adjacent to the grave, rather than in its fill.

Grave 10
Skeleton lying 18-24 inches below the surface in rubble chalk and mould. This grave was 30 yards east of the porch of the house, next to graves 11 and 12. Orientation W/E (A).
Associations; Iron knife (A).

Grave 11
Skeleton, male. Stated to be ' 7 feet long ' in (A). Found 18-24 inches below the surface in rubble and chalk, and situated between graves 10 and 12. Orientation W/E.
Associations; Iron sword blade in good condition, handle perished. Three feet long, two inches wide at the hilt and $1\frac{1}{2}$ inches wide at the point. Placed on the left of the skeleton (A), (D). Bronze belt mount, rectangular, placed by the tang of the sword (A). Two bronze strap-ends, also placed by the tang. Two iron spear heads, an iron shield handle with rivets and stud of shield, and an iron knife (A).

Grave 12
Skeleton. 18-24 inches below the surface in rubble and chalk, next to graves 10 and 11. Thirty yards east of the porch. Orientation W/E (A).
Associations; Iron knife (A).

Grave 13
Skull flattened, lower jaw and teeth in good condition. A little further than skeletons 10-12. Orientation N/W-S/E.
Associations; Bronze rivet and bronze wrist-clasp (half only) found beneath the lower jaw. A circular stud or brooch; a bronze double ring (terret), diameter of the larger ring $1\frac{1}{2}$ inches, placed against the left hip.

Grave 14
Skeleton entirely perished; near grave 13.
Associations; Iron knife and a small piece of iron like a brooch pin.

Grave 15
Skeleton, male; average height. Skull turned to the right and flattened. Teeth of the lower jaw worn. Found 30 yards to the east of the house, parallel with and slightly to the north of graves 10-14. Orientation W/E.
Associations; Iron spear head 7 or 8 inches long, placed on the right of the skull. Socketed (A). Iron arrow head, socketed, $1\frac{1}{2}$ inches long, and placed to the left of the skull. Iron knife

placed to the right of the body at the waist. Iron shield boss with large rivets or studs. Traces of silver or tin on the knob; also traces of wood adhering to the rim and studs; the latter ' clenched ' through small ' brass? ' rings. Iron shield handle, riveted at each end. Iron rivet outside the left thigh. Bronze ring (A).

Graves 16, 17 and 18
Skeleton; orientation W/E.
Associations; None.

Graves 19 and 20
Skeletons; one female, one male. Orientation W/E.
Associations; Iron sword with ivory handle; bronze scabbard mount; wood grain of the scabbard visible; about $2\frac{1}{2}$ inches wide. Iron socket of spearhead. Iron knife. Iron implement. Bronze brooch $1\frac{1}{4}$ inches in diameter; small pattern within a ring (A). Blue glass bead.

Grave 21
Skeleton, male, located one or two yards east of grave 15, and parallel with some of the graves 16-20. Orientation W/E.
Associations; Iron spearhead, socketed, 9 inches long; different from those found in graves 1-20. Iron knife found near spearhead. Iron socket of spearhead blade (or ferrule) perished on the right side (A).

Grave 22
Skeleton. Further east than graves 16-21. Orientation W/E.
Associations; None.

Grave 23
Skeleton, female, head inclined to the right. Further north-east than grave 22.
Associations; Two bronze brooches placed to the left and right of the chin (A). Fragment of bronze dish. Small lead cylinder; perforated at one end for suspension (A). Bronze fragment, thin and bent. Iron knife. Bone gouge (?knife handle), incomplete. Iron stud of shield.

Grave 24
Skeleton, male. Found at a depth of two feet, 40-43 yards east of the porch of the house. Parallel with graves 26 and 27, with three feet between each grave. Orientation W/E.
Associations; Iron sword, two feet eleven inches long; traces of grain of wood in two places; found near the left thigh (A). Iron spearhead, long leaf shape, found to the right of the head. Iron knife placed by the right arm. Iron buckle by the centre of the body at the waist. Two small pieces of iron, each two inches long, at right angles to the knife tang.

Grave 25
Skeleton, with crossed legs. Female (?) indicated by small bones and thin skull. Found 40-43 yards east of the porch.
Associations; None.

Grave 26
Skeleton; female (?) indicated by small bones and a thin skull. Found 40-43 yards east of the porch. Parallel with graves 24 and 27, with three feet between each grave. Orientation W/E.
Associations; None.

Grave 27
Skeleton; female (?) indicated by small bones and thin skull. Found 40-43 yards east of the porch, parallel with graves 24 and 26. Orientation W/E.
Associations; None.

Grave 28
Skeleton; female (?) indicated by thin skull and small bones. Found 40-43 yards east of the porch, but situated further east of graves 24-27. Orientation W/E.
Associations; None.

Graves 29 to 32
No information on the skeletons.
Associations; Two circular bronze brooches, different in design and larger than specimens found earlier (E). Amber bead, large and irregular (A). Blue glass bead, with large waved opal line around it (E); hole 1/8th of an inch diameter (A). Two shells, perforated for use as ornament (A).

Grave 33
Skeleton, male (?).
Associations; Piece of iron ten inches long, very corroded; impossible to say whether it was originally a spear or a long knife (G). Portion of a shield (H). Iron ferrule, possibly of a spear (H). The piece of iron mentioned in (G) is said to be " the only relic found with the bones." However, grave 7 is clearly mentioned in (H), and so is its location, i.e. " the Depot Field, S. Lewes." Omitted from the plan in (A).

Unstratified finds
A piece of bronze, a Nuremburg token, and three small coins or tokens were found near graves 10-12.
A glass bottle, lip and neck fragment only, near graves 24-28.
A bronze ornament (belt fitting), a bronze buckle (half missing), a dark green glass bead, and a bronze pendant, leaf-shaped with a dragon design were also found. A piece of burnt clay was recovered showing the impression of withies or rods, and six pieces of wire came from an area over the pelvis of either grave 10, 11 or 12.

THE CATALOGUE

1. The swords

Three swords were found (Fig. 2); two are severely corroded, but the third (Fig. 2B), is better preserved, and parts of the scabbard and fittings remain.

Fig. 2A. Corroded iron sword. Length of blade 81.5cm.; width of blade 6.0cm.; length of hilt 12.0cm.

Fig. 2B. Iron sword which has recently been conserved at the Institute of Archaeology by Ms. C. Sease. The blade is corroded (Plate 1), and fragments of the wooden scabbard remain. Small fragments of leather adhere to the wood. The chape is bronze, with a series of incised lines on each arm towards the top, on one surface only (the back is flat and undecorated). These incised lines are gilded (Plate 2). Two rivets are present, one of which shows traces of silvering. A single incised and gilded line runs right round the inner edge of the chape (Plate 2). The scabbard mouthpiece is also bronze and has traces of either silver or tin on its surface (Plate 3).
Length of blade 81.0cm.; width of blade 7.0cm.; length of hilt 10.5cm.; length of chape 7.5cm.; width of chape 6.0cm.; width of chape arms 1.6cm.

Fig. 2C. Corroded iron sword. Length of blade 76.5cm.; width of blade 5.6cm.; length of hilt 11.5cm.

2. The brooches

Plate 4; A pair of cast bronze saucer brooches, each 3.3cm. in diameter. The simple geometric decoration consists of a central dot surrounded by two concentric circles. A series of transverse hatchings encloses the central ornament. The whole design is contained within two more concentric circles. Both brooches show traces of gilding. On one brooch, the complete clasp is present; the pin is made of iron. On the other, the pin is missing, and the part of the clasp that survives is badly corroded.

Plate 5; A pair of cast bronze saucer brooches, each 3.1cm. in diameter. Both have traces of gilding. A single, raised circular border, with light and shade decoration, encloses a zoomorphic pattern, consisting of four animal legs arranged in a circular fashion. The upper part of two of the legs is defined by two curved lines, in two instances by three lines. On one brooch, the whole clasp is present, with pin made of iron; on the other, only part of the clasp remains, and is badly corroded.

Plate 6; A cast bronze saucer brooch, 3.7cm. in diameter. The ornament is geometric, consisting of six spirals arranged around a central circle. Surrounding the whole is a series of transverse hatched lines. Traces of gilding are present. Part of the clasp is present but corroded; the pin is missing.

Plate 6; A cast bronze button brooch, 1.7cm. in diameter. The decoration, rather worn, consists of a stylised human face. The prominent features are the mouth, nose, and arched eyebrows. The mouth is represented by three short, arc-shaped lines. The nose is a single raised line, which broadens considerably at the lower end above the mouth, representing a moustache. At its upper end, the line forming the nose bifurcates, forming the eyebrows. Further arc-shaped lines reinforce the shape. Short diagonal lines are present at each side of the face, between mouth and eyebrows. Faint traces of gilding remain. Part of the bronze clasp at the back survives, but the pin is missing.

3. The wrist clasp

Plate 7; Half a bronze wrist clasp, with chip carved decoration. Traces of gilding remain on the upper surface. The design on this surface is symmetrical. In the centre, next to the fastening, is a series of four transverse hatchings. Similar designs exist at each end of the clasp. An arc of spiral decoration partly encloses stylised animal heads.

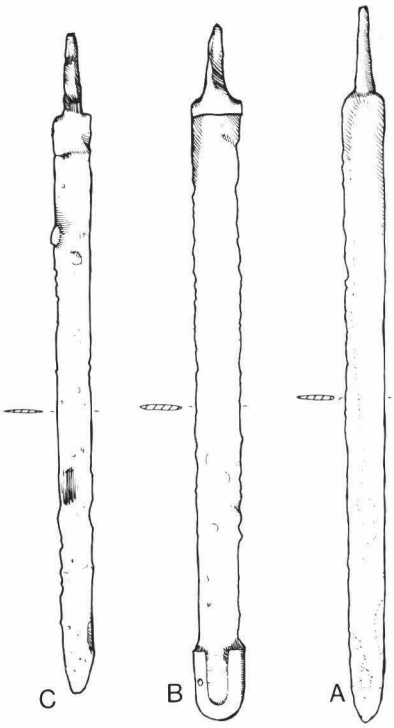


Fig. 2. Saxonbury. The three swords (xl/8)

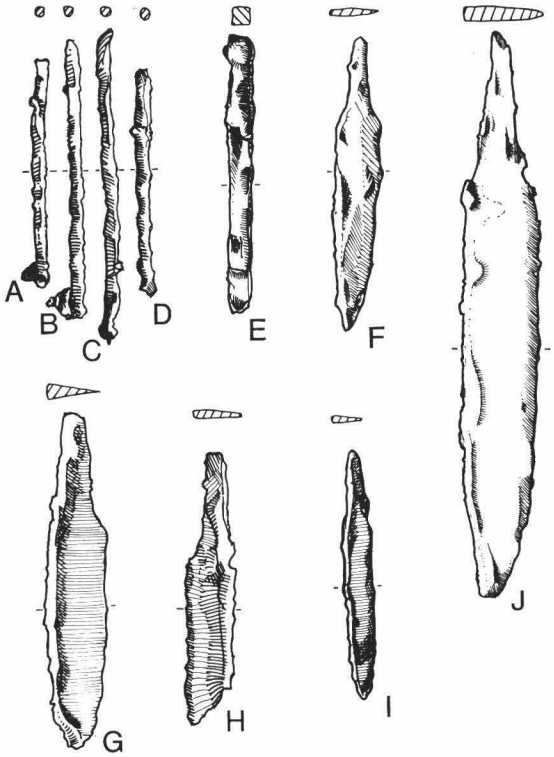


Fig. 4. Saxonbury. Iron objects (xl/4)

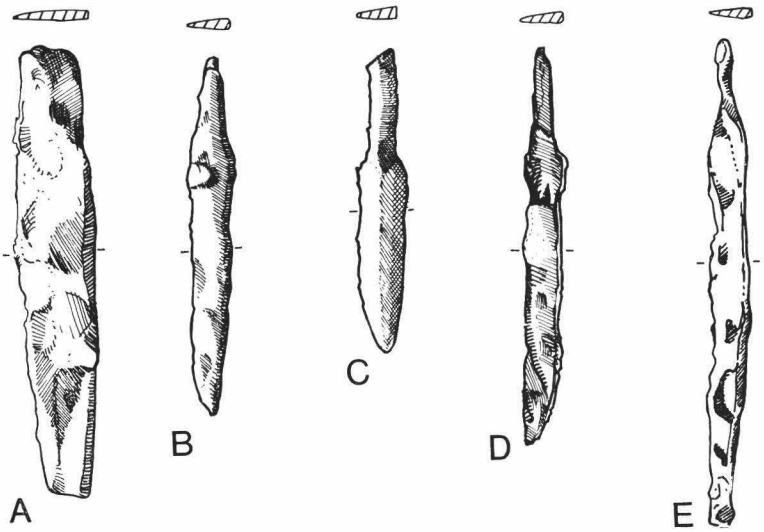


Fig. 5. Saxonbury. Iron knives (xl/4)

There are two small holes near the edge opposite the clasp. The design in this area is worn and corroded, and thus it is not possible to discern any detail. On the underside is a small hook which forms part of the clasp.

4. The belt mount

Plate 8; Rectangular bronze belt mount; traces of silvering remain on the upper surface. At each end there is a row of three convex studs joining the back plate to the upper surface. The studs are at a slightly lower level than the central panel. There is another stud visible only from beneath. The decoration on the central panel is very simple. It consists of a series of grooves; on the flat surfaces between the grooves are rows of small indentations and a zig-zag design in the centre.

5. The strap ends

Plate 9; Two similar leaf-shaped bronze strap ends. The smaller has traces of silvering. Running down the centre of each is a raised spine with decoration consisting of shallow serrations. The end which would have been attached to the strap divides into two flanges, pierced by two convex, circular studs. Lengths; 6.3cm. and 5.3cm., respectively.

6. The buckles

Three buckles were found at Saxonbury; two iron, one bronze. The iron buckles are badly corroded.

Plate 10; Bronze buckle; oval loop, tongue missing. Length 3.8cm.

Not illustrated; Iron buckle; rectangular to oval loop. Rectangular plate; tongue broken. Length 3.5cm.

Not illustrated; Iron buckle; oval loop, straight tongue. Length 2.5cm.

7. The seax

Fig. 4J; Iron seax with short blade. Length 29.5cm.

8. The iron knives

About 30 knives were recovered from the Saxonbury cemetery. Those drawn and described are the best preserved, but all are badly corroded. The knives vary in shape and size, but all have blades which are triangular in section.

Fig. 4F; Tanged iron knife. Length 20.5cm.

Fig. 4G; Tanged iron knife with curved back. Length 23.5cm.

Fig. 4H; Tanged iron knife with broken blade. Length 19.0cm.

Fig. 4I; Tanged iron knife with straight back. Length 17.5cm.

Fig. 5A; Fragment of iron, probably knife blade. Length 26.5cm.

Fig. 5B; Tanged iron knife. Length 21.0cm.

Fig. 5C; Tanged iron knife with broken blade. Length 18.0cm.

Fig. 5D; Tanged iron knife with curved back and straight cutting edge. Length 23.0cm.

Fig. 5E; Tanged iron knife. Length 29.0cm.

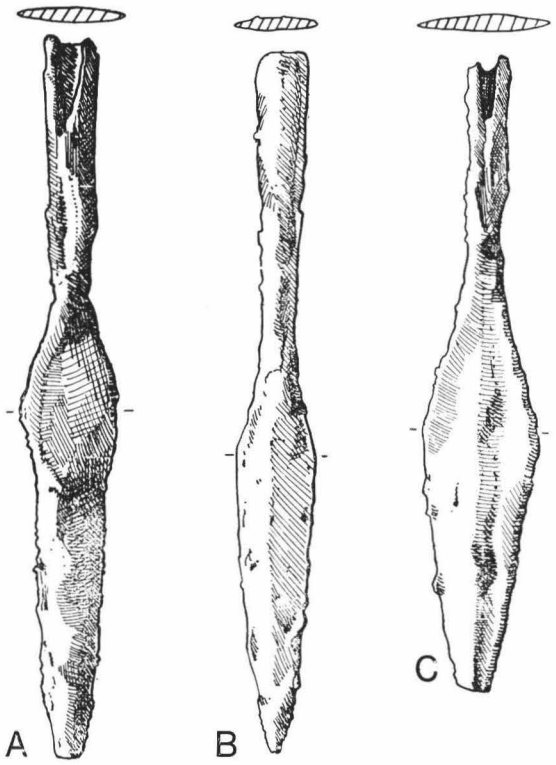


Fig. 6. Saxonbury. Spearheads (xl/4)

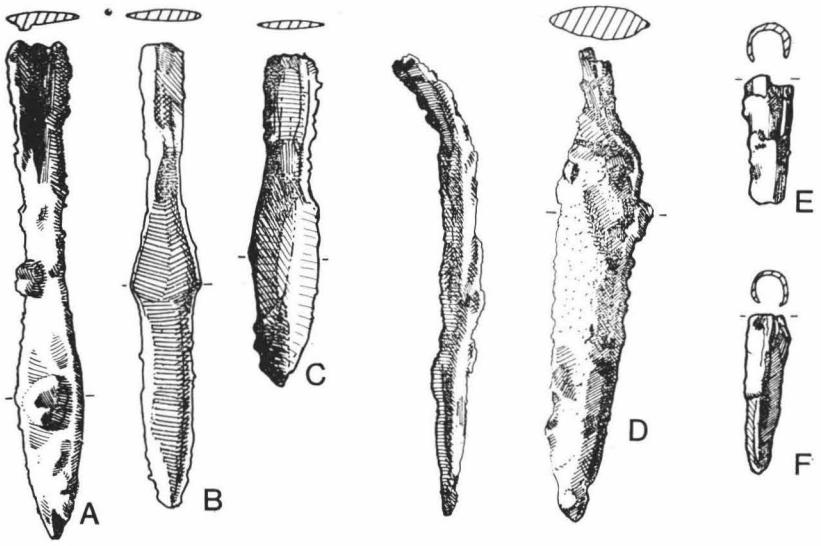


Fig. 7. Saxonbury. Spearheads, A-D; spearhead sockets, E, F (xl/4)

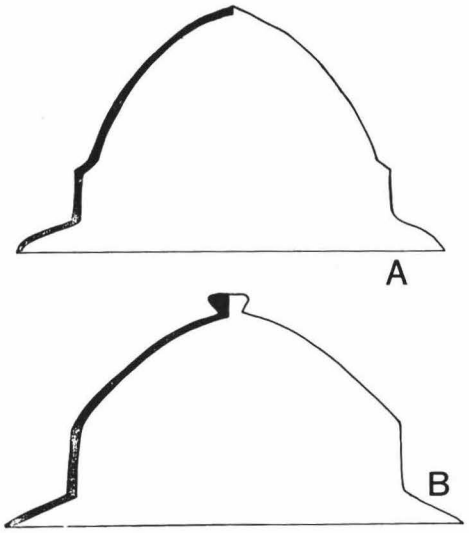


Fig. 8. Saxonbury. Shield bosses (x2/5)

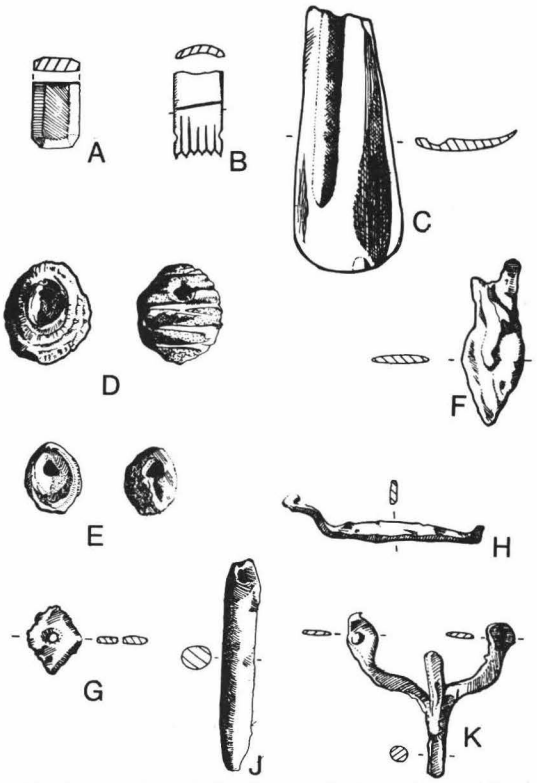


Fig. 9. Saxonbury. Miscellaneous finds. A; Ivory object. B; Bone weaving comb. C; Bone object. D, E; Pierced shells. F; Iron arrowhead. G, H, K; Iron objects. J; Cylindrical lead weight. All x $\frac{1}{4}$, except D, E, F, which are $\frac{1}{2}$

9. The spearheads

Seven iron spearheads are recorded in the museum register. Of these, Swanton has described four.[6]

Fig. 6A; Spearhead with angular blade and cleft socket. Swanton type H3. Length 41cm.
Fig. 6B; Narrow, leaf-shaped blade with welded socket. Swanton type K2. Length 40cm.
Fig. 6C; Large, leaf-shaped spearhead with cleft socket. Swanton type C2. Length 36cm.
Fig. 7A; Leaf-shaped spearhead with cleft socket. Possibly Swanton type C1. Length 33cm.
Fig. 7B; Spearhead with angular blade and a concave curve above the angle. Cleft socket. Probably Swanton type HI. Length 31cm.
Fig. 7C; Leaf-shaped spearhead. Probably Swanton type C1. Length 22cm.

[6] M. J. Swanton, "A Corpus of Anglo-Saxon Spear Types," *British Archaeological Reports*, no. 7.

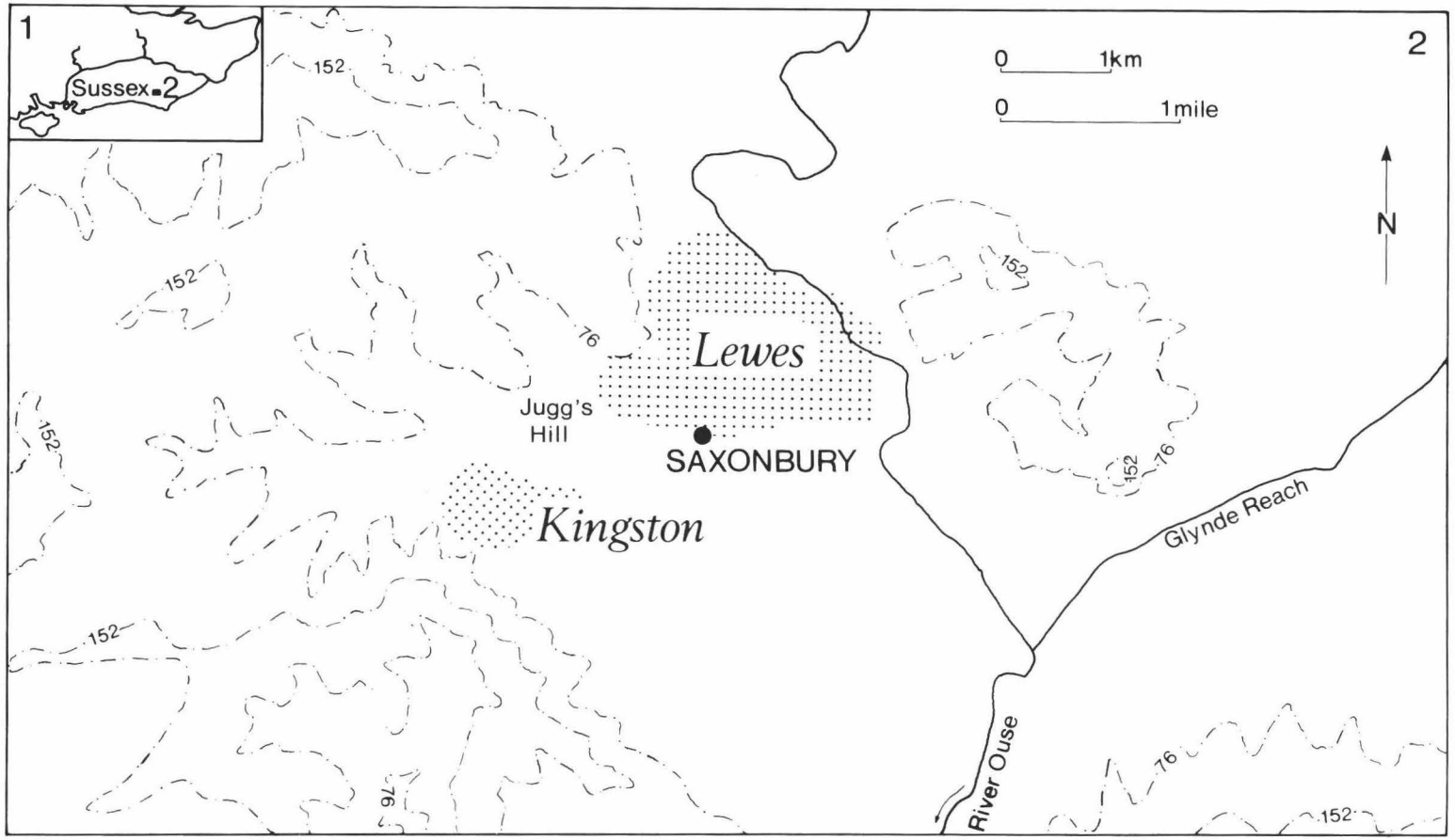


Fig. 10. Saxonbury. Site location. Contours in metres

Fig. 7D; Spearhead, very corroded. Bent before corrosion set in. No indication of type. Length 31cm. approximately.

There are in addition the following objects;

Fig. 7E; Iron socket, probably of spear. Length 7cm.; diameter 2cm.

Fig. 7F; Iron socket, probably of spear. Length 8.5cm.; diameter 1.5cm.

Not illustrated; Iron ferrule, probably of spear. Diameter 4.5cm.

Not illustrated; Fragment of iron, possibly socket of spear.

10. The shield bosses and shield fittings

Three shield bosses were found. They are all in an extremely corroded and fragmentary state. One is almost unrecognisable and is therefore not drawn. The other two are illustrated by an outline drawing.

Fig. 8A; Iron shield boss; low, conical cone.

Fig. 8B; Iron shield boss; low, flat, carinated cone.

Not illustrated; Very corroded, fragmentary iron shield boss.

Not illustrated; Fragment of iron with rivet. Probably part of strap from shield. Length 7.0cm.; width 4.0cm.

Not illustrated; Iron strap of shield boss. Rivet at each end. Length 9.5cm.; width 2.0cm.

Not illustrated; Iron strap of shield boss, with two rivets. Length 16cm.

Not illustrated; Iron strap of shield boss, with two rivets. Length 13cm.

Not illustrated; Iron strap of shield boss. Rivet at each end. Length 11.5cm; width 2.0cm.

Not illustrated; Six iron rivets.

11. The weaving comb

Fig. 9B; Fragment of bone weaving comb. Made from a curved piece of bone. Slight grooves on the convex surface extending from the teeth. One oblique groove in the centre of the convex surface. Two deep indentations on either side above the point where the teeth would have begun. Teeth missing. Width 2.6cm.

12. The glass

One glass bottle and three fragments were discovered. One of these fragments has since been lost.

Plate 11; Small Roman glass bottle. The body is square with rounded corners, and there is a slight dimple in the base. The neck is round with a flared lip, slightly chipped in one place. The bottle is light green with partial silvery patination. Height 3.8cm.; width 2.5cm.

Not illustrated; Fragment of greenish glass; base of a small vessel.

Not illustrated; Fragment of greenish glass. Part of the neck of a small vessel. Diameter of neck 2.7cm.

13. The pottery

Two pottery vessels are mentioned in the original museum catalogue; both are now missing.

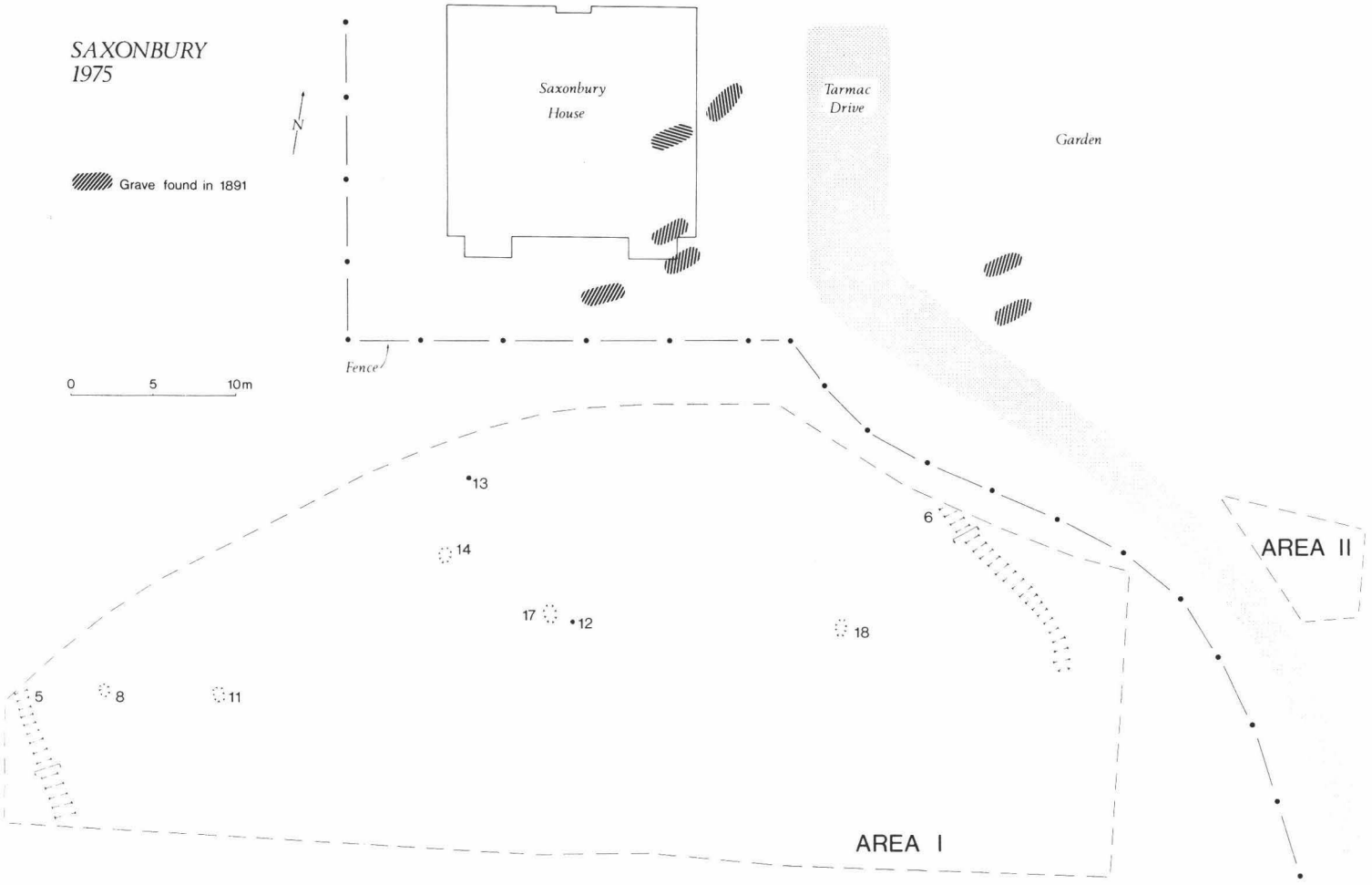


Fig. 11. Saxonbury. Plan of the 1975 excavations

14. The beads

Plate 12, left; Amber bead in the form of an irregular cube. Maximum dimension 1.5cm.; diameter of hole 0.3cm.

Plate 12, centre; Pale blue glass bead; barrel-shaped. Diameter 2.0cm.; diameter of hole 0.2cm.

Plate 12, right; Dark blue glass ring with white serpentine decoration around the outside. Diameter 2.0cm.; diameter of hole 1.0cm.

15. The shells

Fig. 9D; Pierced shell. Length 3.0cm.; width 2.0cm.

Fig. 9E; Pierced shell. Length 1.8cm.; width 1.2cm.

16. Boars' tusks

Seven boars' tusks of varying size were found at Saxonbury.

17. Skeletal material

In the museum catalogue, two adult human skulls and a jaw fragment are listed. Only one of these skulls can now be traced.

18. Miscellaneous objects

Not illustrated; 35 miscellaneous iron objects, corroded beyond recognition. 21 of these may be knives.

Fig. 9G; Diamond-shaped iron object, with hole in the centre. Length 4.0cm.; width 2.0cm.

Fig. 4, A-D; Four iron rods of irregular cross-section. Dimensions as follows;

A; Length 11.5cm.; diameter 0.4cm.

B; Length 14.0cm.; diameter 0.4cm.

C; Length 15.5cm.; diameter 0.4cm.

D; Length 12.0cm.; diameter 0.4cm.

Fig. 9K; Iron object, perhaps part of the fitting on the side of a bucket.

Not illustrated; Curved iron fragment, corroded.

Fig. 9F; Socketed iron arrowhead. Length 4.5cm.

Fig. 9H; Iron object, probably a latchlifter. Length 10.5cm.

Not illustrated; Thin sheet of bronze, pressed flat. Also three small bronze fragments.

Plate 13; Bronze object in two pieces. Each fragment has two holes. Possibly part of a buckle (medieval).

Plate 14; Bronze terret, with wear facet inside the larger ring. Length 6.6cm.

Not illustrated; Heavily tinned bronze buckle with numerous scratch marks. Length 4.3cm.; width 2.5cm. (medieval).

Fig. 9J; Narrow, cylindrical lead weight, with hole at one end for suspension. Length 5.0cm.; width 0.5cm.

Fig. 9C; Bone handle, possibly of a knife or similar object. Curved on the outside surface, and has a groove on the inside surface (to contain the tang?).

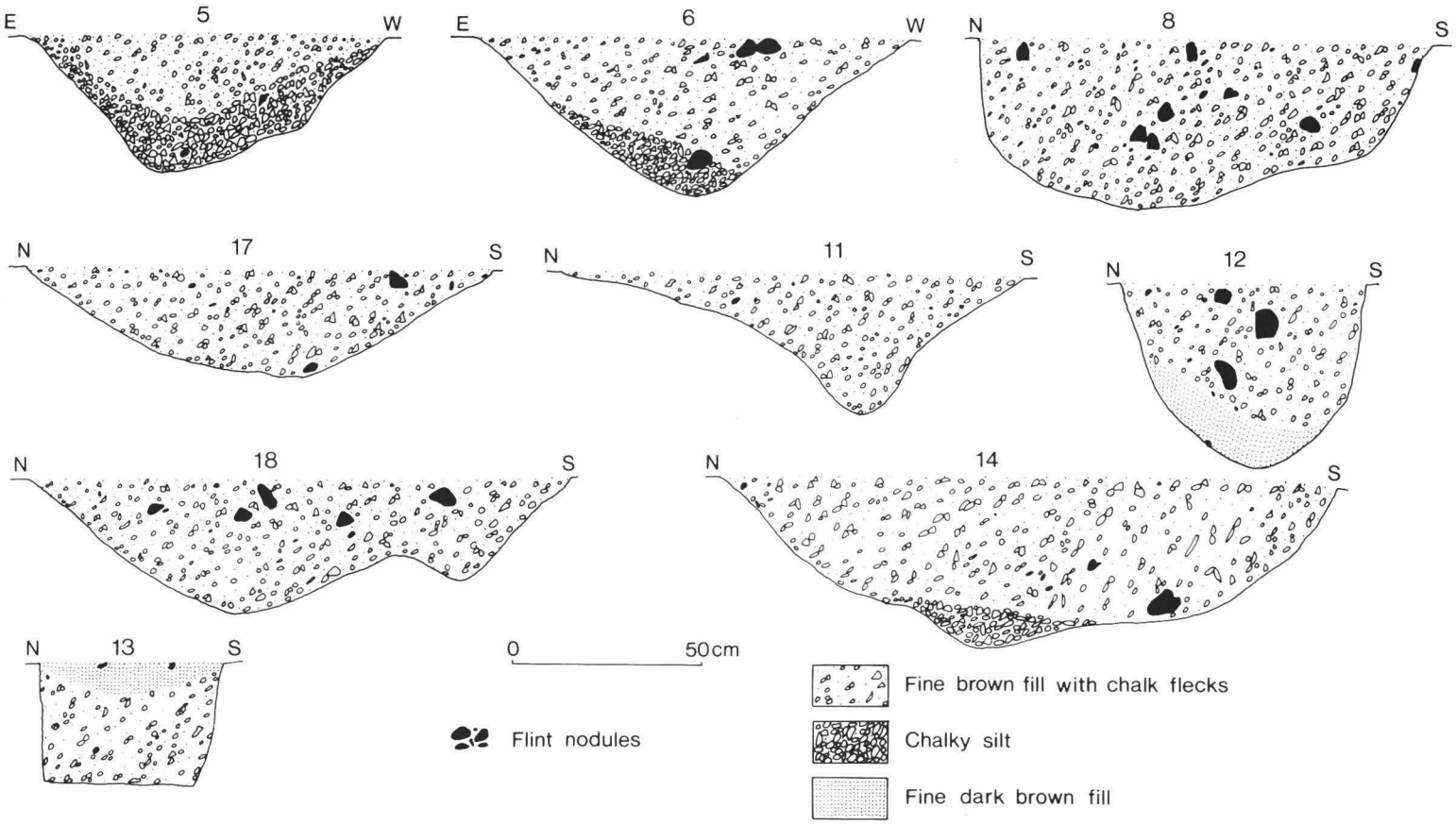


Fig. 12. Saxonbury. Sections

Fig. 9A; Piece of ivory. One surface flat; the other surface has two chamfered edges. Length 3.2cm; width 2.4cm.

Not illustrated; (Surface find). Razor (Medieval).

CONCLUSIONS

On typological grounds, it would seem that the majority of the grave-goods belong to the sixth century. Some objects are decorated with Style I ornament, e.g. the wrist-clasp (Plate 7), and the zoomorphic saucer brooches (Plate 5), but none show Style II decoration, which would indicate a later date. The shield bosses are of the low cone carinated type, considered by Evison[7] to belong to the sixth century. One of the knives (Fig. 5D) possibly belongs to Bohner's type C, however; the cutting edge is practically straight and the back of the blade has a pronounced curve to the point. This is a type commonly found in seventh century graves.[8] Similarly, the Saxonbury seax does not appear to have the tapered blade form ascribed to sixth century types,[9] and may thus be later. These two objects indicate that, although of predominantly sixth century date, the cemetery continued in use into the seventh century.

Acknowledgements

I should like to thank the following for their assistance; Miss Fiona Marsden and Mr. Simon Garrett, Curator and Deputy Curator, respectively, of Barbican House Museum, Lewes; Mr. Con Ainsworth, Mr. Eric Holden, Mr. Martin Bell, Mr. James Graham-Campbell, Mrs. Lesley Webster, Miss Cap Sease, Mr. Philip Stanley, and Mrs. R. Jupe.

REPORT ON EXCAVATIONS CARRIED OUT ADJACENT TO THE CEMETERY AT SAXONBURY, 1975

by Owen Bedwin

The Anglo-Saxon cemetery found in 1891 was not methodically explored.[10] Only those burials in the way of building operations were investigated, and thus the full extent of the site was not established. The area surrounding the house and garden has therefore always been considered of potential archaeological interest as it might contain further graves or a settlement site.

Plans for the construction of the Lewes by-pass included a link road across land immediately to the south of Saxonbury House, and it was decided to excavate a strip of land, 70m. by 20m., where the line of the road passes closest to the house (Fig. 11).

The excavated area was on the south-facing slope of a low chalk ridge running east-west. Excavation simply involved stripping topsoil down to the underlying chalk by machine. The chalk was then trowelled clean, and the features cut into it excavated. The results are shown in Fig. 11. Area II was barren, and Area I contained very few features, to none of which can be assigned a date earlier than medieval. The two narrow ditches, features 5 and 6, both contained

[7] V. I. Evison, "Sugar Loaf Shield Bosses," *The Antiquaries Journal*, Vol. 43 (1965), pp. 38-96.

[8] S. C. Hawkes, "The Anglo-Saxon Cemetery at Polhill," in *Excavations in West Kent, 1960-70*, edited by B. Philp (1973), pp. 154-172.

[9] S. C. Hawkes, op. cit.

[10] J. Sawyer, op. cit.

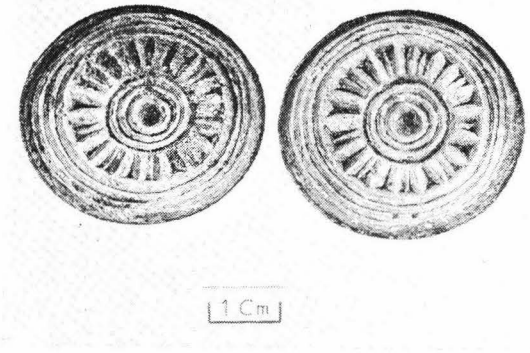
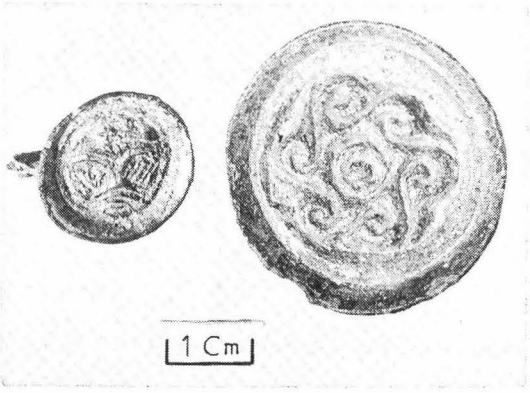


PLATE 4

PLATE 5

Plate 4. Saxonbury. Pair of bronze saucer brooches with geometric decoration (Photo: R. Jupe)
Plate 5. Saxonbury. Pair of bronze saucer brooches with zoomorphic decoration (Photo: R. Jupe)



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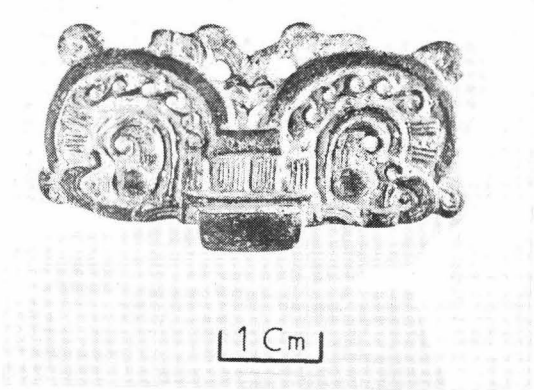
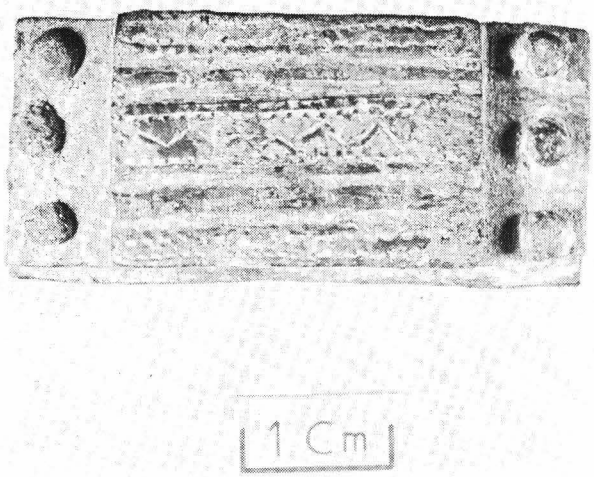


PLATE 7

Plate 6. Saxonbury. Bronze button brooch (left) with stylised human face. Large bronze saucer brooch with spiral decoration (Photo: R. Jupe)
Plate 7. Saxonbury. Bronze wrist clasp (Photo: R. Jupe)



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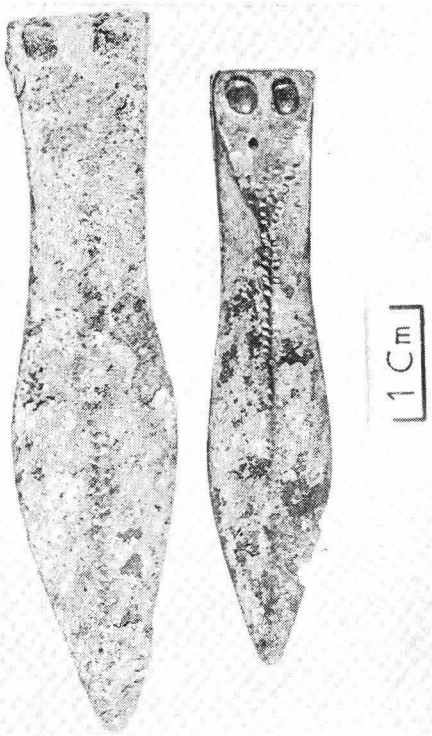

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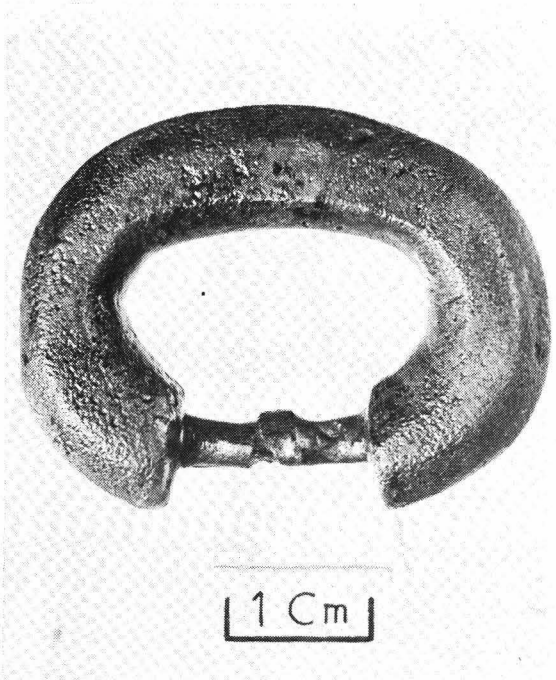

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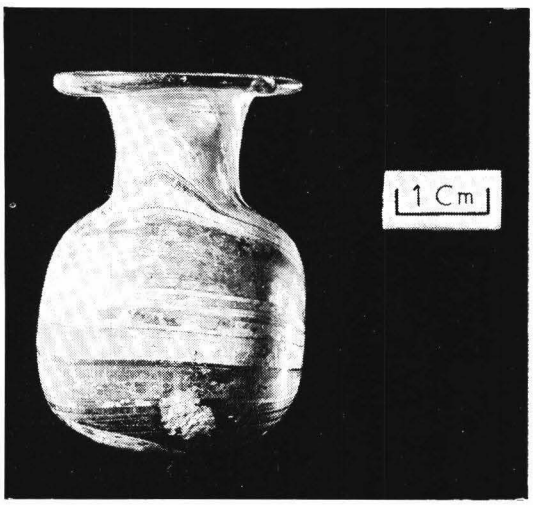


PLATE 11

Plate 8. Saxonbury. Bronze belt mount (Photo: R. Jupe)
Plate 9. Saxonbury. Bronze strap ends (Photo: R. Jupe)
Plate 10. Saxonbury. Bronze buckle, tongue missing (Photo: R. Jupe)
Plate 11. Saxonbury. Roman glass bottle (Photo: R. Jupe)

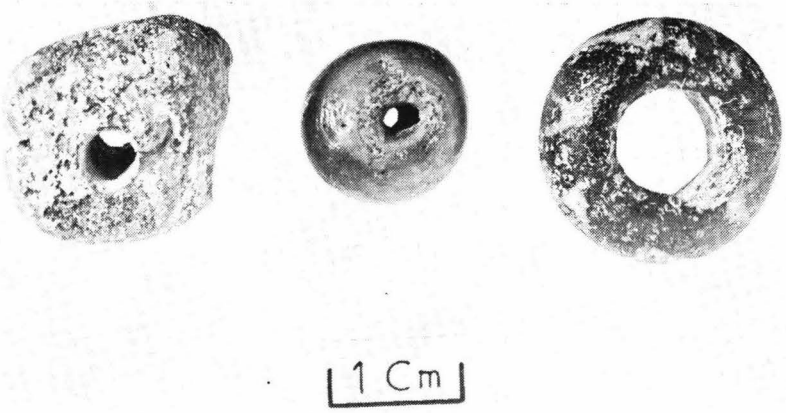


PLATE 12

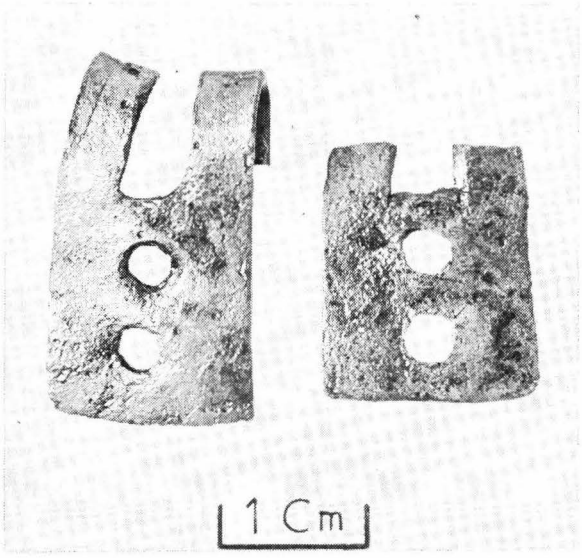


PLATE 13

PLATE 14

Plate 12. Saxonbury. Beads. Left; amber. Centre; translucent light blue glass. Right; dark blue glass with white serpentine decoration round the outside (Photo: R. Jupe)
Plate 13. Saxonbury. Bronze object in two pieces; possibly part of a buckle (Photo: R. Jupe)
Plate 14. Saxonbury. Bronze terret ring (Photo: R. Jupe)

'THE MOUND' AT CHURCH NORTON, SELSEY, AND THE SITE OF ST. WILFRID'S CHURCH

by *F. G. Aldsworth, B.A.*

The mound adjoining St. Wilfrid's Chapel[1] was the subject of excavations in 1911 when several features were revealed including a substantial stone foundation, which may be of a square tower.[2] Also discovered was evidence of flint-working, Romano-British occupation, a probable tenth-century bronze belt tab, and post-medieval pottery. At the time the earthwork was thought to have been constructed as the result of an order, made in 1587, for the erection of defences between Selsey Bill and the church, at the time of the Spanish Armada. Attention was drawn to the early sixteenth-century painting in Chichester Cathedral which shows two buildings, one of which appears to be a representation of Selsey Church and the other an isolated tower surmounted by a spire. The writer, however, felt that 'it would be unwise to attach much importance to this fanciful sketch.' Further excavations were undertaken in 1965 but these have not been published.

Recent research, by the present writer assisted by Dr. T. Hudson, of the Victoria County History, and Mr. T. J. McCann, of the West Sussex Record Office, has shown that there is evidence to support the idea that the buildings shown in Lambert Barnardi's painting of 1519, now in the south transept of Chichester Cathedral, represent Selsey Parish Church and a tower which probably dates to the eleventh-century—both of which survived at Church Norton in the sixteenth-century.

A churchwarden's presentment of 1662[3] states 'That there was never any steeple belonginge to the church (at Selsey), but a tower formerly belonginge to a ruined castle, somewhat remote from the church, where the bells hunge, but it is latelie fallen downe, the bells preserved, and a newe steeple now annexed to the church is allmost the fourth part finished.' It would thus appear that there was once an isolated tower near the church, which had been used to hang the bells. It may be this structure, with its spire, that is referred to as 'the Stepull' in 1541[4] and again in 1579 when the steeple was 'in great decay'.[5] On February 12th, 1580, letters patent recite 'that there is in the saide Isle of Selsey, one olde stone Steeple of a great height adioyning neere to the Sea, which of most auncient time out of mind and at present is a notable Sea-marke for all Merchants and Trauailers by Sea vpon the South coast, from East to the West, and from the West to the East, wherby not onlie the said Maisters of Merchant Ships but also the Maisters of our Ships take principall marke for the auoiding the dangers of great Rocks and Shalles lying out tenne miles from the shoare, being one of the most dangerous places upon that Coast called the Shalles'.[6] Collections for restoration were authorised to be made during that year in the 'Counties of Sussex, Kent, Surrie, and South', with the Isle of Wight, and the Cities of London and suburbs, 'Canterburie, Chichester, Winchester, and Southampton'.

[1] National grid reference SZ 8721 9568.
[2] Salzmann, L. F. 'Excavations at Selsey 1911' *Sussex Archaeological Collections*, 55 (1912). 56-62.
[3] W.S.R.O., Ep.I/22/1 and *S.R.S.*, vol. 49 p.146.
[4] *S.R.S.*, vol. 45 p.102.
[5] Add.Ms. 39544 fol.15.
[6] *Church Briefs* 1896 p.80. Wyndham Anstis Bewes.

In 1602 there is a reference to the effect that 'the steeple hath many breches and . . . many places wide open very hurtful to the timber worke and the bells; the weather cocke is blowne downe'.[7]

The replacement bell-tower which was being constructed adjoining the church in 1662 is presumably the feature which is shown in ruins at the west end of the church on a photograph of 1865.[8] It had evidently been replaced by a bell-turret on the west end of the nave by 1798[9] and it is probably the top of this turret that is just visible above the mound on Grimm's drawing of about 1780.[10].

Bishop Bowers' visitation of 1724[11] states 'There are four bells, but not hung up, the tower where they formerly hung is fallen down'. In his travels through England in the 1750s Richard Pococke referred to 'remains near the church (of Selsey) of a large tower, which fell down in the memory of man and a fortified place which was probably the Bishop House'.[12]

Despite the evidence presented in 1911, there can be little doubt that the surviving mound at Church Norton (see figure 1) is the remains of an eleventh-century ringwork which once supported a square tower, the foundations of which appear to have been encountered in 1911. The tower may have functioned as a keep or, since it occurs on one side of the ringwork, as a gatehouse, as at Bramber. A tower in a ringwork at Sulgrave, Northamptonshire, is of pre-Conquest date and in his discussions of the stone-built tower at Portchester, Hampshire, Cunliffe[13] draws attention to the well-known church tower at Earl's Barton, Northamptonshire, which appears to have originated as a free-standing structure of late Saxon date, to which the remainder of the church was added. In this case the church adjoins a ringwork. Whilst the function of the Church Norton tower remains uncertain, it is tempting to recall, as Cunliffe points out, the early eleventh-century compilation which records 'and if a churl prospered so that he owned full five hides of land of his own, a bell and a *castle-gate,* a seat and special office in the king's hall, then he was henceforth entitled to the rights of a thane'.

St. Wilfrid's Chapel, the sole remains of the parish church of Selsey, which was otherwise removed in 1865, lies in close proximity to the ringwork and some relationship between the two must be considered. Since the bishopric was not moved from Selsey to Chichester until 1075 it seems possible that the ringwork was established soon after 1066, if not before, to protect a church which represented the remains of Wilfrid's seventh-century church. There can be little doubt that in 1519 it was considered that Wilfrid's Cathedral stood at Church Norton and in the will of William Reed, bishop of Chichester, which was made on the 1st of August, 1382, he clearly identifies the then parish church with the ancient cathedral—'And my body to be buried in front of the high altar in the chancel of (the church of) the Holy Trinity at Selsey formerly the cathedral church of my diocese'.[14] The surviving remains, however, appear to be of the early thirteenth century although fragments of Anglo-Saxon sculptured stone were built into the present parish church when it was moved to its present position, several miles south of Church Norton, in 1865 and these may have come from Church Norton.

[7] V.C.H. (Sussex) 4 (1953) p. 208 and Add.Ms. 39368 fol. 1203.
[8] Heron-Allen, E. *Selsey Bill* (1911), Plate XXXIII.
[9] Ibid., Plate XXXII.
[10] BM., Add.Ms. 5675, fol. 69.
[11] WSRO, Ep.I/26/3, fol. 88.
[12] Cartright J. J. (Ed.) *The travels through England of Dr. Richard Pococke during 1750, 1751 and later years.* Camden Society 1888 and 1889, Volume 2 p. 108.
[13] Cunliffe, B. *Excavations at Porchester Castle Volume II: Saxon.* Reports of the Research Committee of the Society of Antiquaries of London No. XXXIII (1976) 60 and 303.
[14] *Sussex Record Society,* vol. 45 (1940-41) p. 102.

CHURCH NORTON, SELSEY
THE MOUND & ST. WILFRID'S CHAPEL

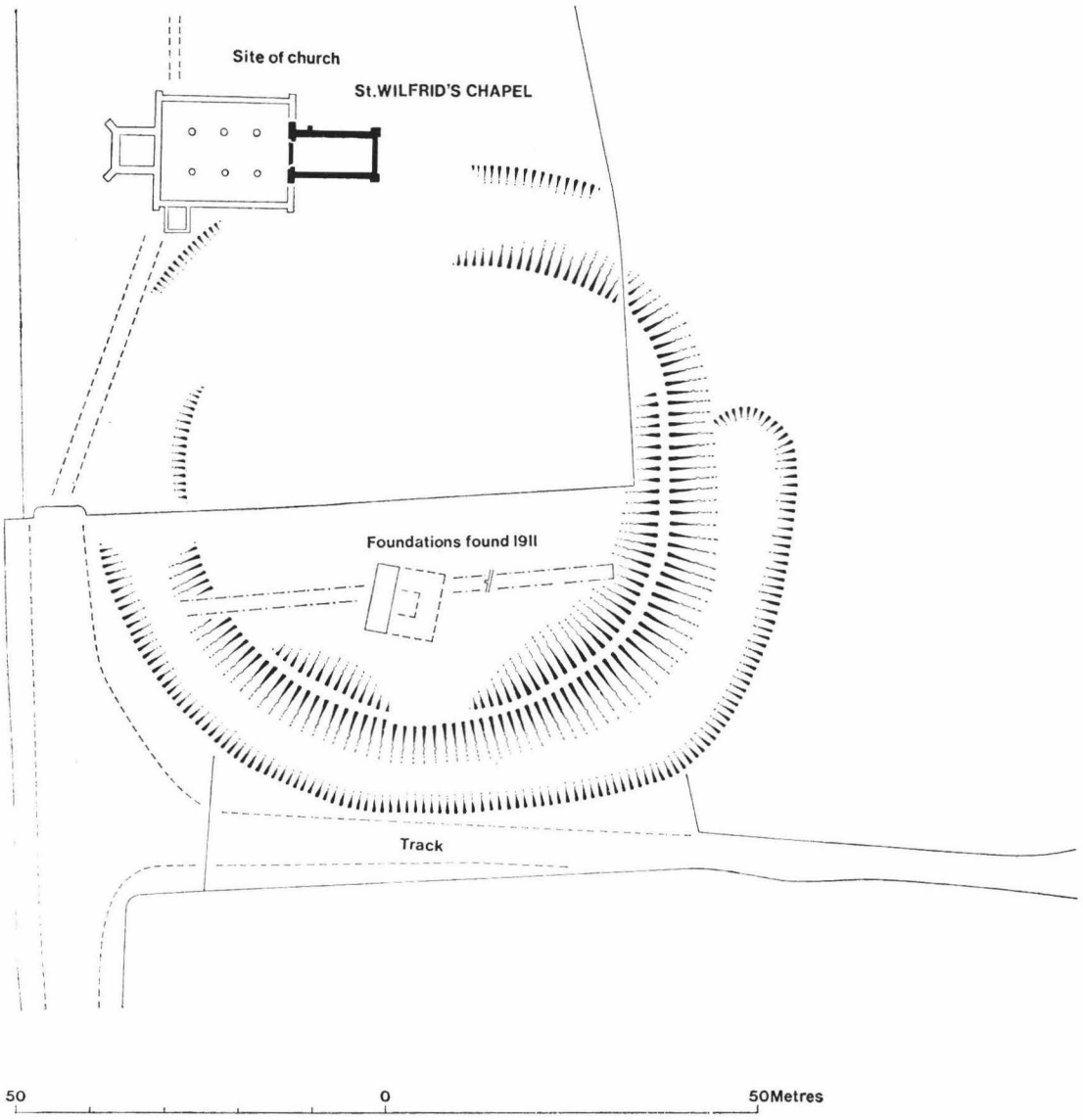


Fig. 1. Plan of site

These four pieces of carved stone have not previously been published in the Collections and it is felt that, since they are now subject to weathering and decay, some form of record is desirable.

Fragment 1 (Fig. 2 No. 1; Plate 2 No. 1) is 31.5 cm by 14.5 cm. It has the remains of a moulding on two sides and is decorated with a double-riband interlace which survives in comparatively good condition. In 1911 it was built into the wall of a summerhouse at Grange Farm, Church Norton[15], but it is now built into the south face of the 1914-18 war memorial near Selsey parish church.

Fragment 2 (Fig. 2 No. 2; Plate 2 No. 2) is 24.5 cm by 16.5 cm. It has the remains of a moulding on one side and is decorated with a poorly surviving and poorly executed interlace. In 1911 it was built into the same building as fragment 1[16], but is now built in the north face of the Selsey war memorial.

Fragment 3 (Fig. 2 No. 3; Plate 2 No. 3) is 28.5 cm by 16.5 cm. It has the remains of a moulding on two sides and is decorated with interlace forming two circles which may be a later version of the Ribbon style animal. In 1911 it was inside the porch of Selsey Church and may have previously been located at Church Norton[17]. It is now built into the south end of the west face of the war memorial.

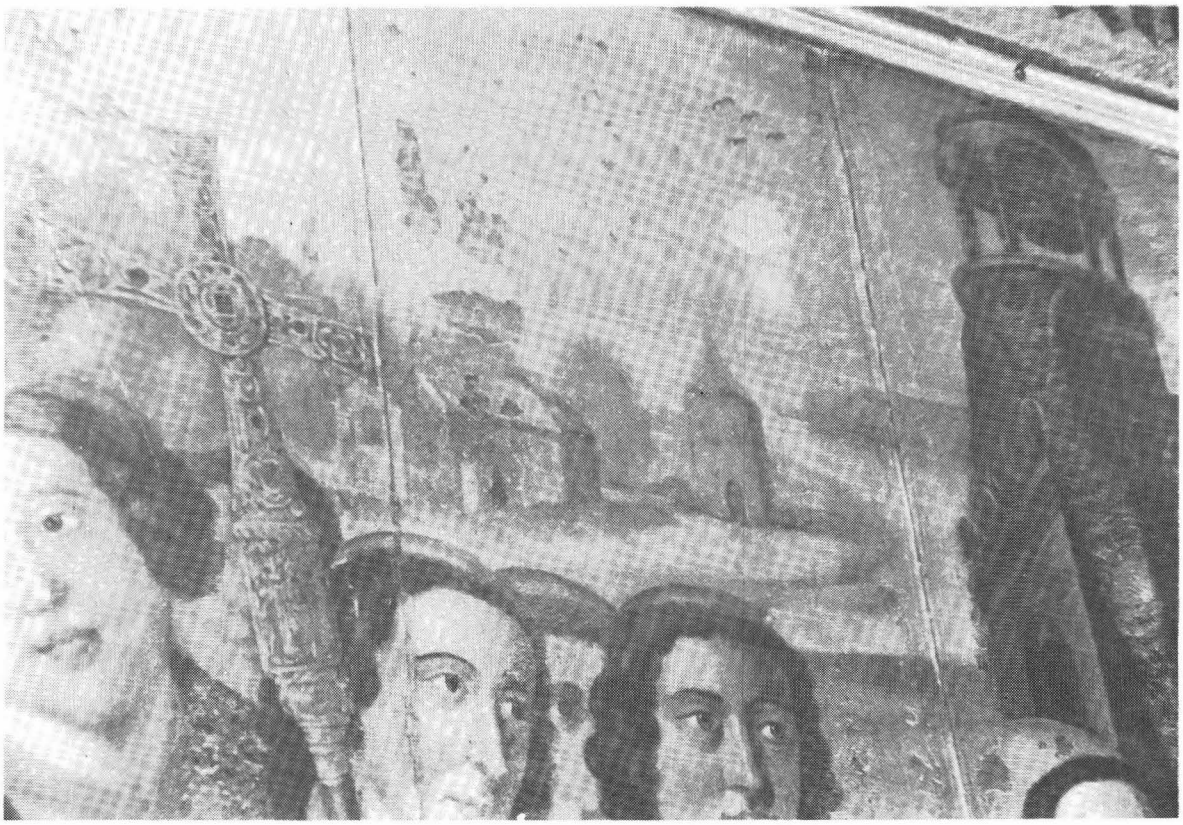
Fragment 4 (Fig. 2 No. 4; Plate 2 No. 4) is 27.5 cm by 27.5 cm. It is partially defaced but has the remains of a moulding on one side and is decorated with interlace with leaves and what may be traces of an animal head in the bottom right-hand corner. In 1911 it was inside the porch of Selsey Church and may have previously been at Church Norton[18]. It is now built into the north end of the west face of the war memorial.

The form of decoration of all four pieces is clearly Anglo-Saxon and there are good parallels in the Durham Cathedral Collection of contemporary pieces from Northern England.[20] The best parallels in Southern England are the examples from Hampshire. The shaft fragment from Steventon[20] is decorated with the rather irregular interlace that exists on Fragment 2 and animal heads of the form which appear to survive on Fragment 4. The base at Priors Barton, Winchester[21], and the sculptured stone from South Hayling[22] are both decorated like fragment 3.

All four pieces are probably best considered as being part of a cross or crosses, made in Southern England in the latter part of the ninth or during the tenth century A.D., which probably stood close to a church at Selsey—then the cathedral.

15 *Heron-Allen* op.cit. pp. 102-3. Plate XXI.
16 *Heron-Allen* op.cit. pp. 102-3. Plate XXI.
17 *Heron-Allen* op.cit. p. 102. Plate XXII.
18 *Heron-Allen* op.cit. p. 102. Plate XXII.
19 Greenwell, W. *A Catalogue of the Sculptured and Inscribed Stones in the Cathedral Library, Durham*, 1899, pp. 51-129.
20 Green, A. R. and Green, P. M. *Saxon Architecture and Sculpture in Hampshire*, 1951, pp. 44-45. Plate XIII.
21 Green and Green op.cit. pp. 46-47. Plate XIVc.
22 Green and Green op.cit. pp. 47-50. Plate XV.

Plate 1. Lambert Barnardi's painting in the south transept of Chichester Cathedral, showing Wilfrid receiving the Selsey Charter from Caedwalla, King of the South Saxons, in about 683.



Detail from Lambert Barnardi's painting showing the church and separate tower. Photographs by Fred Aldsworth.

THREE MEDIEVAL SITES IN WEST DEAN PARISH

by *F. G. Aldsworth, B.A.*

INTRODUCTION

During 1976 and 1977 the Chichester Excavations Committee commenced a survey of the prehistoric and Roman landscape in the Chilgrove Valley, an area extending from East Marden to West Dean and from Lavant to Treyford Hill. The results of the survey are to be published in the forthcoming report on the excavation of the Chilgrove Roman villas. When the survey had been commenced, it soon became clear that the distribution of surviving features, especially the prehistoric field systems, was affected by the extent to which they had been removed by subsequent agricultural activities, and for this reason a survey was begun of the landscape changes in the post-Roman period down to the middle of the nineteenth century, under the direction of the writer. At the same time, a survey of Sussex churches had also been started by the writer, under the auspices of the Sussex Archaeological Society and the Chichester Diocesan Arts Council.

The discovery of the three sites described in this article came as a direct result of an intensive documentary and field study of one piece of landscape, although the writer does not claim to have been responsible for their discovery since his attention was drawn to the sites by Mr. Eric Holden and previous writers. I am grateful to the Chichester Excavations Committee for allowing me to publish this article in advance of their proposed publication on the development of the Chilgrove Valley landscape in the post-Roman period, which may not appear for a number of years.

All three sites lie within the parish of West Dean, into which the parish of Binderton was taken in the nineteenth century, and all three have been recommended to the Secretary of State for the Environment for scheduling as Ancient Monuments.

West Dean is not directly referred to in Domesday Book (1086) although there can be little doubt, bearing in mind the surviving Saxon doorway in the north wall of the nave of the parish church of St. Andrew, that the church was in existence before the Norman Conquest. The village, too, can probably be attributed to the two or three centuries before 1066, although this has yet to be demonstrated archaeologically. The plan of the late medieval village and its contemporary common fields, all lying in the southern part of the parish, can be traced on an estate map of 1623[1] (Fig. 1). The shape of the village and its fields were subsequently modified by Enclosure in the seventeenth and eighteenth centuries (Fig. 2) and by the building of West Dean House, the laying out of its park, and the re-alignment of the Chichester-Midhurst road in the years on either side of 1810.

The same seventeenth-century estate map also shows that a large area in the northern extremity of West Dean parish was arable before 1623 and documentary sources appear to indicate that this was so during the late medieval period, between 1200 and 1500 (Fig. 1). The area is bounded on the south side by a bank and ditch, supporting a hedgerow, and at its south-east corner there is a copse which is known locally as 'Castle Corner'. This copse is shown on the estate map of 1623. The bank and ditch surrounding it was examined by the Chichester Excavations Committee in 1975 and a trial trench revealed that the feature originally comprised a 'ha-ha' with dry-stone

[1] *West Sussex Record Office* (hereafter *WSRO*), West Dean Ms 3152.

retaining wall. There was insufficient evidence to date the feature, but it may have served as a standing or hunter's station from which game could be shot on the open downland during the late medieval or post-medieval period.[2]

It was this community of scattered farmsteads and hamlets, generally referred to as the tithing or chapelry of Chilgrove, that the chapel of Chilgrove served. Many of the occupied areas have continued in use until the present day but Monkton, otherwise known as Northolt, is now completely deserted. This extensive area of arable appears to have been made out of open downland and woodland some time before A.D. 1200, during a period of agricultural expansion, and it seems likely that the chapel of Chilgrove would have been established at about the same time to serve a community located some distance from their parish church. The date of the foundation of the chapel might therefore indicate the approximate date of this agricultural expansion, but its location had, until very recently, been lost.

CHILGROVE CHAPEL

The chapel is referred to in a survey accompanying a covenant, made in about 1210, between the monks of Waverley Abbey, Surrey, and Thomas de Sandervill.[3] This refers to 'the way under Grenemere going to the chapel of Chelegrave'. Further references occur in 1431, when the vicar of West Dean was obliged to celebrate mass in the chapel each week,[4] and in January 1526, when a bequest was made by William Alewyn for the repair of the chapel.[5] In May 1526, reference is made to the Chapel of St. Margaret, West Dean,[6] which, if it does not refer to a shrine within the parish church of St. Andrew, West Dean, probably refers to Chilgrove Chapel. A list of churches made in 1563 includes the chapel,[7] and in 1596 it is again referred to in an arbitration of four canons at Chichester.[8] In 1601, a rent charge was left to the chapel by Bartholemew Stone[9] and in 1618, reference is made to the repair of the roof.[10] The Parish Register, which covers the period 1554 to 1812, includes references to Chilgrove Chapel and records marriages there in 1596 and 1597, and a burial in 1593.[11] Dr. T. Hudson, of the Victoria County History, has drawn my attention to the following references which indicate that it was taken down between 1618 and 1636. A church inspection book of 1602 contains the following report—'Chilgrove: the chancel is at fault both in walls and roof like to fall down. The church wanteth paving and glass.'[12] In another of 1636 there is no reference to Chilgrove[13] and it can be assumed that it had been taken down before this date, but presumably after the reference in 1618. In 1640, the West Dean Churchwardens stated 'We have a fair church and a chapel two miles distant from the church long since demolished for want of maintenance for divine worship.'[14]

A map of 1797[15] shows a field called 'The Chapel' containing in its north-east corner a rectangular building, perhaps the chapel, surrounded by an enclosure, perhaps the graveyard. The

[2] Down, A. Excavations at Chilgrove and Up Marden (forthcoming).
[3] *Sussex Archaeological Collections* 77 (1936) 254-5 L. F. Salzman.
[4] *A History of the Western Division of the County of Sussex* Volume 1 (1815) 168 J. Dallaway.
[5] *SAC* 12 (1860) 81 C. Gibson.
[6] *Sussex Record Society* 42 (1936-7) 75.
[7] *SAC* 61 (1920) 110 V. J. Torr.
[8] *Victoria County History (Sussex)* 4 (1953) 100.
[9] *VCH* 4 (1953) *sub. ref.* B.L. Add Ms 39414 B fol. 62.
[10] *VCH* 4 (1953) *sub. ref.* B.L. Add Ms 39426 fol. 2.
[11] Information from Rev. J. H. Bishop of Singleton Rectory.
[12] *WSRO* Ep.I/26/1 f.15.
[13] *WSRO* Ep.I/26/2 f.4.
[14] *WSRO* Ep.I/22/1 (1640).
[15] *WSRO* West Dean Ms 3157.

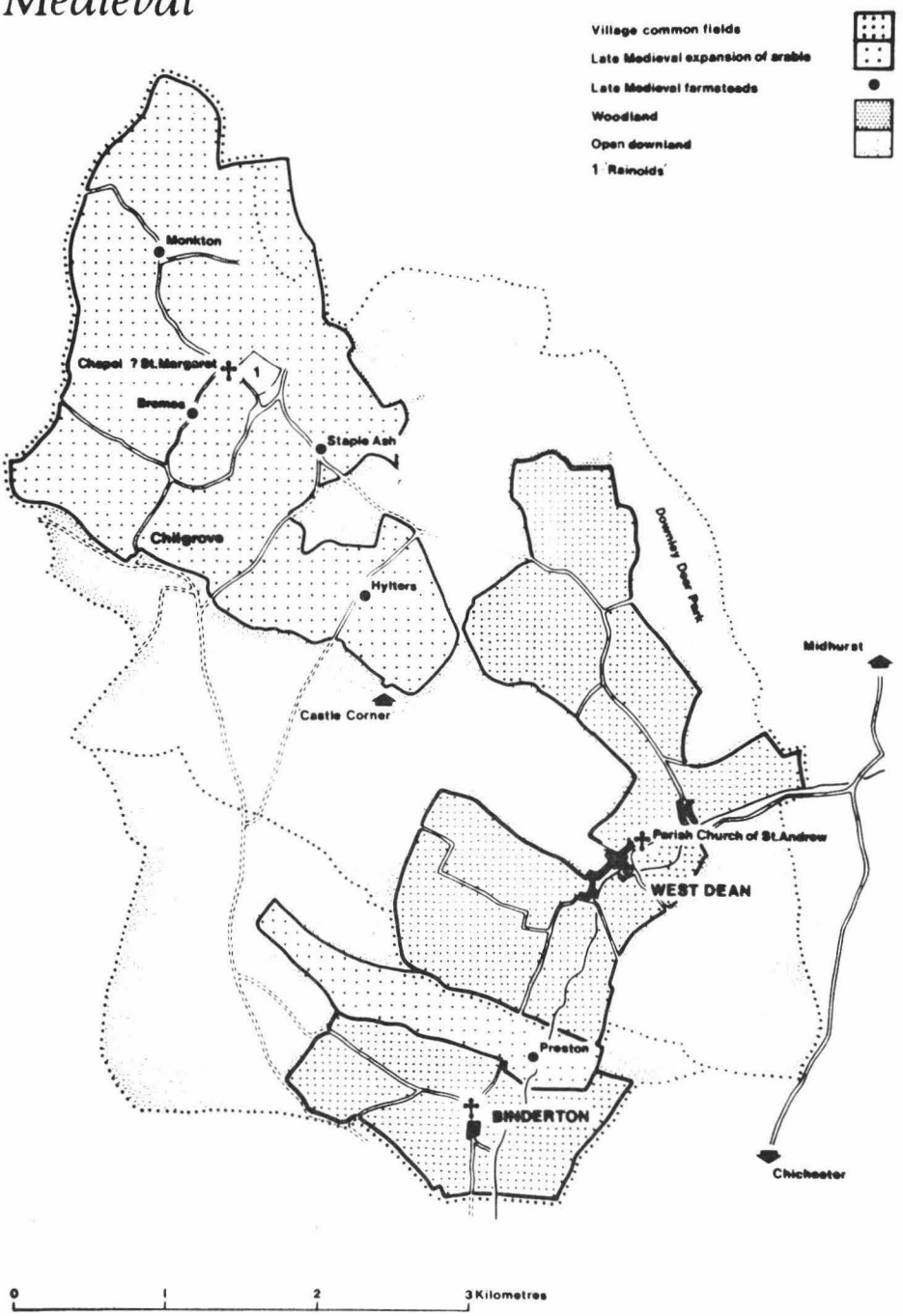

WEST DEAN AND BINDERTON
Medieval
Village common fields
Late Medieval expansion of arable
Late Medieval farmsteads
Woodland
Open downland
1 'Reinolds'
Monkton
Chapel ? St.Margaret
Bromes
Staple Ash
Chilgrove
Hylters
Castle Corner
Downley Deer Park
Midhurst
Parish Church of St.Andrew
WEST DEAN
Preston
BINDERTON
Chichester
0
1
2
3 Kilometres

Fig. 1

WEST DEAN AND BINDERTON c.1800

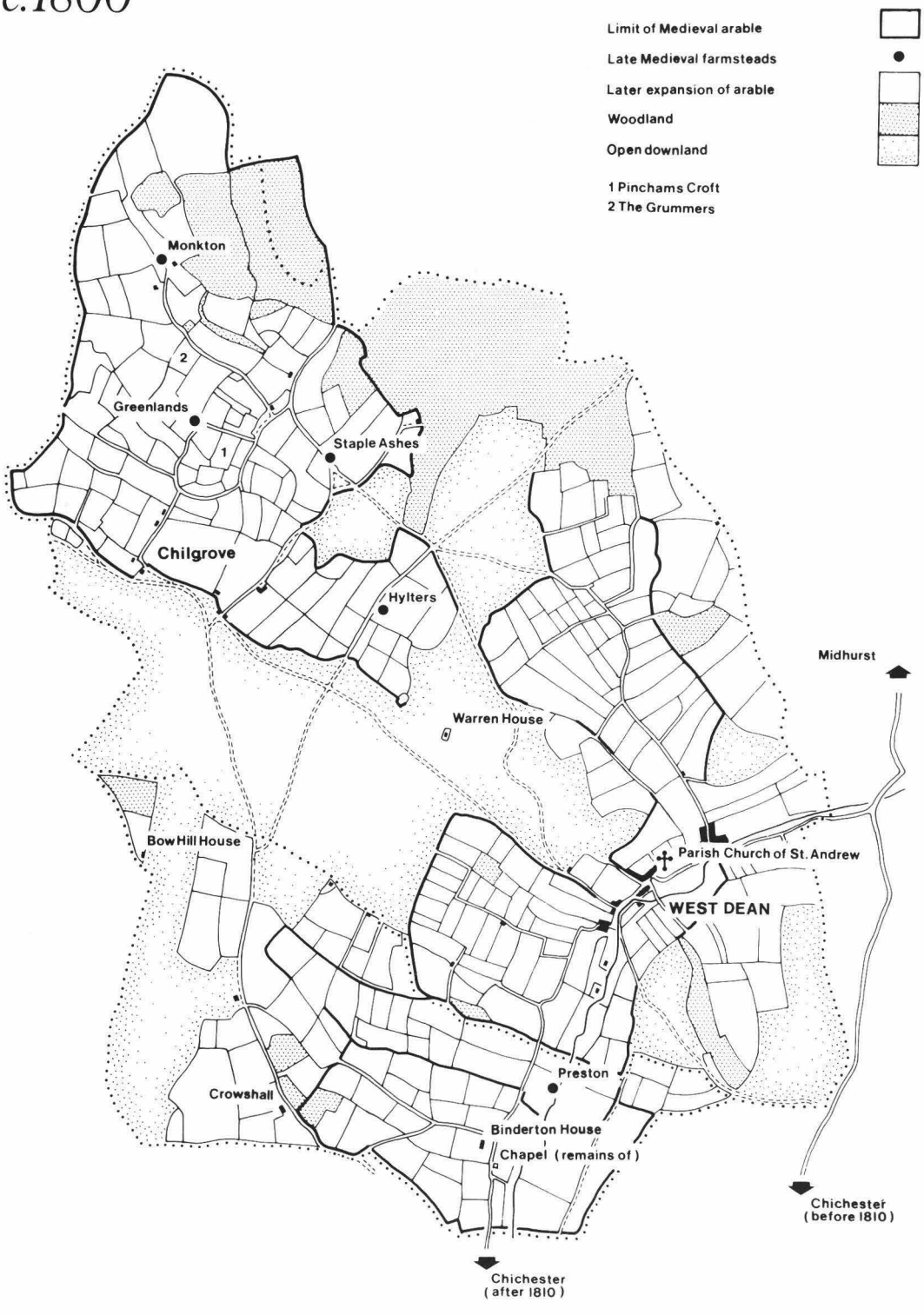


Fig. 2

Tithe Map for West Dean has 'Chapel Coppice' and 'Chapel Field', and an undated early nineteenth-century map[16] also has 'Chapel Field' in the same area. In 1976, the attention of Mr. Eric Holden was drawn to the occurrence of the local name Chapel Lane by Messrs. Noel Simon and John Mills, of the West Dean Estate, and to the existence of a rectangular depression, lined with flint and roofing tile, in a small copse on the south side of the lane leading from Hog Common to Old Monkton Farm, at Grid Reference SU 8340 1575.

In an attempt to define the extent and nature of any remains, trial excavations were undertaken by the writer, in March 1977, with the assistance of members of the 1976/1977 Midhurst W.E.A. Class in Field Archaeology. I am grateful to the Trustees of the West Dean Estate for allowing the excavation to be undertaken and to Mr. Alec Down, of the Chichester Excavations Committee, and Messrs. Eric Holden and Alec Barr-Hamilton for their help and advice.

When first visited by the writer the site lay beneath undergrowth which, when cleared, revealed a depression measuring about 16m east-west by about 9m transversely, and up to about 1m in depth. Quantities of flint lay around the depression and some roofing tile lay on its northern side. A trench, 18m long and 1m wide, was dug across the depression from north to south revealing the north and south walls of the chapel and a quantity of flints further north which were not mortared, but which may be the remains of the footing of the north wall of the churchyard. A second trench, 20m long and 1m wide, was dug at right angles to the first trench, slightly south of the central axis of the chapel, and revealed the east and west walls of the nave, the curving east wall of the chancel, and a brick and stone area within the chancel. A small area was subsequently excavated to reveal the south-east corner of the nave and the south wall of the chancel (Figs. 3 and 4).

The north, south, and east walls of the nave showed the same characteristics although all had been rubbed down to their footings. These were of rammed chalk and flint, 0.70m wide, laid on the underlying chalk through a shallow layer of old topsoil. Of the west wall only a few flints in a pale buff mortar were encountered and these may not have been *in situ*. A threshold of bricks over flints in yellow mortar appeared to indicate the site of a south door. A paved area of rough greensand blocks, laid on buff mortar, some 1.4m wide, extended northwards from the threshold as far as the centre of the nave. This then turned eastwards, at a width of 1.3m, along the centre of the nave, over the footings of the east wall of the nave and into the chancel. In the chancel, the paved area widened to about 3m for a distance of 2.2m at which point it gave way to a brick step up onto an area paved with thin bricks on a foundation of rammed chalk. This presumably served as an altar plinth.

The footings of the walls of the chancel were somewhat narrower than those of the nave, being 0.60m wide, and were almost entirely made of chalk with very little flint. At the south-east corner of the nave, an attempt was made to relate the chancel and nave footings. The evidence was not conclusive but a small amount of soil between the two foundations and the difference in the character of their construction suggests that the chancel may have been an addition to the nave. Further confirmation of this interpretation seems to be indicated by the fact that the footings of the east wall of the nave were continuous and not broken or strengthened to support an original chancel arch in this position. An area of flints in yellow mortar at the south-east corner of the nave appears to represent the remains of a buttress footing or an underpinning. The east wall of the chancel comprises the remains of one course of large flints in a buff mortar, on a bed of mortar, laid on the chalk footings.

[16] *WSRO* West Dean Ms 3159.

CHILGROVE CHAPEL
LOCATION PLAN

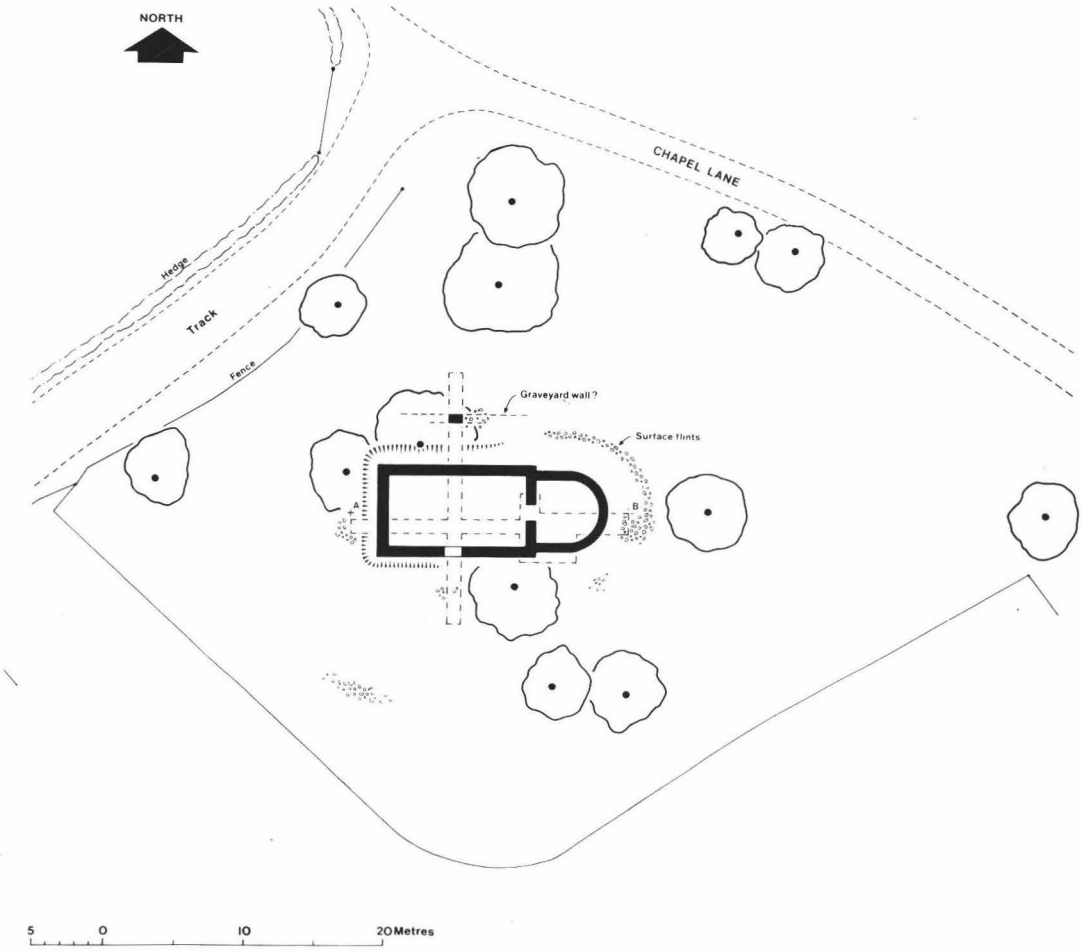


Fig. 3.

As indicated by the excavation the chapel comprised a rectangular nave, 11.3m long and 6.8m wide externally with walls about 0.7m thick. A chancel with semi-circular east wall, 5.2m long and 5.8m wide, was either an original part of the plan or a subsequent addition. The walls of the chancel were 0.6m thick. There was no evidence to suggest that any subsequent additions were made or that any earlier structure existed on the site, but the nature of the exploratory excavations do not preclude the possibility that features could be located beyond the limits of the area investigated.

Since no attempt has been made to excavate under the features encountered, the dating of the structure must be based upon the unstratified pottery and the plan. A preliminary examination of the pottery by Mr. Alec Down, who has provided the following notes, indicates that the majority dates from the early eleventh to the fifteenth century. It includes sherds from late fourteenth to early fifteenth century dishes, a fourteenth century glazed jug, thirteenth to fourteenth century cooking pots, and several sherds of a crenellated ridge tile with green glaze. At the lower end of the date range is a small group of sherds in underfired gritty fabrics, some with knife trimming, which may pre-date the Norman Conquest. There is one heavily abraded sherd, in a sandy fabric, from a rilled bowl of a type found at Chichester[17] and Porchester.[18] The pottery came from the topsoil over and around the foundations of the chapel, and while most of it may be assumed to have been deposited during the life of the building, some of it may be intrusive or residual. The material may indicate a pre-Conquest date for the chapel.

The plan, nave with semi-circular chancel, is not uncommon in English church architecture and can usually be attributed to the twelfth century or earlier. Plans closely resembling that of the Chilgrove Chapel occur at Balsdean, East Sussex, and Upwaltham, West Sussex. Balsdean Chapel, the site of which was excavated between 1945 and 1953,[19] comprised a nave, 10.3m long and 5.7m wide with walls about 0.8m thick, with north doorway, and a semi-circular chancel, 4.8m long. On firm archaeological and documentary evidence, the chapel is dated to between about 1120 and 1147 and appears to have served a similar community to that at Chilgrove, being in an outlying part of Rottingdean parish. The surviving parish church at Upwaltham comprises a nave, 11.8m long and 6.8m wide with walls 0.8m thick, a semi-circular chancel, 4.8m long, and a later south porch. The structure can be safely attributed, on architectural grounds, to the twelfth century. The imposts of the chancel arch are incorporated into the north and south walls of the chancel and there appears to be no reason why, in this particular case, there should be foundations for an east wall of the nave, as at Chilgrove, as the chancel appears to be an original feature.

Chilgrove Chapel can thus probably be assigned at least to the twelfth century, though it could be somewhat earlier. The walls are comparatively thin, a feature which is often indicative of a pre-Conquest date for a church.

Apart from the paved greensand areas, the brick altar plinth, and the fragment of east wall, the structure appears to have been taken down to foundation level with some care. The broken roof tiles were laid in a pile outside the north wall of the nave but most of the other building material has apparently been taken from the site. No worked stone has been found in the area investigated, but a fragment of a glazed ridge tile was found. There was no archaeological evidence to indicate a date for the taking down of the chapel but the general character of the bricks in the chancel and on the threshold of the south door indicate that the building was still in use in the first half of the

[17] *Chichester Excavations* 3 (forthcoming) A. Down.

[18] *Society of Antiquaries Research Report* No. 32 (1976) 'Excavations at Porchester Castle' Volume 2—Saxon B. Cunliffe pp. 187-188 and figure 127.

[19] *SAC* 91 (1953) 53-68.

CHILGROVE CHAPEL, WEST DEAN

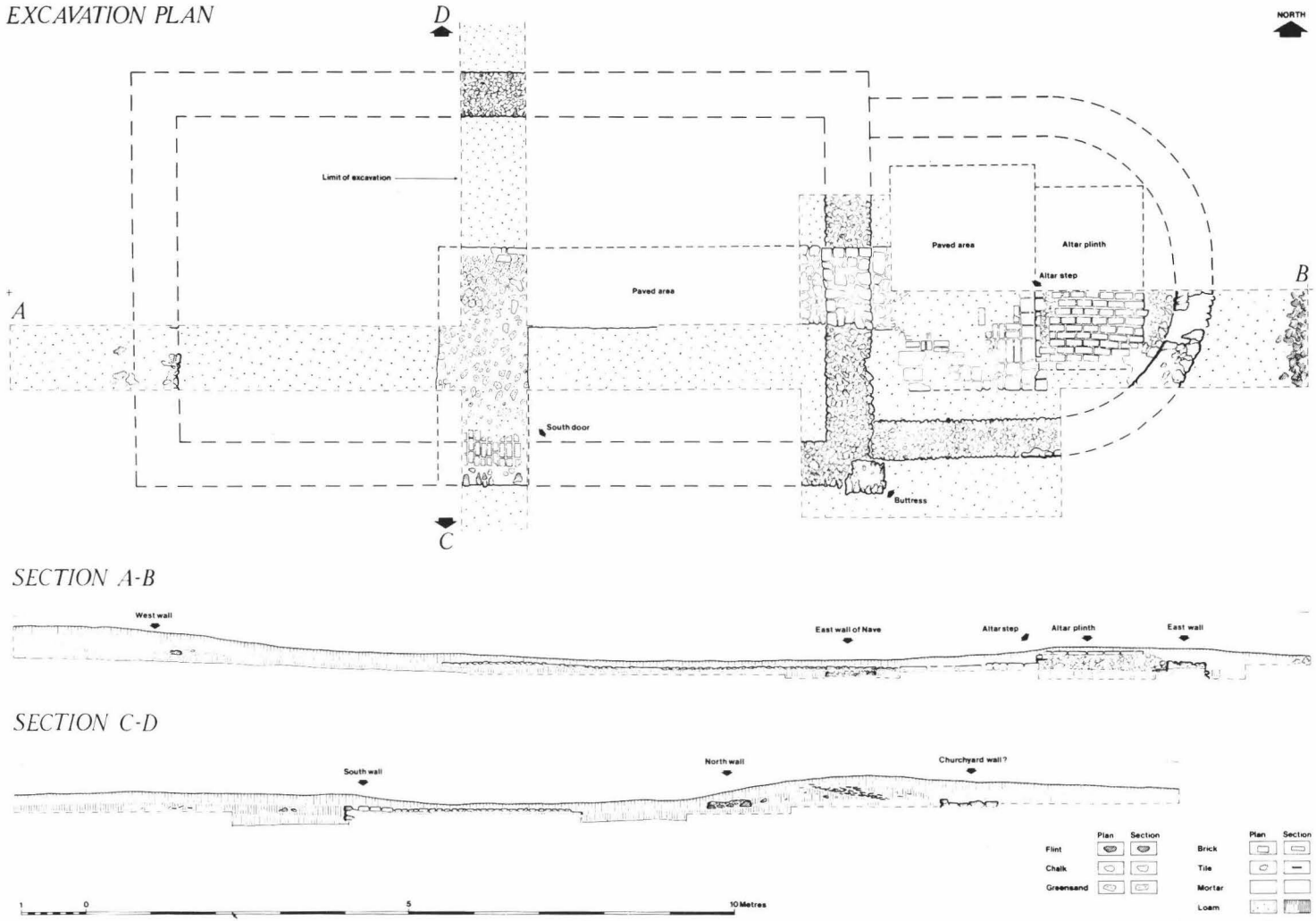


Fig. 4

seventeenth century, which would appear to agree with the documentary evidence for its demolition between 1618 and 1636. The medieval settlement at Monkton, which may have been a hamlet or village, appears to have been replaced by a large house and farm before 1608 and its partial abandonment may have been contributory to the demolition of Chilgrove Chapel so soon after this date.

MONKTON DESERTED MEDIEVAL SETTLEMENT

In October 1975, Mr. Eric Holden drew the attention of the writer to earthworks adjoining the remains of Monkton Farm and suggested that they might represent the site of a deserted village or hamlet. The site, centred at SU 8290 1660, has subsequently been surveyed at different seasons of the year and there appears to be evidence of a settlement of about eight or more buildings, with associated tofts and field ways, extending over a distance of 400m along a dry coombe above the remains of Old Monkton Farm (Fig. 5). A double-lynchet trackway forms the main route through the site, on its north-eastern side, and this is linked to individual terraced tofts and to the surrounding land by hollow-ways and trackways. Immediately north of Old Monkton Farm are the remains of two crofts, A and B, each comprising a rectangular depression, measuring about 14m by 6m, with associated flints and roofing tile. Further north are several terraced rectangular areas which are dominated by nettles during the summer months. These may also be the sites of crofts and are shown enclosed by dotted lines on Fig. 5.

The remains of Old Monkton Farm comprise brick and flint walls which have been demolished almost down to ground level. The occurrence of sixteenth and seventeenth century brick and tile indicates that the buildings may originally be of that date, but later bricks demonstrate that it had subsequently been altered during the eighteenth and nineteenth centuries prior to demolition soon after the First World War. Further south is a well and the footings of a surrounding brick and flint building which once housed a donkey wheel.

The earliest direct reference to the site occurs in a deed, dated November 1608, which refers to the place as 'Northolt alias Muncton Manor and Farm.'[20] It is again referred to as the manor or farm of Northolte alias Monkton in 1619.[21] On an estate map of 1623,[22] a single large house is shown and the adjoining areas are shown as Windenn, Munckon Wood, Munckon Heath, and Munckon Enclosures. On the accompanying schedule,[23] which has kindly been transcribed for me by Mrs. Alison McCann of the West Sussex County Record Office, the property is referred to as 'Munckon Farrme' and was held in 1623 by two people. William Fairemanner held 'A convenient house with Barnes Stables orchards gardens and gaterooms' assessed at 2 acres 3 rods 34 perches. In addition his holdings included

'of Arable	138a.	0r.	19p.
of Pasture	32a.	2r.	34p.
of Heath	94a.	0r.	33p.
of Wooddie grounds	35a.	1r.	23p.
of Cops by Cops measure	23a.	3r.	17p.
By statute measure	28a.	0r.	23p.

[20] *WSRO* West Dean Ms 1100-1116.
[21] *WSRO* West Dean Ms 1179.
[22] *WSRO* West Dean Ms 3152.
[23] *WSRO* West Dean Ms 3151.

DESERTED MEDIEVAL SETTLEMENT
MONKTON, WEST DEAN.

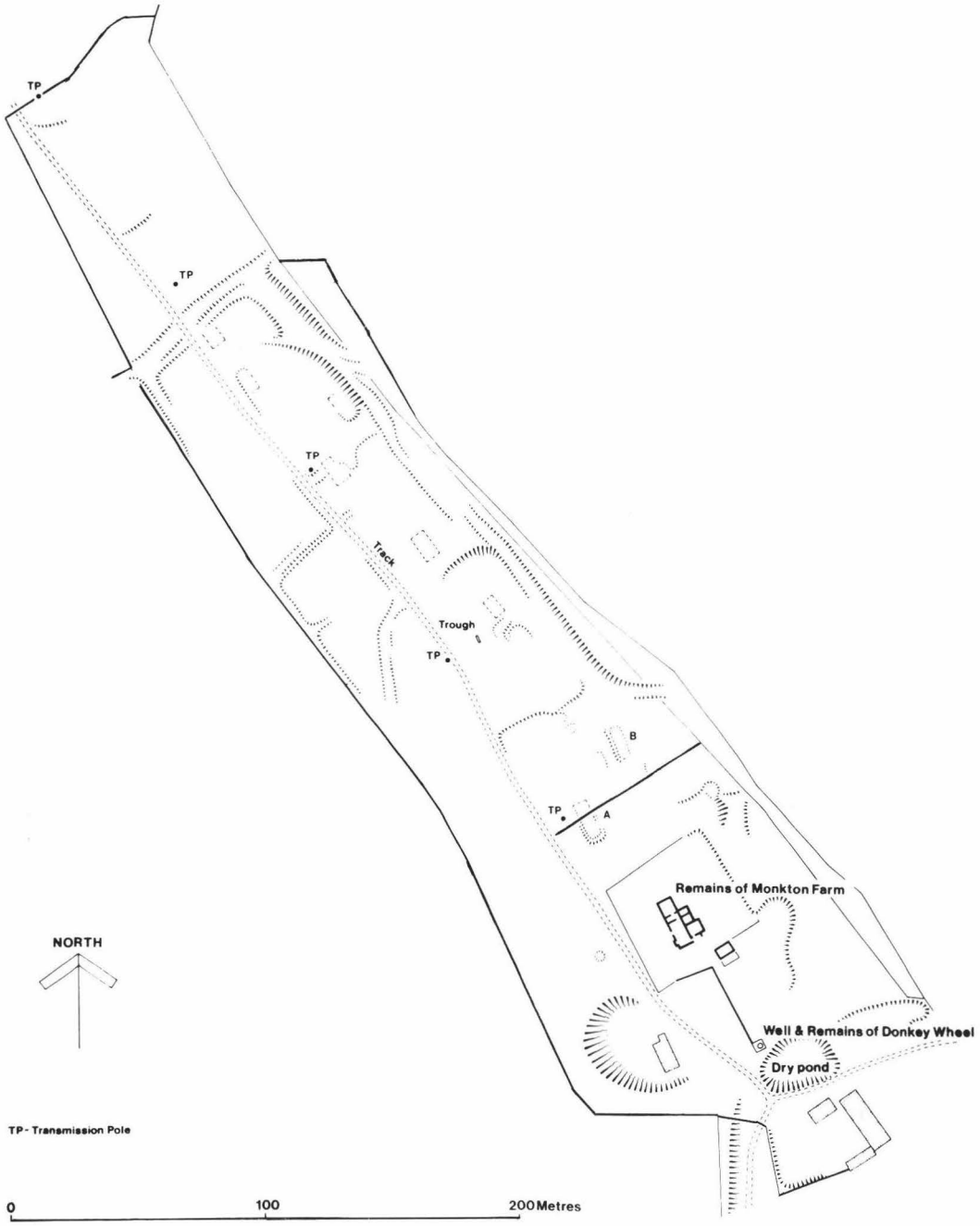


Fig. 5.

The whole Content Accompting to Copses by Cops measure	345a.	1r.	30p.
Accompting the Copses by statute measure the Content is	349a.	3r.	36p.'

Richard Rassalls Hee hath of Arable or Pasture 37a. 3r. 6p. Henry Rassals Part called Rainolds of Arable or pasture 9a. 3r. 31p.

The whole content of all the farme is accompting the Cops by Cops measure 393a. 0r. 27p. Accompting the Copses by Statute Measure 397a. 2r. 33p.'

A plot called 'Rainolds' is shown on the estate map to the south-east of the house which can be identified as Monkton Farm. The various areas shown on the estate map can be correlated with surviving stretches of woodland and arable fields on the ground and the areas of these have been measured on modern maps. The total acreage in the schedule, less the nine acres in Rainolds which was an isolated field north-east of Chilgrove Chapel (Fig. 1), is about 389 acres by 'Statute measure' and these cover an area of about 212 hectares on the ground. Thus one hectare is equal to about 1.82 acres in the schedule. The individual acreages in the schedule do not appear to correlate precisely with the areas measured on the modern maps but it is quite clear that many areas, like the present Winden Wood, were either arable or pasture in the early seventeenth century.

The property is described as a tenement, two barns, two stables, cart-house, well-house, garden, orchard, lands and woods called Moncton Farm in a lease of 1688.[24] On maps of 1724 and about 1740[25] the place is called 'Monking' and a map of 1797[26] shows a track leading 'to Monking'.

This evidence appears to suggest that only a large house or farm occupied the site in the early seventeenth century and that this was known as either Northolt, Munckon, Monking or Muncton. Since the northern part of West Dean parish was referred to as the tithing and chapelry of Chilgrove until comparatively recently, and since this name appears to refer to a dispersed settlement of farms, and perhaps hamlets, centred on Chilgrove Chapel (Fig. 1), it is difficult to relate early references to specific occupation sites within the area.

A covenant between the monks of Waverley Abbey and Thomas de Sandervill, dating to about 1210,[27] refers to 'land in the fields of Chelegrave which was common to the monks' and in the accompanying boundary survey it refers to 'the chapel of Chelegrave', and also 'Middelfeld' and 'Suthfeld'. The latter may refer to village common fields but the boundary survey cannot yet be closely related to surviving features. Of the features mentioned on the boundary, Putcroft, Hildeleia, Frithleia, Fochslichesleia, Middelfeld, Suthfeld and Grenemere, only the first and last appear to be represented in later field names, although Hildeleia may be represented by Hylters. Putcroft is possibly the field Pinchams Croft, which occurs east of Broom's Farm, on an early nineteenth century map of Monkton and Brooms Farms[28] and on the West Dean Tithe Map of 1847[29] (Fig. 2). Grenemere may be represented by the field called 'The Grummers', on the south side of the lane leading from Hog Common to Old Monkton Farm, on a map of 1797,[30] on an early nineteenth century map,[31] and on the West Dean Tithe Map.[32] The field names 'Putticks' and 'Grummer' also occur in a lease of 1768.[33]

[24] *WSRO* West Dean Ms 1268.
[25] Richard Budgen's Map of 1724 and Thomas Bowles' Map of about 1740.
[26] *WSRO* West Dean Ms 3157.
[27] *SAC* 77 (1936) 254-5 L. F. Salzman.
[28] *WSRO* West Dean Ms 3159 Field No. 16.
[29] Field No. 242.
[30] *WSRO* West Dean Ms. 3157 Field No. 258.
[31] *WSRO* West Dean Ms 3159 Field No. 51.
[32] Field No. 258.
[33] *WSRO* West Dean Ms 1455.

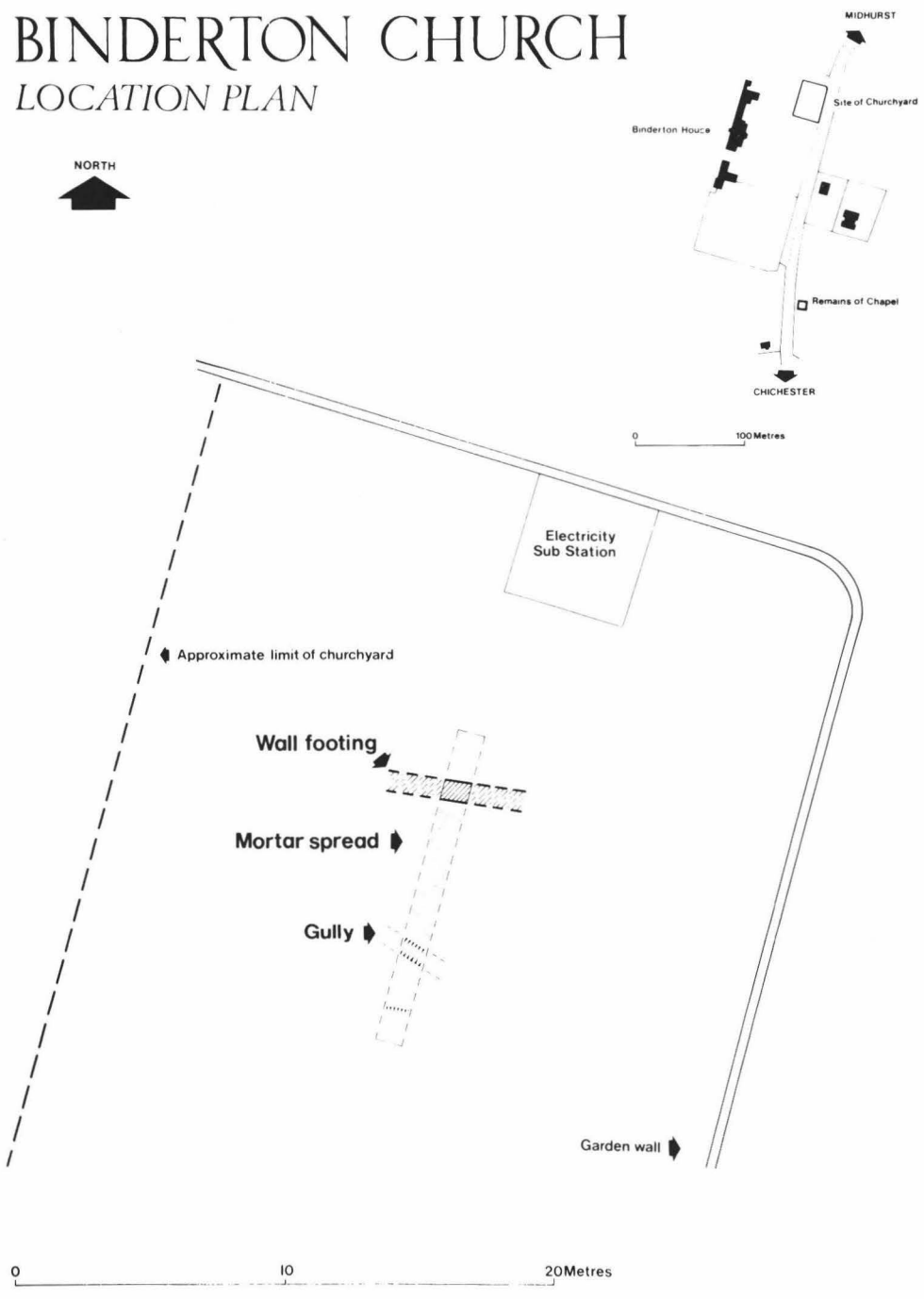

BINDERTON CHURCH
LOCATION PLAN
NORTH
MIDHURST
Site of Churchyard
Binderton House
Remains of Chapel
CHICHESTER
0
100 Metres
Electricity
Sub Station
Approximate limit of churchyard
Wall footing
Mortar spread
Gully
Garden wall
0
10
20 Metres

Fig. 6.

It is Chilgrove that is referred to in the Lay Subsidies of 1296, 1327 and 1332, and in 1348 tenements in Chilgrove were held of John Bernak by William and Richard atte Wenden.[34] The name Winden occurs on the estate map of 1623, referred to above, and survives today as Winden Wood and Winden Field, east of Old Monkton Farm, suggesting that the fourteenth century name for the site under discussion may have been Winden.

The documentary evidence and the surviving remains on the ground indicate that this was once the site of a medieval village or hamlet which was deserted, apart from a single property, before 1608. It may have been served by common fields represented on the estate map of 1623 by 'Windenn', Munckon Heaths', Munckon Inclosures', and Munckon Wood'. Some of these areas are now wooded but all contain evidence, in the form of lynchets and field banks, to suggest that they were once cultivated areas. The village or hamlet and chapel were probably situated on a downland route from West Dean to Treyford which can still be traced over the top of the Downs.

BINDERTON CHURCH

A church at Binderton (BERTREDTONE) is mentioned in Domesday Book (1086),[35] when the estate was held by Earl Godwin, but it does not occur again in written records until the middle of the fourteenth century. It is not referred to in the Taxation of 1291 or in the Nonae Rolls of 1340.[36] Although it was not mentioned by name when the prebend of Singleton was given to Chichester in the twelfth century, the confirmation of that gift, by Archbishop Simon, in 1355, refers to the chapel of Binderton as forming part of that prebend.[37] In 1481, the Dean and Chapter leased to William Collock the rectory of West Dean with the 'chapels' of Binderton, East Dean, Chilgrove, Didling, and Dumpford, of which Didling and Dumpford were parish churches.[38] In 1535, the building is again referred to as a chapel[39] but it is called a parish church in 1526 and 1546.[40] In 1546 and 1563, it was served by a curate.[41] In about 1579, it was stated that the Dean and Chapter were patrons and that service was conducted by the curate of West Dean.[42] In 1640, the churchwardens stated that 'our vicar lives at Westdene',[43] but in the following year the Protestation, signed by nineteen persons of the parish of Binderton, was made before James Eburne, curate or minister of East Lavant.[44] It seems clear, however, that Binderton was usually served from West Dean though there appears to be no trace of any formal act of union and as late as 1849 there was a separate Tithe Award for Binderton, which states that the vicar had half the small tithe of Binderton Farm.[45]

When Binderton House was built by Thomas Smyth between 1660 and 1670, the medieval church was taken down and replaced by the surviving chapel on the east side of the Midhurst-Chichester road.[46] There is little evidence of the plan of the church but several features are recorded. In 1523, Alice Smith requested that she should be buried in the *chancel* next to her former

[34] *VCH* 4 (1953) 97-99 L. F. Salzman *sub. ref.* Cal. Inq. p.m. xii, 457.
[35] *VCH* 1 (1905) 421b L. F. Salzman.
[36] *Ibid.*, 4 (1953) 90 L. F. Salzman.
[37] *Sussex Record Society* 46 (1942-3) No. 1111 p. 375 W. D. Peckham.
[38] *Ibid.*, No. 735 pp. 196-7.
[39] *Ibid.*, No. 784 pp. 217-8.
[40] *Ibid.*, 41 (1935) 145-7 ed. W. H. Godfrey.
[41] *SAC* 61 (1920) 110 V. J. Torr.
[42] *B.L. Add. Ms.* 39454, fol. 8v.
[43] *B.L. Add. Ms.* 39428, fol. 51.
[44] *Sussex Record Society* 5 (1906) 32 R. Garraway Rice.
[45] *Binderton Tithe Map and Apportionment* (1847).
[46] *Sussex Notes and Queries* 3 (1930) 85-7.

husband,[47] and in 1586 it (the church) was unpaved.[48] In the church inspection book for 1602 there are two passages for Binderton. The first states that 'the chancel wanteth some paving, the windows are unglazed and some of the rough (roof) unhealed'. The second states that 'the *church* (i.e. the *nave*) lacketh some paving and mending of the wall one (on) the north side and the font wanteth a cover'.[49] In 1611, the chancel was said to have been decayed and some of the rafters had fallen into it,[50] and in 1613 'the steeple' was 'weak and shaketh very mutch'.[51] In 1622, it is recorded that the church and *church porch* were 'in some decay'.[52] In the church inspection book for 1636 the following report occurs for Binderton. 'The church (nave) and chancel want to be whited throughout and to be beautified with sentences of scripture. Also the Ten Commandments and the Kings Arms are to be set up in the church. The *three windows in the chancel* do all want glazing. There wants a new communion book. There is no cloth nor cushion for the pulpit. No partition between the church and chancel. Divers of the seats in the church want repairing and all the seats in the church want planking and paving. There is no bier to carry the dead to burial. The font will not hold water. The church wants paving in divers places. They have no Book of Homolies nor book for the 5th of November nor the utensils of the church. The register book is not kept in the church. There is no flagon for the communion wine'.[53] In 1640 the churchwardens reported that 'wee have a decent church for divine service . . . noe parte of our church is demolished nor put to any prophane use'.[54] In 1641, it was reported that it was in repair 'save that some lead in the healing wants attention, and that the vane of the *steeple,* lately blown down, is not yet up again. The chancel is severed from the church, the steeple is furnished with bells, and there is a Parish Register, a communion cup and a flagon'.[55]

From the foregoing evidence it would seem clear that by 1523 the structure comprised nave and chancel, though in 1641 these were 'severed.' The Victoria County History suggests that the latter indicates that the two components were 'structurally distinct' but they may have been separated only by a chancel screen which was not there in 1636. The reference to three windows in the chancel in 1636, suggests that it was probably quite small and may have contained one window in each of its north, south, and east walls. The steeple, referred to in 1613, was probably no more than a wooden bellcote and in 1622 there is reference to a church porch. In its final form the church of Binderton may have been similar in plan, and perhaps even size, to Chilgrove Chapel and Upwaltham Church.

W. D. Peckham suggested that the site of the church lay in the north-east corner of what is now the garden of Binderton House and drew attention to a nineteenth-century map recording an exchange of glebeland in this position.[56] A copy of this map is now in Barbican House Museum, Lewes.[57] It is dated 1862 and consists of several small areas of land, but only one (Plot 29a) lies in Binderton Parish. There is no mention of a church or churchyard on the Glebe Schedules and other documents attached to the map. The piece of land in Binderton, evidently that referred to by Peckham, is listed under the first schedule as 'Part of pleasure ground and lawn of Binderton House'

47 *Sussex Record Society* 41 (1935) 146.
48 *B.L. Add. Ms.* 39425, fol. 55.
49 *WSRO* Ep.I/26/1, fol. 15.
50 *B.L. Add. Ms.* 39426, fol. 9.
51 *B.L. Add. Ms.* 39426, fol. 44.
52 *Sussex Record Society* 49 (1948) 45.
53 *WSRO* Ep.I/26/2, folios 5v-6.
54 *B.L. Add. Ms.* 39426, fol. 51.
55 *Sussex Notes and Queries* 7 (1938-39) 119.
56 *Sussex Notes and Queries* 3 (1930) 85-87.
57 Box D/10.

and measures about 25m east-west by 34m north-south (i.e. about 850m^2). There is no trace of a piece of glebeland on maps of 1771, 1810 and 1847,[58] but in 1849 the vicarial glebe was thirty poles in West Dean, obtained in exchange for land in Binderton.[59] Thirty poles is equal to about 750m^2, a figure which compares favourably with the area of glebeland recorded on the map of 1862.

Dr. T. Hudson, of the Victoria County History, has kindly provided the following observations on the possible interpretations of this evidence. In the Binderton Glebe Terrier of 1635,[60] it states that 'one plot of ground belongeth to the vicar or minister of Binderton aforesaid adjoining to the churchyard of Binderton, aforesaid, containing by estimation a quarter of an acre.' The glebe land and the parsonage or vicarage were part of the revenues of the benefice, and therefore their site(s) would be less likely to disappear without trace, since the income would continue to be received, or, as happened here, a piece of glebe could be exchanged for land elsewhere. The site of a church and churchyard, on the other hand, were not part of the revenues, and would have no economic value, since they would not be used for agricultural purposes, at least at first—so they might disappear altogether.

It is possible, therefore, that the plot of land recorded on the map of 1862 was the plot exchanged for land in West Dean, and contained the site of the vicarage or the church. Thus the site of the church could be on this or an adjacent plot.

In an attempt to determine whether the plot of glebeland represented the site of the churchyard and to see whether there were sufficient remains of the church to warrant preservation, a trial excavation was undertaken in May 1977 by the writer with the help of members of the Midhurst WEA class in archaeology 1976/77. I am grateful to Mr. Brian Snelling, owner of the property, for allowing the excavation to take place, and to Mr. Alec Barr-Hamilton, and Mr. T. Hudson for their help and advice.

The north-east corner of the garden of Binderton House is planted with mature trees and a small electricity sub-station has been erected near the corner. A trench, 12m long and 1m wide, was opened in a north-south direction across the centre of the area thought to be the churchyard or the site of the vicarage.

Beneath the topsoil an east-west wall footing, 0.8m wide, was found. This was of large, unmortared, flints laid in a foundation trench cut into the chalk. Its upper surface was 0.6m below the present surface. A spread of yellow mortar with flints extended, at a depth of 0.5m, for a distance of 5m from the south side of the wall foundation where it terminated with several large flints in the same mortar. Further south a gully, 0.7m wide and about 0.8m deep, lay across the trench, cut through the chalk, and was filled with loose soil and flints. No attempt was made to excavate through any of the features but it seems likely that they represent the north wall of a building and a mortared floor or demolition layer. Presumably the footing of the south wall is located beneath the mortar spread giving a building of up to 4.5m wide internally. Assuming that the remains are of the church, this would be rather narrow for a nave and therefore probably represents the width of the chancel. A few pieces of slate, roofing tile, and worked stone were found, and it seems likely that substantial remains of the footings of the church or vicarage occur in this area centred at SU 8502 1082. No trace survives of the churchyard but the evidence, referred to above, quite clearly demonstrates its possible former extent. Burials within the church and the

[58] *WSRO* West Dean Mss. 3156; 3161, 3162; and the *Binderton Tithe Map.*

[59] *VCH* 4 (1953) 90; *Sussex Notes and Queries* 7 (1938-9) 119-121.

[60] *WSRO* Par.65/1/1/3 f. 5.

churchyard are referred to in the sixteenth century[61] and these, and the remains of the church, should be respected if future development is considered in this area.

The replacement chapel, built between 1670 and 1680, still survives as a ruin to the east of the main road (Fig. 2) and is described by Peckham. It was never consecrated and had 'sunk to the level of a barn within a hundred years.' The only burial, that of Thomas Smith (junior), who died in 1687-8, was removed to West Dean in 1839.[62]

The Domesday settlement and Medieval parish of Binderton appears to have survived as a village community at least until 1641, when at least nineteen adults resided there, but, like other examples in Sussex, it became deserted during the seventeenth century. It is still listed in a religious Census of 1676 as a parish or village but, unlike other places mentioned, the population total is missing.[63]

ACKNOWLEDGEMENTS

In addition to acknowledgements within the text I am very grateful to the Trustees of the Edward James Foundation (West Dean Estate) for allowing me to publish the references contained within the West Dean Manuscripts and to the West Sussex County Archivist for allowing me to make use of other material in the County Record Office.

Dr. T. Hudson and Mr. E. Holden have kindly commented on the text.

61 *Sussex Record Society* 41 (1935) 146.
62 *Sussex Notes and Queries* 3 (1930) 85-87.
63 *SAC* 45 (1902) 147.

EXCAVATIONS IN WINDING STREET, HASTINGS, 1974

by David C. Devenish, B.A., A.M.A.

INTRODUCTION

During 27th July to 4th August, 1974, the Hastings Museum and the Hastings Area Archaeological Research Group undertook an excavation, with the permission of the East Sussex County Council, on a site on the north side of Winding Street, which is now covered by part of the Senior Citizens' Day Centre. A medieval pit and part of a house were found.

The Old Town of Hastings was the nucleus of the town from at least the late fourteenth to the mid nineteenth centuries. The apparent dearth of early medieval objects found on this excavation might be interpreted as supporting the view that the present Old Town of Hastings was only founded in the fourteenth century. One should, however, bear in mind that the Town Wall, built after 1356 (perhaps in 1385)[1] lies only 10 m. to the south and that the whole area may well have been stripped when it was built, removing all traces of earlier occupation. The sites of Anglo-Saxon and Norman Hastings remain a problem that has yet to be answered.

The Site

The site (TQ 8251 0952) lies to the south of the one excavated in 1975 on part of the area formerly occupied by the public bathhouse and corresponding to the earlier house numbers 10 to 13. Originally a strip 13 m long was started, but Victorian features uncovered (houses numbers 10 and 11) later limited investigation to a quadrilateral 4.50 m by 3.20 m to 2.70 m. The north edge of this trench (I) was bordered by a concrete raft, since removed, but recorded on the O.S. 1/500 map. This was used as a datum. The east and south sides were bounded by the berms allowed for the garage of number 16 and the back of the pavement respectively. (The garage was demolished in 1975, although number 16, for long the only house in Winding Street, remains).

The 'natural' stratum here is a spongy, greenish-yellow clay lying at 1.40 m below datum, corresponding to roughly one metre below present pavement level. Lying over this was a layer of brownish clay (W2=E4), 25-30 cm thick. It graded into the natural rock material, but otherwise showed no sign of stratification. It contained medieval potsherds, mainly small fragments representing a large number of different pots and some bone and metalwork. Objects were found all through, but mostly in the top 10 cm. It is difficult to interpret this layer on the evidence available. It may have been a garden, or perhaps the surface of the Hundred Place, which is believed to have been in this neighbourhood.[2]

Pit D

Through this layer, into the natural rock material, had been dug an oval pit with vertical sides and a flat bottom, 2.35 m by 1.10 m and, from the top of W2, a maximum of 80 cm deep. The fill was similar to W2 but more loose. Some large sherds were found right at the bottom, but otherwise the contents was similar to W2 and probably derived therefrom. Neither the shape nor the contents

(particularly rarity of bone) suggest a rubbish pit. It may perhaps have been dug for clean clay, which could have been used as daub or for making pottery. It would appear to have been of the same phase (fourteenth century) as Pits 6 to 9 of the 1975 excavation.

The House

On the west side of Trench I, layer W2 was directly overlain by post-medieval levels, but on the east the equivalent layer, E4, was overlain by a platform of grey clay (E3), 15 to 30 cm thick which ran off into the baulks at the north and east. Along the west edge of E3 were six flat stones and, at the north end, a stone lined post-hole (PV) suitable for a post 15 cm square set 30 cm deep. The six stones and the post-hole lined up with two more post-holes (p.h.s. 1 and 2) found in 1975. This complex can be interpreted as a house platform on which a house had been built with a wall of cob or wattle and daub, resting on the flat stones and supported by half-timbering.

East of the line of stones, and overlying E3, was a confused succession of floor levels (E2) totalling, at maximum, only 17 cm. These were very varied—including black, yellow, red, brown, etc., each individual layer being restricted not only in thickness, but also as to area covered. These must represent a series of individual dumpings over a long period. Although these layers were observed in the 1975 excavation they were rather obscure. However examination of the site during the digging of foundations in December 1975 revealed the full extent N-S to have been 5.80 m. The extent E-W must have been at least 5.50 m since it runs in under the garden of number 16.

Potsherds were found in E3. In contrast to the layer below, however, they represented only a few vessels. A quantity of metal was also found. Sherds and a bronze fitting were found in PV; but of the numerous floor levels only the very lowest, a yellow clay (E2d), not represented throughout the excavated part of E2, yielded much pottery. It would appear that the house may have been occupied from the fifteenth possibly until the eighteenth century.

Subsequent History

Near the end of its life (early eighteenth century) the south-west corner of the house was rebuilt with roughly shaped blocks and mortar overlying the old floors—it was a common practice in the Georgian period to refront old houses. At perhaps the same time a rubbish pit (PI) was dug, partly overlapping Pit D. It contained a great deal of bone and tile and a few potsherds, both medieval rubbish and post-medieval. Two small postholes (PII and PIII) were dug close by it.

Subsequently, in the late eighteenth or early nineteenth century, the whole site was cleared and cottages with foundations of rough stone and with flagged floors were built. When the foundation walls of No. 12 were removed, three carved sandstone blocks were recovered (a fourth was found in 1975). These blocks have an ecclesiastical appearance and may have come from the predecessor of All Saints or St. Clements Church, although they might have been salvaged from the cellar of a wealthy merchant. In Victorian times a flagged passageway, which had been built to the west of No. 12 was demolished/buried and a wide, pebble-floored, entrance to 11a, a stable, was built. Numbers 10 and 11 were built at this period so destroying all earlier evidence as already mentioned.

In the late 1930s the inhabitants of Winding Street and John Street were evicted in the name of slum clearance (sometimes forcibly, according to the evidence of former residents visiting the site). The houses were demolished, although only down to ground level. The site of houses Number 12 and 13 became a dump for ash from the baths.

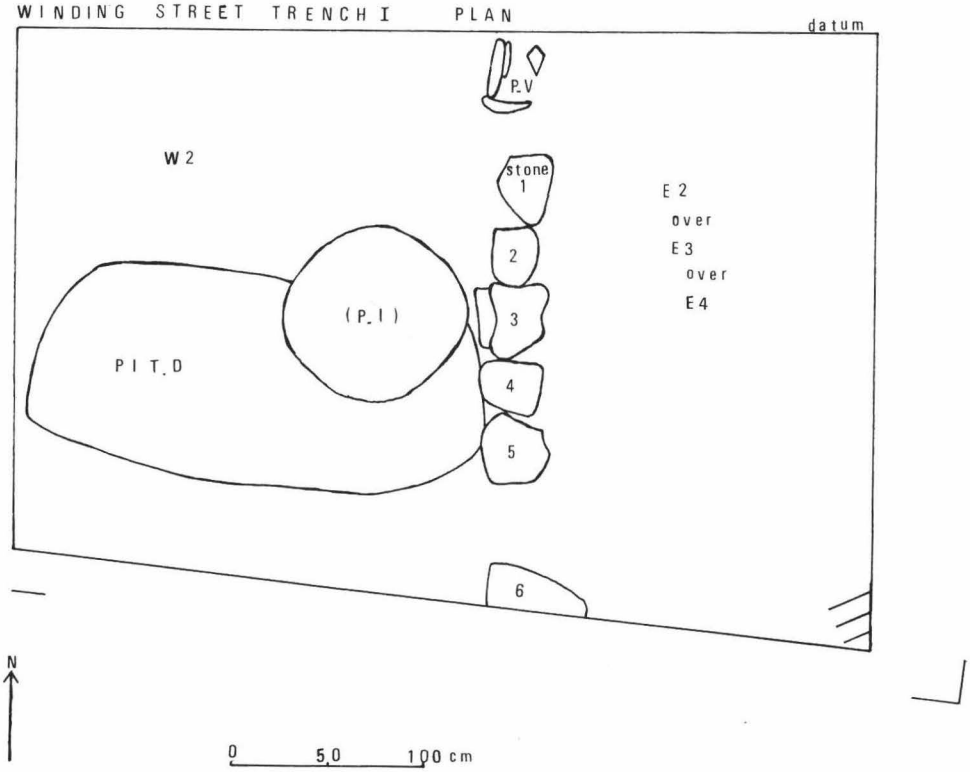


Fig. 1. Winding Street 1974; Plan

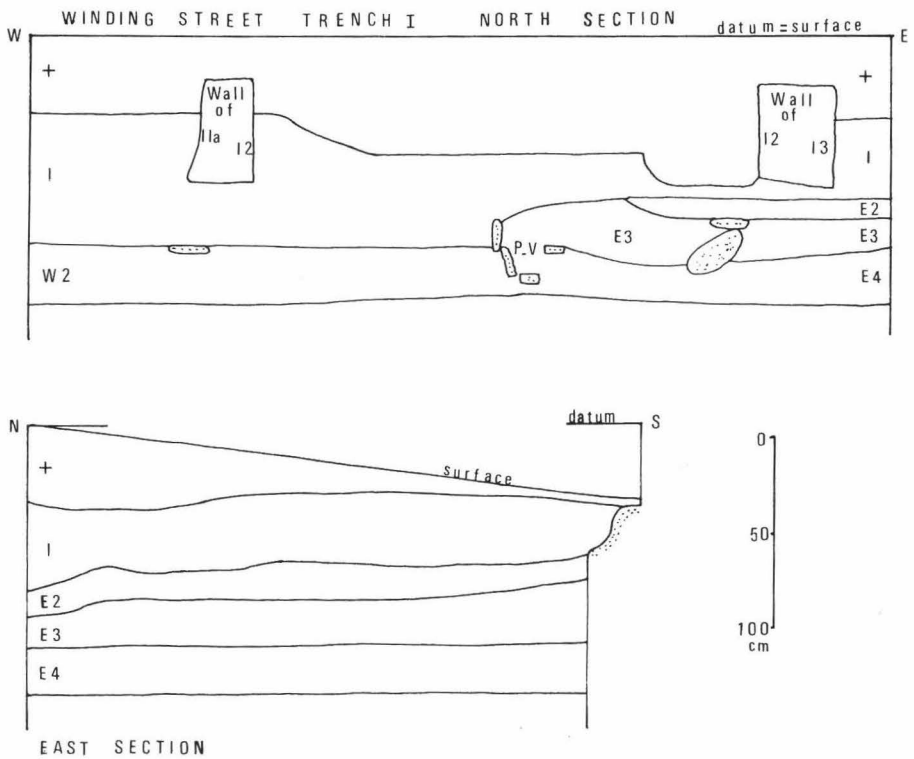


Fig. 2. Winding Street 1974; Main sections

THE FINDS

Bone

W2/E4. The volume of bone found was small (*c.*5,000 cu. cm. loosely packed), roughly a quarter that of the pottery. All the large bones and nearly all the small ones were fragmentary; this was clearly partly due to their having been chopped up, since some showed signs of cutting. Only cattle, sheep or goats and pigs were clearly recognisable, without any obvious predominance. The finds included a milk tooth of a calf. No human bones were observed. The bones would seem to have been food refuse which had casually accumulated but their numbers were too small for W2/E3 to have been a refuse heap. The small size of most of the fragments would further support this view.

A few vertebrae of large fish were found, very decayed, as well as some disintegrating oyster shells. Doubtless the fishermen of Hastings lived very largely on fish and shellfish, but most traces of these would have decayed away long ago. Oysters were common off Hastings until eliminated by pollution in recent years.

Pit D The bones were on the whole similar to W2/E4 and may well have been old refuse lying about when the pit was dug. However three lower jaws of sheep/goats and two ox horn-cores are more likely to have been thrown in fresh.

E3 The few bones in this layer were, on the whole, less damaged than in the layer below and so more probably arrived there fresh. The same three species were present and also a single large horse's tooth.

E2d Three pieces of bone were found in this layer, probably all beef, also fragmentary pieces of oyster shell.

Bronze

W2/E4

s.f. 6 D-shaped buckle with pin, somewhat reminiscent of Hangleton.[3] 24 x 18 mm.
N. 2.15 m. S.; E. 1.65 m W.; 1.15 m d (from datum).
(South side of the top of E4).

s.f.8 Pendant of L.M.C. Type IV,[4] undecorated. Diam. 17 mm, length 25 mm.
N. 80 cm. S.; E. 3.60 m W.; 1.25 m d.
(In W2, 15 cm north of pit D).

s.f.22 Needle. Perforated but broken short at both ends, maximum width 4 mm. Length now 40 mm, estimated originally at 60-100 mm.
N. 45 cm. S.; E. 4.50 m W.: 1.30 m d.
(In W2, north end of west baulk).

Pit D

s.f.10 Buckle plate (see s.f. 3, below, broken, width 9 mm. N. 1.55. S.; E. 3.88 m W.; 1.35 m d.
(Upper fill near N.W. corner).

E3

s.f.3 Buckle, broken, maximum width 17 mm.
It is extremely probable that this fits onto s.f. 10, to make a buckle with attached plate 40 mm long; furthermore a rectangular stud from W2 (9 x 25 mm, no number) has holes exactly matching s.f. 10 and is likely to have been used to attach it to a belt. N. 2 m S.; W. 20 cm W.; 1.10 m. d.
(Bottom of E3, south side).

s.f.4 Double rectangular plaque, held together with four round studs; apparently plain, but heavily corroded. 36 x 28 x 7 mm. N. 2.55 m S.; E. 35 cm W.; 1.10 m d.
(Bottom of E3, south side).

s.f.7 Stud, saucer shaped and perforated. Diam. 14 mm N. 1.50 m S.; E. 1.30 m W.; 1 m d.
(Top of E3, north side).

s.f.12 Lump of bronze, roughly triangular, 28 x 17 x 17 mm. N. 1 m s.; E. 1.75 m W.; 1.05 md.
(under stone number 1 of the medieval house wall).

s.f.13 'Square' buckle, the sides having rhomboid section, pin missing. 30 x 33 x 4 mm. N. 25 cm S.; E. 1.60 m W.; 1 m d.
(Just east of Pit V).

Bronze rivet, spike or tang, broken at upper end, length 39 mm, max. width 5 mm.
(Under stone 4).

Pit V

s.f.14 Forked strap-end, of a type figured and discussed by J. G. Hurst.[5] 21 x 50 mm. N. 35 cm S.; E. 1.80 W.; 1 m deep. (South side of top of Pit V. fill).

In addition to the named pieces, small flecks of bronze were found in W2, E4 and E3, but nothing suggesting bronzeworking, except s.f. 12. Considering the small area excavated, more pieces of bronze were found than one would expect, even allowing for three pieces being from one buckle. One might postulate that these objects might originally have come from the booth of itinerant tradesmen on the Hundred Place, but chance domestic loss cannot be ruled out.

Fishing Equipment

A discovery seldom encountered, but to be expected in a fishing port like Hastings, was a number of lead weights and iron fishhooks. The weights are cylindrical, made by wrapping a rectangle of lead around a cord. They may have been used for weighting fishing lines, but, more probably, like the rather similar but larger weights used today, they were for weighing down the underside of net openings. The fishhooks have only slight barbs. The top of the shank was usually widened for the attachment of the line, but it seems most unlikely that they were perforated. Note that cord would not survive in this soil, so that any pieces of netting or line originally in these strata would have perished.

W2/E4

a Cylindrical lead weight, 43 x 10 mm (From E4=s.f.5)
b Small fishhook, tip missing, plain shank 18 x 11 mm (lower W2).
c Fishhook, probably barbless, nicked just below top of the shank, 65 x 21 mm (W2).
d Fishhook, barbed, knobbed shank, 52 x 22 mm (W2).
e Fishhook, barbed, top of shank flattened into a disc, facing the barb, 30 x 14 mm (W2).
f Fishhook, slightly barbed, slight widening at top of shank, 53 x 20 mm (W2).

E3

g Cylindrical lead weight 30 x 11 mm.
h Cylindrical lead weight 24 x 8 mm.
i Very corroded fishhook, length 50 mm.

Also from W2 came an irregular square of lead, 22/24 x 24/26 x 2 mm, which may have well been cut to make one of these lead weights.

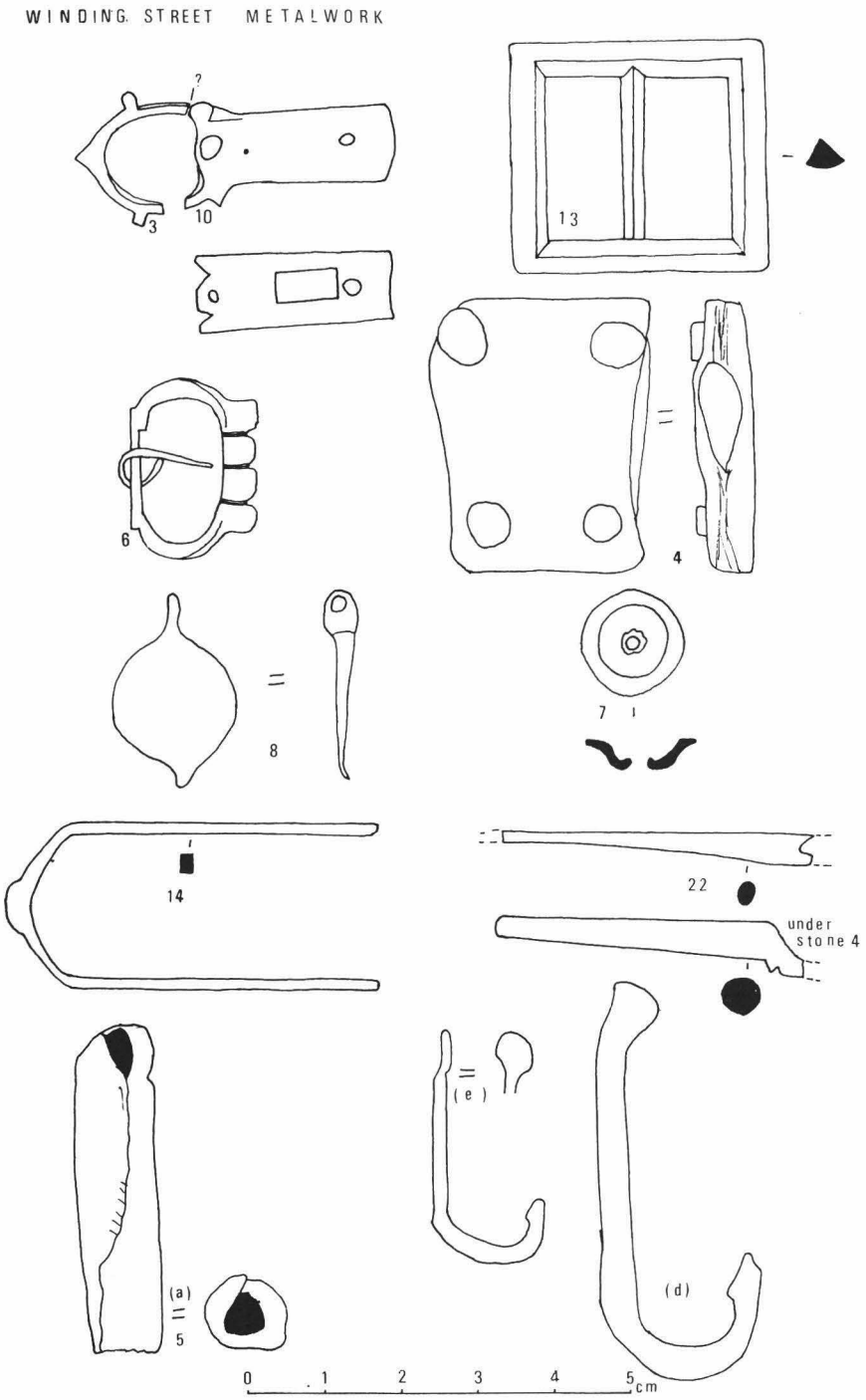


Fig. 3. Winding Street 1974; metalwork

Iron (In medieval levels)

Apart from the fishhooks already described, the only certainly recognisable pieces of iron were nails. Typically these nails were about 60 mm long, with a disc-shaped head about 20 mm across—quite large by modern ideas.

W2-E4 27 nails and three other pieces of iron.

These included a massive nail with a head 30 mm across, a shank 15 mm across and a (present) length of 90 mm.

Pit D 8 nails and one other piece.

E3 9 nails and two other pieces.

E2 2 nails

This total of 46 nails seems very high for a medieval site. However the relative abundance of iron in the Hastings area would probably make people less careful in salvaging nails for re-use or re-smelting.

POTTERY (MEDIEVAL LEVELS)

A great deal of pottery was found, but mainly in the form of small sherds. The majority must be local to East Sussex and probably to Hastings itself. By the later Middle Ages Hastings had ceased to be a major port, so that one would hardly expect much imported pottery: nevertheless some of the finer pieces are probably of continental origin.

W2/E4

This yielded 983 sherds, of which at least 249 came from glazed vessels. The average size of these sherds was only about 5 sq. cm, and the largest 60 sq. cm. To judge from the glazed sherds, in few cases could different sherds be ascribed to the same vessel. Most of the glazed sherds were consistent with balluster jugs, although only three strap handles were found. Most glazed sherds were of sandy ware with green glaze. The only glazed sherds to show further decoration were: three dark green sherds with fishscale ornament (two probably from the same vessel), a yellow and a green sherd, each with a raised "raspberry" or "asterisk" (not the same vessel), a reddish sherd with two white stripes painted on it, two green sherds with incised wavy lines (not the same vessel), a yellow sherd with square rouletting, a rim sherd with deep green glaze, and a slashed carination (also another sherd probably from the same vessel), a light green sherd with a raised band in dark green and a green strap handle with stabbing. The unglazed ones appear to have been mainly flat-rimmed cooking and storage pots: there is a stabbed pipkin handle, but no feet. Apart from this there are no decorated sherds except some with raised "pie-crust" bands.

Pit D

These sherds can be divided into two groups—firstly a few, mostly large sherds lying in silt directly on the bottom of the pit and almost certainly newly broken when deposited and secondly the mass of the potsherds which resemble those from W2/E4 and are probably derived therefrom.

On the bottom of Pit D

s.f. 16 Part of a strap handle in hard purplish ware with grey-green glaze.

s.f. 17 Flat base (diam. 18 cm)—probably of a jug—in pink ware with splashes of green glaze.

s.f. 18 Rim of flat-rimmed cooking pot (diam. 24 cm) in very rough unglazed grey ware.

Fig. 4. Winding Street 1974; pottery

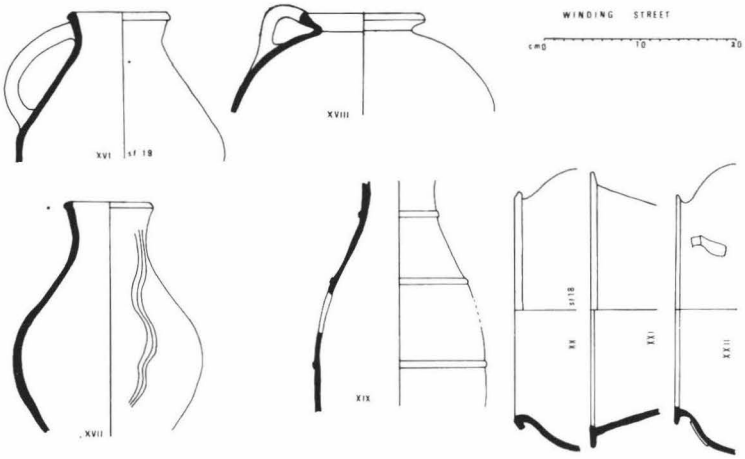


Fig. 5. Winding Street 1974; pottery

s.f. 19 Complete strap handle with part of rim and side of a jug in pinkish ware with very poor brownish glaze (diam. of rim 10 cm, of belly 16 cm).

s.f. 20 (a) Rim of a flat-rimmed cooking pot (diam. 23 cm) not the same as s.f. 18.
(b) Small green glazed fragment.

In Filling of Pit D

The rest of the sherds numbered 417, of which at least 158 were from glazed vessels. Although there were very few glazed sherds with further decoration, one should note that four of these were almost certainly from the same four vessels already described under W2/E4, viz.: a fishscale sherd, a yellow sherd with a raised "raspberry" or "asterisk," a deep green glazed sherd with slashing and a light green sherd with a raised band in dark green. For a sherd with a raised cordon, see below.

Most outstanding was a sherd of white ware glazed red with applied encrusted ornament in yellow. A very thick sherd with green glaze may be part of a roof tile or loover. The unglazed wares were much as in W2/E4 except a very crude strap handle in rough gritty ware.

E3

In E3 proper, to the east of the wall only 25 sherds were found. All of these, however, can be ascribed to one of two vessels. One was a pot bellied jug in pink ware with a rough brown glaze and decorated with vertical wavy grooves (diam. rim *c*.8 cm, belly 21 cm). The second was a vessel of grey ware, with a yellow interior and pink exterior surface, partially glazed yellowish green. It would appear to have been a jug (20 cm in diam.) decorated with (probably three) horizontal raised cordons. A sherd probably from this vessel was found in the upper fill of Pit D. These two vessels must have been freshly broken at the time E3 was laid down—it is quite likely that the remainder of these pots lay in the parts of E3 beyond the excavations.

Along the western edge, under the wall, were found 70 sherds (of which 16 were glazed). Most of these were very small and were probably derived from W2/E4.

E2d

This layer produced 59 sherds. Of these 36 are unglazed and not noticeably distinctive. Of the glazed sherds two belong to the two jugs found in E3 and were probably misplaced from there. Ten are fragments bearing a light green glossy, but thin, glaze: the only distinctive piece being a handle of oval section. The remaining piece is the handle, with part of the side and rim, of a Dutch pipkin in white ware with a pink slip, partially glazed reddish brown (diam. 12 cm).

E2 (rest)

The rest of E2 produced 65 sherds (14 glazed) but all were small, the total volume being much less than in E2d. The only distinctive pieces were three abraided fragments of straphandles (one glazed) and a piece of burnt rim sherd (diam. 8.0 cm): this last was the only piece from the topmost quarter of E2.

Pit V

Two small fragments of cooking pot and one green glazed sherd near the top of the fill.

The objects found are now in Hastings Museum.

Winding Street Illustrated Pottery

I Grey ware with green glaze (E4)—13-14th century. Probably local.
II Pink ware with yellow glaze (W2).
III Pink ware with dark green glaze (E4).
IV Pink ware with two white painted stripes, very poor glaze (W2).
V Pink ware with spots of green glaze. Crudely grooved (W2).
VI Grey ware with light green glaze, rough cordons in dark green (E4).
VII Pinkish-white ware with brilliant green mottled glaze (W2).
VIII Perhaps from same vessel as above (W2).
IX White ware, exterior with very hard yellow 'crackled' glaze, the interior with thumb-prints of red paint (?) (E4)—14th-15th century from Northern France.
X Unglazed ware, burnt black (top of E2).
XI White ware with encrusted ornament, the background glazed red, the ornament bright yellow (pit D)—13th century, imitation of Rouen ware.
XII (s.f. 16) Purplish ware with partial green glaze (Pit D).
XIII White ware with some bright green glaze (Pit D)—14th-15th century from Saintonges.
XIV Grey and pink ware with some light green glaze (E2).
XV Extremely rough brown ware (Pit D).
XVI (s.f. 19) Pink ware with very poor brown glaze in places (Pit D).
XVII Pink ware with some greenish-brown glaze (E3).
XVIII White ware with a pink wash and spots of brown glaze (E2d)—15th century Dutch.
XIX Grey ware with yellow interior and pink exterior surfaces, partly glazed light green (E3) —15th century, local.
XX (s.f. 18, Pit D).
XXI (E4)
XXII (W2).
} Typical examples of the cooking pots found.

I am grateful to Mr. John Hurst, of the Department of the Environment, for his comments on the above.

[1] Baines, J. M., *Historic Hastings*, F. J. Parsons, (1955), pp. 186-7.
[2] Baines, J. M., *op. cit.*, p. 75.
[3] Holden, E. W., "Excavations at the Deserted Medieval Village of Hangleton," Pt. 1, *Sussex Archaeological Collections*, vol. 101 (1963), pp. 54-181, fig. 36/3.
[4] *London Museum Medieval Catalogue* (1940), p. 118.
[5] Hurst, J. G., "The Kitchen Area of Northolt Manor, Middlesex," *Medieval Archaeology*, Vol. 5 (1961), pp. 211-299. Fig. 76/25, p. 291 and note 192.

EXCAVATIONS IN TANYARD LANE, STEYNING, 1977

by *D. J. Freke, M.A.*

In February and March 1977, an area west of Steyning parish church was excavated prior to redevelopment. Previous excavations in 1962-3[1] *and 1967-8*[2] *to the south and south-west of the church produced evidence for late Saxon and medieval occupation, and it was suggested that the late Saxon town was centred on the church*[3]*. The 1977 excavations revealed no structures of the late Saxon or medieval periods, but there was evidence of occupation and industrial activity in the vicinity.*

INTRODUCTION

The site was notified to the Sussex Archaeological Field Unit by Fred Aldsworth, Archaeological Officer of the West Sussex County Council. Permission to excavate was negotiated through Churchman Burt and Son, and thanks are particularly due to Mr. N. Hamilton for his help and co-operation. The excavation took place perforce at an uncomfortable time of year, and I am indebted to my principal assistants: Martin Howe, B.A., Ian Blair (on whose work Fig. 4 is based) and Jill Craddock, B.A., who organised the Finds Shed, as well as to Frances Griffith, Guy Lester, John Thompson, Mike Welsh, Lawrence Buckley and Howard Hill (on whose survey work Fig. 2 is based). Valuable help was also given by local volunteers. I am indebted to Jill Turner, who found us all essential accommodation, and to Mrs. McNiel who gave us access to the site across her land, and who allowed us to investigate and survey the earthworks in her garden. Tim Hudson, M.A., of the West Sussex Record Office, kindly allowed me to read the typescript of his entry on Steyning for the Victoria County History of Sussex before its publication. I would like to thank T. P. O'Connor, B.Sc., P. Hinton, D. Butler, B.Sc., and C. Cartwright, M.A., for their specialist reports. Finally, I would like to thank P. L. Drewett for his comments on the draft of this report, and C. Page who patiently typed it.

HISTORICAL BACKGROUND[4] (Fig. 3)

A port has existed on the River Adur since the Saxon period, and prior to 1066 this appears to have been St. Cuthman's port at Steyning. The harbour may have been on what is now a creek north of St. Andrew's church,[5] the river having changed its course since the medieval period. By 1086, silting of the tidal marshes had stimulated the growth of the port of Old Shoreham nearer the river mouth, and continued deposition led to the founding of New Shoreham in about 1100. Nonetheless, in a document of 1103 there is a complaint that ships were being impeded by a bridge at Bramber,[6] implying that up to that date at least, Steyning was still accessible to shipping. A Saxon mint was established at Steyning in 1018 when the Cissbury mint ceased, suggesting that Steyning was fully urban by the eleventh century. It may have had urban status before this date, despite not being included in the tenth century Burghal Hidage.[7] The Domesday Book records that the town contained 118 houses in 1066 and 123 houses in 1086. The present High Street extends

across a promontory formed between two tributaries of the Adur, with Church Street extending northwards to the late Norman church. It has been suggested that the High Street is an area of secondary medieval growth, caused by a re-alignment of roads focussed on Bramber bridge and the abandonment of the harbour (note 3). Certainly the surviving timber-framed buildings are concentrated along the High Street with a few along Church Street.[8] It was this suggestion that the excavation was designed to investigate in an area only 125 m from the west end of the church.

THE EXCAVATION

The site is on a gentle north-facing slope at the foot of the scarp of the Downs (Fig. 1). The geology is Lower Chalk, and the lowest bed of the series, a green glauconitic sandy marl, outcrops in the north-west corner of the trench, overlain to the south by a grey marl.[9] The site is bounded on the west and north by sunken ways, on the east by a surviving medieval house, and on the south by a sixteenth-century house.[10] Before excavation, the area was occupied by an orchard, and the slope was visibly terraced (Fig. 2). These terraces or platforms with their proximity to the sunken way, medieval house and church, suggested that they might be house platforms and so the opportunity was taken to check their origin.

A machine trench 1m wide was cut down the length of the site from south to north to see if any evidence of walls survived. When this failed to reveal anything structural, the largest accessible 'platform' was stripped by machine down to medieval layers, and then excavated by hand. Inclement weather in February made work so slow that the eastern portion of the 'platform' was not excavated below the machine scrape, and some of the features in the western portion were half sectioned. Nonetheless, the nature of the site was clearly revealed.

The area had been an orchard, and before that, in the nineteenth century, a cattle market.[11] Documentary and archaeological evidence suggests that from the fifteenth century to the nineteenth the site had been a croft.[12] It is to this period that the terraces belong. They are probably horticultural rather than agricultural. In the late medieval period, a number of pits were dug in the area of our trench (Figs. 4 and 5, nos. 27, 89, 111, 113, 132, 133, 145, 148 and 157). These are assigned to the late medieval period on the basis of the pottery. Most of these pits are near the southern end of our trench and are presumably the rubbish pits of a dwelling to the south of the excavated area and the machine cut slot. There were many more earlier medieval features (Figs. 4 and 5, nos. 6, 7, 15, 16, 17, 18, 19, 36, 37, 38, 45, 48, 49, 54, 55, 57, 59, 66, 86, 95, 96, 105, 108, 110, 124, 164, 167, 168, 174, 177). There are also two boundary ditches at the north end of the site (features 16 and 19), one of which had been recut (feature 88). Again, the dating of these features depends solely on the pottery, except in the case of number 96, which produced a spur (Fig. 5, no. 15) dated to before the middle of the twelfth century (report below).

The features 37, 38, 45, 48, 167, 174 and 177 cut through an area of very rough flints, which could hardly be called cobbling, but which was perhaps merely hardcore (feature 40). This produced fragments of bun-shaped loomweights and a pair of iron shears (Fig. 6, no. 14), whose style has a date range from the eleventh to the thirteenth century (report below). Feature 40 contained a higher proportion of pottery with coarse fabric than did feature 96 and the others listed above (Table 1) and is tentatively dated to the eleventh or early twelfth century. The boundary ditch (feature 16) cuts feature 44, which contained a good example of Saxo-Norman pottery (Fig. 5, no. 8), and very few sherds of finer fabric. The other possible Saxo-Norman feature is number 28 (Table 1).

STEYNING TANYARD LANE 1977

a

Location plans

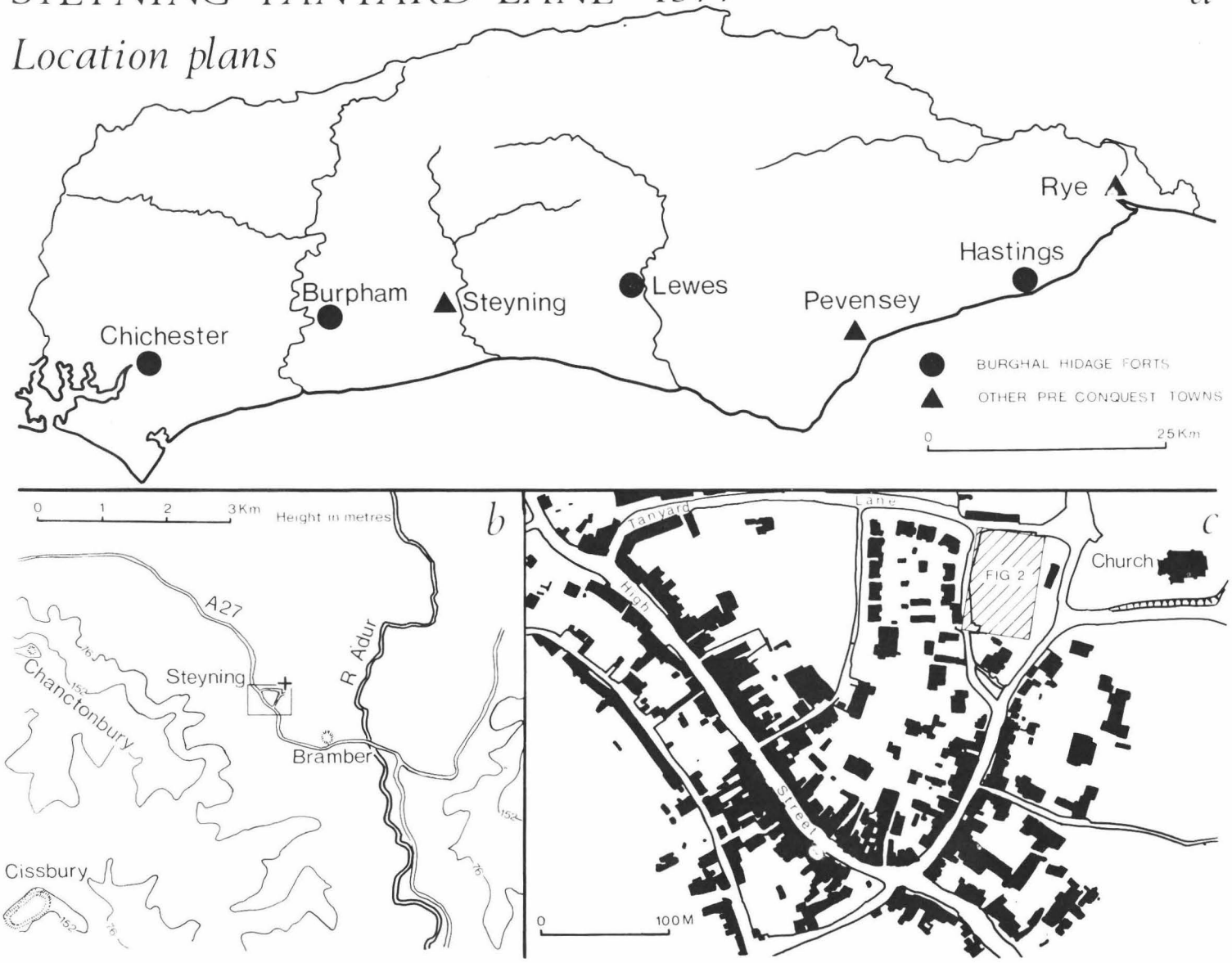


Fig. 1. Steyning, Tanyard Lane, 1977. Location Plan.

Fig. 2. Steyning, Tanyard Lane, 1977. Location of trench and earthworks.

Features 10, 123, 126 and 162 produced very coarse pottery with virtually no sherds of finer fabrics present. These are possibly middle to late Saxon pits, although the pottery samples are small and may reflect the specialised industrial nature of the fill of these features. They all contained quantities of iron slag derived from forging (report below by David Butler).

Earlier periods were represented by a few residual sherds of Romano-British pottery and a fragment of Roman roof tile (in feature 28) and a scatter of flintwork (ten flakes and two scrapers). There was no evidence for occupation in the vicinity before the middle to late Saxon period, but the area seems to have been on the edge of continuous occupation until the late medieval period. Chantry Green House, to the south, was built in 1525,[13] although there may have been an earlier abandonment of our site by 1469 as noted above.

CONCLUSION

The excavation shows that there was occupation in the vicinity of our trench from at least late Saxon times to the late medieval period. It is difficult to establish the exact proximity of the medieval dwellings, whose inhabitants originally dug the features in our trench. The lack of wells or cess pits suggests that medieval houses may not have been any nearer than the surviving medieval cottages 50m to the east, and Chantry Green House 60m to the south. This situation contrasts with the late medieval structures found in 1962-3 just south of the church and with the reported density of occupation debris found 150m south of the church in 1967-8. It appears that the present site has always been on the outskirts of Steyning. Whether the town really moved from a primary settlement centred on the church to the present High Street remains a difficult problem. The evidence from the two previous excavations, on purely archaeological grounds, seems to indicate the reverse, with earlier material, including a coin of Edgar (A.D. 959-975), found further away from the church than the later medieval house platforms just outside the churchyard. On topographical grounds, however, it remains a probability, and the evidence from the 1977 site does suggest a progressive abandonment in the later medieval period. It may be that earlier occupation was denser to the east of Church Street, but without more evidence from there and elsewhere in the town, these conclusions can only be tentative.

The economy of late Saxon and medieval Steyning is hinted at in the iron slag, loomweights, bones, environmental evidence and pottery.

The iron slag was found in quantities only in the middle to late Saxon contexts, and this shows that iron forges were working in the neighbourhood at that time. Late Saxon iron working on the outskirts of settlements can be paralleled in Lewes and Burpham where iron slag has also been found in 'early' contexts.[14] This may show early 'zoning' of dirty occupations in towns, although excavated evidence from town centres in Sussex (except in Chichester) is still lacking. It may also indicate that after the early medieval period, forging was carried out at or near the sites making the iron in the Weald, and the iron trade into towns was in the more economically transported form of wrought iron rather than in blooms. More work needs to be done to test this suggestion, and it may be that in the unexcavated areas of Steyning, Lewes and other Sussex towns there lies buried the evidence for later medieval urban iron working.

The loomweights are more difficult to categorise as evidence of an 'industry' beyond the domestic sphere, and there is no archaeological evidence to show that weaving was particularly highly organised or zoned in Sussex towns. The only Saxon specialised weaving hut found in Sussex was in a village, Old Erringham.[15]

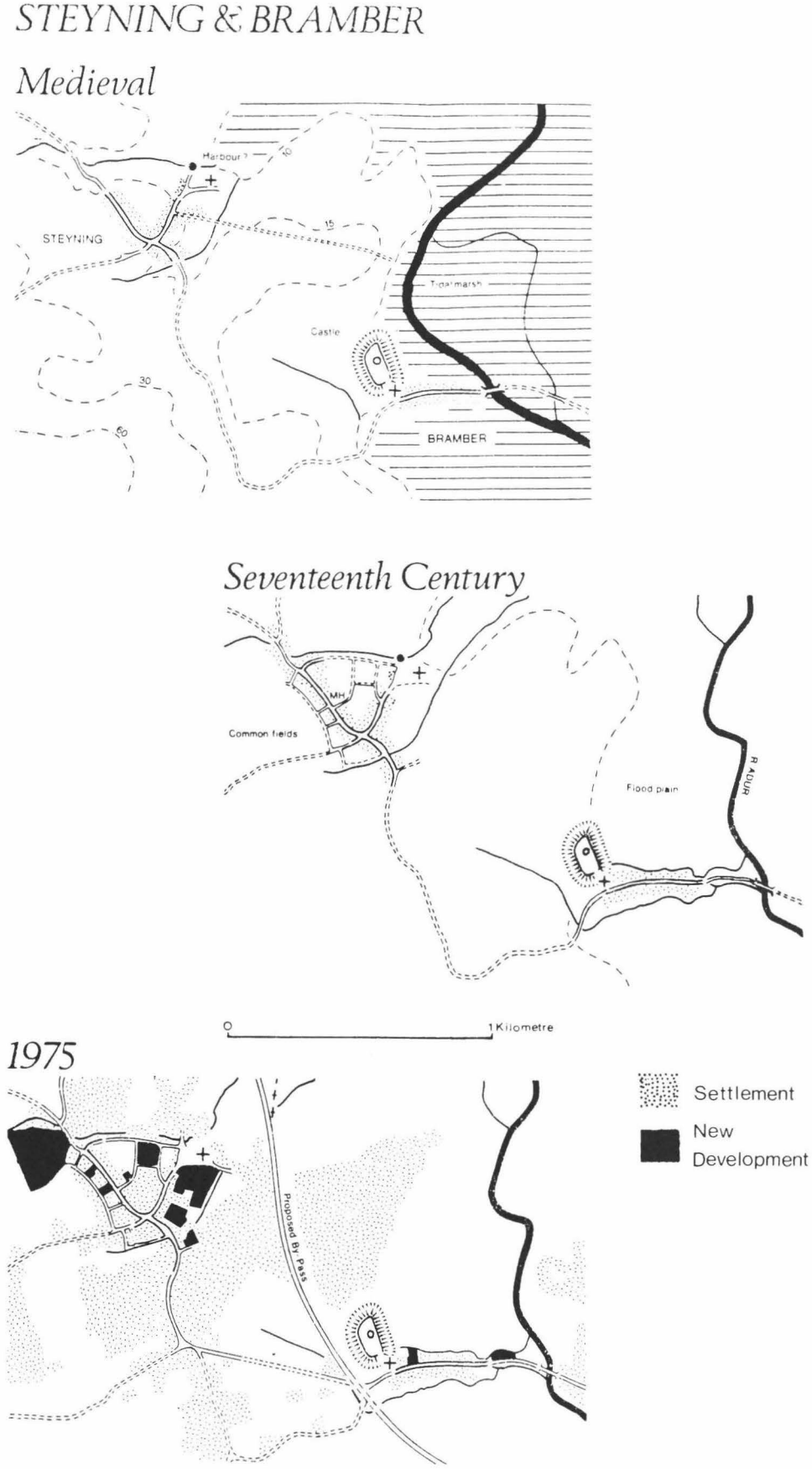


Fig. 3. Steyning, Tanyard Lane, 1977. The historic development of Steyning (taken from F. Aldsworth and D. Freke, *Historic Towns in Sussex* (1976) 58).

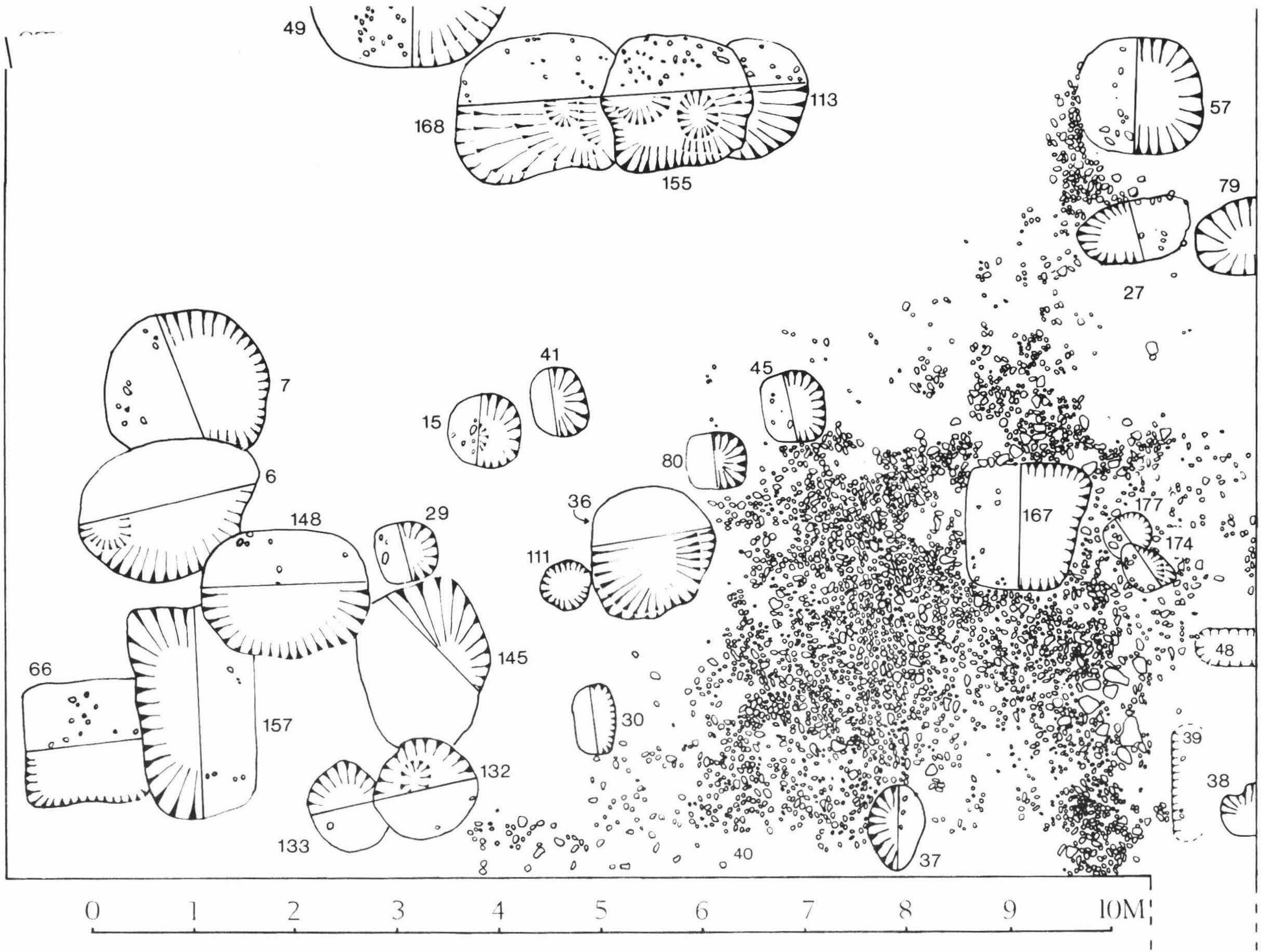

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Figure 6. The pottery

1. Cooking pot, dense medium flint filler with some larger inclusions, dark grey surfaces and core. Calcium carbonate deposits inside and soot outside. Layer 77 in feature 28.
2. Rim, fine flint filler with some larger inclusions and a little shell. Buff surfaces, pale grey core. Layer 77 in feature 28.
3. Rim, dense medium to coarse flint filler (1-3mm), buff surfaces, grey core. Feature 95.
4. Rim, medium flint filler, grey internal surface, buff external surface, grey core. Feature 48.
5. Rim, dense medium flint filler, dark grey surfaces and core. Layer 72, part of 40.
6. Rim, medium flint filler with voids caused by burnt out chalk filler, patchy buff and grey. Hand made or slow wheel. Feature 59.
7. Rim, medium flint filler with some larger flint inclusions (2-3mm), patchy buff and grey on surface, grey core. Feature 59.
8. Rim, medium flint filler with a few larger inclusions (2mm), pale grey surfaces and core. Layer 104 in feature 44.
9. Rim, coarse flint filler (3mm), patchy buff and grey. Hand made. Layer 118, part of 40.
10. Rim, fine flint filler with some shell, orange-buff surfaces, grey core, incised decoration. Layer 122 in feature 113.
11. Rim, coarse flint filler (2-4mm), grey surfaces and core. Layer 161 in feature 96.
12. Rim, coarse flint filler, grey surfaces and core. Feature 54.

Domestic Finds

The whetstone fragments are all sandstone.

The quern fragments are all sandstone except one from feature 40: Fig 6, no. 13. Quern of coarse grits, typically 2-3mm, but up to 6mm across.

The lava quern fragments are Mayen or Niedermendig lava. None is large enough to show the cross section or shape of the original stone.

The loomweight fragments from features 40 and 174, are the later bun-shaped type, with a radius of 5-7cm where identification was possible, and a hole of radius 1-1.5cm. The loomweights could perhaps be considered in the 'industrial' category, given the evidence at Old Erringham for the provision of specialised structures for this activity, but failing such clear cut evidence here, it is listed as domestic.

Bones should also come into the domestic category.

Industrial Finds

Despite the iron slag being listed as a total number of fragments per feature and not weighed, the large groups are clearly indicated. Three features (nos. 10, 123 and 126) contained slags which are derived, in part at least, from iron forging (report below). Another feature, no. 22, contained much burnt stone, and charcoal from different species to that found in the features containing slag. All features (except 22, which contained no datable artifacts) produced pottery fabric groups heavily weighted towards the coarse types, and it is possible that these features are evidence for late Saxon iron working in the vicinity of our trench. This evidence is matched in Lewes, where slag and an oven were found on the edge of the town.[21]

Burnt stones include flint and sandstones. There is no way of determining what sort of fire, domestic or industrial, caused the burning. The stones do not seem necessarily to be associated with iron slag, and their ubiquity may indicate a domestic source, except that they do not seem necessarily to be associated with large pottery groups either.

'Daub' can be furnace or stove lining as well as the debris from burnt wattle and daub structures. Barton has drawn attention to recent examples of houses of wattle and daub which, when burnt down, did not produce such a well-fired clay as daub.[22] He suggests that it is more likey to be derived from furnaces or ovens. However, Coles cites several instances where 'daub' *was* produced by burning houses,[23] so fired clay, even with wattle impressions, cannot be used as indisputable evidence for either ovens or buildings exclusively, but could be from either. In some cases on our site it does seem to accompany iron slag (features 49, 96, 126) but elsewhere there is slag with little or no fired clay or fired clay with no slag.

Miscellaneous Finds

Building materials include brick, roof tile, floor tile, slate, roof furniture, mortar and dressed stone. Details are archived with the finds.

Small Finds (Fig. 6)

14. Iron shears. Type 1B in the medieval catalogue of the London Museum.[24] The loop at the junction of the two arms is a feature which first appears in the tenth century in Scandinavia, but is generally later. The simple form of the shoulder of the blades is dated from the eleventh to the thirteenth centuries. A similar pair of shears is illustrated from Chichester.[25] Layer 118, part of 40.
15. Iron spur? The point and terminals are both too damaged and corroded to be identified. The straightness of the arms when viewed from the side indicates a date before the middle of the twelfth century.[26] Layer 120, feature 96.
16. Iron single buckle. Found with fourteenth century red painted pottery from Beauvais in feature 110.
17. Bone handle. Truncated cone of long bone, roughly carved at its widest into eleven facets. The socket is strongly tapered. Layer 152 in feature 66.

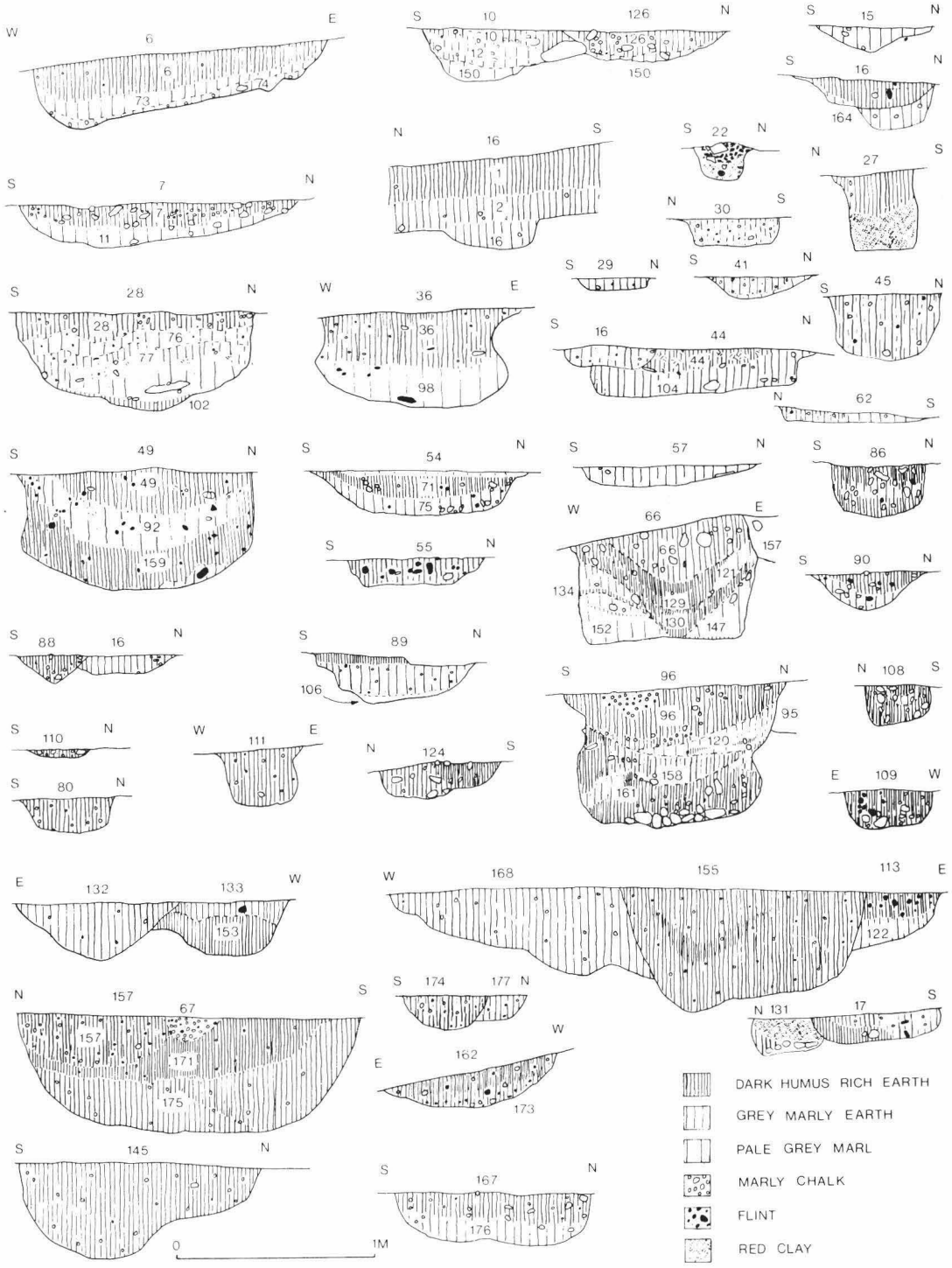

Fig. 5. Steyning, Tanyard Lane, 1977. Pit and post-hole sections.

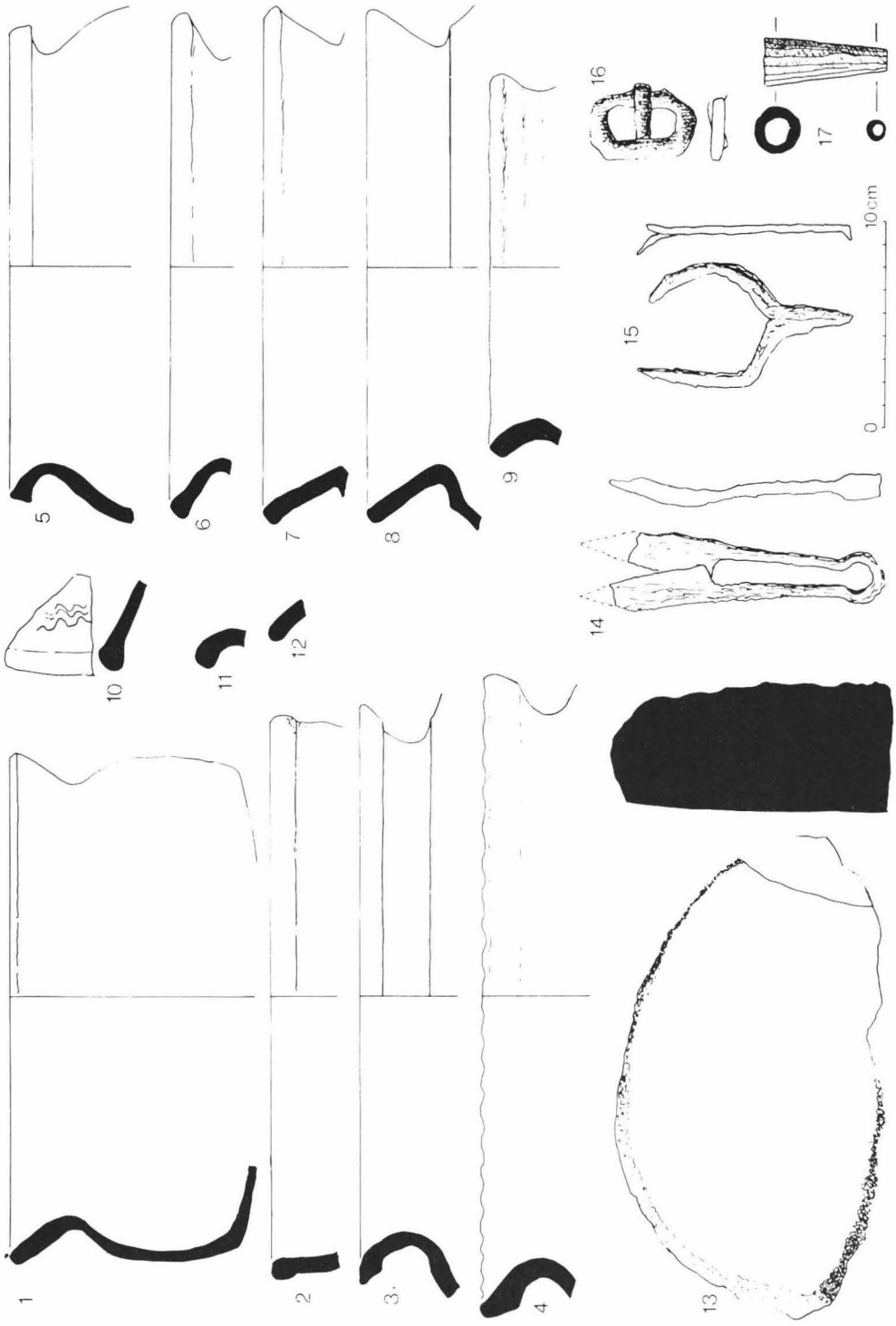

Fig. 6. Steyning, Tanyard Lane, 1977. Finds (¼).

The Examination of the Microstructure of the Iron Slags (D. Butler, B.Sc., Eng. (Met.), M.I.M.)

All the samples examined are iron making slags and seem to be the products of forging rather than smelting operations. The specimen references and sample references are given in Table 2.

Feature 10. Very rough surface with some rust patches. Fracture surface blue black and porous with rust coloured areas.

H58. The friable nature of the specimen made its surface preparation difficult. The photomicrographs show a jumbled mixture of constituents, which is more consistent with slag from a forge than from a bloomery furnace.

H60 (Plate 1). Visual description as H58 above.
A large number of disconnected iron particles are visible in a matrix of slag which has a jumbled structure similar to H58. It is possible that the sample is from the periphery of the bloom and has been subjected to re-heating (partial fusion of the slag?) in a forge hearth.

Feature 126. This group contained samples of ore and slagged clay. The slag itself had a rough blue black surface, sometimes nodular. The fracture surface is blue black and porous, often containing the skeletal slag outline of charcoal and areas of rust.

Table 2

Specimen Ref. No.:	*Sample Ref. No.:*	*Feature No.:*	*Remarks:*
H58	STL 77 (10) (A)	10	Non magnetic
H60	STL 77 (10) (A)	10	Magnetic
H59	STL 77 LF (126) 25.3.77	126	Strongly magnetic—metal core?
H61	STL 77 LF (126) 25.3.77	126	Strongly magnetic—metal core?
H62	STL 77 LF (126) 25.3.77	126	Magnetic—no response to metal detector
H69	STL 77 LF (126) 25.3.77	126	Non magnetic
H63	STL 77 25.3.77 (128)	128	Non magnetic
H64	STL 77 118	40	Non magnetic
H65	STL 77 118	40	Non magnetic

H59. Shows a solid iron core, containing some slag inclusions, which is surrounded by slag of a similar structure to H60. The iron core, when etched with 2% nital, shows a structure of what appears to be granular pearlite, the product of very slow cooling or prolonged heating at *c.*700°C.

H61 (Plate 2). Has a solid iron core, larger than H59, the iron being surrounded by slag similar to H59.
Etching with 2% nital shows most of the core to consist of varying size grains of almost pure iron. Part of the periphery has a higher carbon content and shows ferrite with a Widmanstälten structure and what appears to be granular pearlite. This structure is consistent with the specimen being slowly cooled and not worked.

H62. Shows a jumbled structure of slag constituents difficult to identify. Magnetic response may be caused by presence of magnetite or spinel.

H69. Specimen porous and friable and difficult to prepare a surface suitable for microscopic examination.
Appears to be a jumble of constituents not readily identified by simple examination. It is not normal tap slag and could therefore be a product of forging operations.

Feature 128. Rough nodular surface, blue black colour with some rust patches. Fracture surface is blue black with small and large gas voids and skeletal slag outline of charcoal. Rust patches within sample.

H63. Specimen porous and friable. Shows dendrite wüstite in matrix of fayalite and glass. Could be slag from forging or smelting.

Features	Pottery							Domestic				Industrial				Misc.	
	ROMAN	COARSE	MEDIUM	FINE	SANDY	NO FILLER	IMPORTS	WHETSTONE	QUERN	QUERN LAVA	LOOM WEIGHT	IRON SLAG	BURNT STONE	DAUB OR STOVE LINING	CHARCOAL	BUILDING MATERIAL	SMALL FINDS
6		1	4	66	11							1				8	
7		1	5	64	16							10	1			5	
10		9	2	3								183	2	1	●		
15				5	2												
16		2		98	9							2					
17		1		3	2							2				1	BONE HANDLE
18				2													
19				13												2	
22												2	64	1	●		
27		1		9	9							1					
28	2	4	43	10	2				2	3			1	6		2	
30					1											1	
33				3													
36		10	31	113	2							4		1		2	
37				1												1	
38				3	1							2	1				
40		5	3	10	5			1	1		5		19	5		4	SHEARS
44		1	18	6	1								1	3			
45			1	25	8							4	1	4		2	
49		5	5	343	183							13		10			
54		4		11	3							7	4			2	
55				14	4									2			
57				2	1											1	
59			6	32	7		1							7			
66		4	7	41	23					2	1	4		1			
86				8										1			
89				3	6									1			
95			1	39	21								5	2		3	
96		7	6	106	30							10		9		4	SPUR
103				2									1				
105				3	1								1				
108				5	1												
109			5											3			
110			2	2			1							1			BUCKLE
111					8											1	
113		1	4	127	110							2	1	3			
123		12			6							55	2		●		
124				13	5												
126		3		3	1							140	5	5	●		
128					2							7					
131			1									2					
132		2		4	10							3					
133					3								1				
145			1	9	7											1	
148	1		2	48	72						1		3	1			
155		1		33	20	1						1		5		1	
157			8	46	59								4			14	
162		2			1							7	2				
164			1	30	3							3					
167				23								2		3			
168				30	13	2											
174				3							1			3			
177				5								2					

Table 1
Steyning, Tanyard Lane, 1977. Finds summary.

Feature 40. Freshly fractured surface shows blue-black slag, part dense, part very porous. Rust coloured areas within the slag, also some skeletal slag outline of charcoal.

H64. Structure shows dendritic wüstite in a matrix of fayalite. Also present are dark areas of what may be leucite. Could be product of forge or bloomery. Forge favoured in view of lack of structural detail of matrix.

H65. Another specimen of same sample as H64. Shows large amount of dendritic wüstite in matrix of fayalite in groundmass of glass. Irregular patches of wüstite and quantity of latter suggest specimen is product of forge operations (take up of iron oxide by slag in forge hearth). There is also a dark area of what appears to be leucite containing dendritic wüstite.

Animal Bone Remains (T. P. O'Connor, B.Sc.)

The animal bone remains recovered from Tanyard Lane were generally in a fairly good state of preservation, but fragmentary and rather weathered. Much of the bone had the appearance of secondarily deposited material, although some of that from pits was clearly in a primary context. The material comprised a large number of small samples, and accordingly estimates of minimum numbers are of low significance.

The range of species represented is fairly typical of the food animals which would have figured in the diet of a medieval population. *Bos* and *Ovis* predominate with *Ovis* slightly the more widespread of the two. Two points must be considered, however. A single *Bos* produces many times as much meat as a single *Ovis*, and *Ovis* was not kept primarily as a meat animal before about 1700. In medieval England, the sheep was a producer of wool, milk and manure in that order. Of interest is the frequent occurrence of *Gallus*, notably in Pit 66. The bones suggest this *Gallus* to have been a little smaller than the modern domestic fowl. The remains of *Canis* and *Felis* probably represent household pets or familiars. That some hunting went on is shown by the presence, albeit scarce, of *Cervus, Dama* and *Capreolus*. The occurrence of *Cygnus* sp. in 157 suggests the possibility that this bird was a luxury supplement to the food supply. The solitary *Capra* in 54 highlights the dominance of *Ovis* in the medieval period.

Butchery Indications

There were only a few obvious traces of butchery. Feature 157 yielded the proximal part of a *Bos* tibia bearing the marks of an oblique downward blow from a sharp, straight-edged instrument such as might have been delivered in the process of chopping muscle away from the bone. Fragments of *Bos* tibia from Feature 124 showed similar marks.

Part of an *Ovis* skull from Feature 16 showed evidence of having been cloven longitudinally and the horn core having been chopped. The cleaving would suggest that the brain was being eaten, or possibly even the whole head. Quite why the horn-core should have been struck off is hard to say.

The broken distal end of a *Capra* femur from Feature 54 had the appearance of having been chopped, or cut rather than snapped.

From layer 104 in Feature 44 came a *Bos* cervical vertebra which had been cloven longitudinally. This probably reflects the complete longitudinal cleaving of the whole carcass, for ease of handling. An immature *Bos* atlas from Feature 59 had been chopped transversely in a manner which strongly suggests a beheading blow from above and behind the skull.

For *Bos, Ovis* and *Sus*, a note was made of the occurrence of bones from either meat-yielding components of the carcass, or waste components. A figure was calculated, being the percentage of all occurrences of that species in which meat/waste components were present. These figures are summarised in Table 3.

Table 3. Relative abundance of meat-yielding and waste components.

		Bos	*Ovis*	*Sus*
Pits:	Meat:	76%	84.5%	65%
	Waste:	72.5%	74.5%	70%
Postholes:	Meat:	73.5%	84.5%	75%
	Waste:	66.7%	54%	75%
Other contexts:	Meat:	80%	81.5%	50%
	Waste:	80%	65.5%	62.5%

The high proportion of waste components of all species makes it very probable that all three species were being slaughtered and butchered in Steyning rather than the dressed carcasses being brought in from elsewhere.

The Environmental Samples (M. P. Hinton)

I wish to thank Richard Hubbard for his generous help and criticism in the preparation of this report. Any errors are, of course, the responsibility of the writer.

Samples of soil were taken from cleaned surfaces in Features 10, 27, 44, 49 and 88. The seeds were extracted by a combination of wet-sieving (through meshes of 2mm, 1mm and 0.25mm) and water flotation, using 100 vol. hydrogen peroxide to break up lumps.

The seeds fall into three classes. In the first are the carbonised seeds (bracketed in Table 4), and these are presumed to be ancient. The non-carbonised seeds appear in varying stages of degradation, from unmistakably modern (discarded) to a state resembling fossilisation. These last have lost their outer seed coats and have become hard and translucent. These "fossilised" seeds (marked by an asterisk in Table 4) occurred in the layers containing a peculiar brown concentration, and a few were actually incorporated in it. In the third class are the remaining, sub-fossil seeds.

The condition of the majority of the carbonised seeds is poor. Among them grains of wheat and barley have been identified but there are a number of cereal fragments which cannot be ascribed to any genus. The only wheat species identified is *Triticum aestivum* (bread wheat). This is the typical species of the medieval period, by which time it had replaced the formerly predominant *Triticum dicoccum* (emmer).[27] The barley also is poorly preserved and distorted. That hulled barley is present is indicated by the angular outline of some grains, caused by the veins of the tightly enclosing palea and lemma. There is no evidence of naked barley, which declined in England after the Bronze Age.[28]

Food plants are also represented by the Celtic bean and the hazel nut fragments. Celtic beans have been cultivated in England since the Iron Age[29] and hazel nuts have been frequently found in sites of the Mesolithic period and later.

Among the other carbonised seeds, corn cockle, mayweed and vetch are inedible weeds of arable land.

There seems little reason to doubt the antiquity of the fossilised seeds, but the age of the sub-fossil seeds is uncertain. Two species in particular raise doubts. Firstly, the most frequently found species among the sub-fossil seeds is elder, and it must be noted that several specimens of this plant are growing at the margins of the excavated area. Secondly, the greatest number of seeds of any one species occurring in a sample was seventeen apple pips in layer 130, Feature 66, and the site is known to have been used as an orchard, probably from the nineteenth century.

The problem of contamination by recent seeds has been discussed by Keepax[30] who concluded that some intrusion is unavoidable, despite care in sample collection and processing. This may be caused by down-washing through cracks and root-holes, but chiefly by earth worm action. In the light of Keepax's conclusions the elder seeds should be regarded as contaminants. However, the fact that the apple seeds, which certainly appear ancient, have come from only one sample may suggest that they are not of recent origin. It seems unlikely that seeds could survive in non-waterlogged soil for very long periods of time, although Salisbury states that seeds may retain viability for many years if not dried beyond a minimum water content, which varies with species.[31] He further suggests that under 'favourable conditions', it is not impossible that some weed seeds could even remain viable for centuries. There would then be a further period of time required for their complete degradation.

Perhaps the most interesting of the seeds is *Anethum graveolens* (dill), which is not native to Britain. It is known to have been introduced, or more probably imported, to several Roman sites in England and has recently been reported from medieval London.[32] There are two seeds from Steyning and in both cases the outer coats are lost, leaving the broad vittae exposed. One of the seeds (from layer 152 in Feature 66) is distorted, but nevertheless seems likely to be dill. The preservation of these seeds places them within the group of uncertain age. Dill is unlikely to have been cultivated in this area and so is presumably not a relatively recent contaminant, and on archaeological evidence the site has not been occupied since the late medieval period.

Wild celery, like dill, may be used to flavour food. This plant is found in damp ditches and slow-flowing water, especially near the sea, conditions which are likely to have prevailed at this site, and it is probable that it was collected locally. Ragged robin and celery-leaved crowfoot also favour damp situations. These seeds and the other buttercup species, yarrow, ribwort, daisy, thistle and knapweed, which are all grassland species, may give some indication of the site's environment. Celery-leaved crowfoot and rye-grass are particularly associated with grassland with a high nitrate content, and this may indicate grazing.

The Coprolites

Two items from layer 121, Feature 66, have been identified as probable dog coprolites. The larger of the two weights *c.* 14g and measures *c.* 2 x 4cm. It has been kept in preserving fluid and has partially disintegrated, revealing jagged bone fragments from *c.* 3mm to *c.* 12mm in length, in a light brown matrix. The smaller one has been kept dry and weights *c.* 7g, measures 2.3 x 1.7cm and is light brown-grey. No constituent parts have been identified.

Table 4

Taxa	Features						Vernacular Names
	10	44	49	66	27	88	
Triticum aestivum L.	(5)	(31)	(1)	(4)	(2)	(1f)	Wheat
cf. *T. aestivum* L.		(Fr)	(5)	(3)	(2)		
Hordeum vulgare L.	(1)	(4)		(2)			Barley
cf. *H. vulgare* L.	(2f)	(Fr)		(1f)		(1f)	
Unidentified cereals		(Fr)		(Fr)	(Fr)		
Vicia faba L. Var. *minor*	(1)						Celtic bean
Vicia sp.		(1)			(1)		Vetch
Malus sp.				17			Apple
Corylus avellana L.					(Fr)		Hazel

Prunus avium L.				3		Fr	Wild Cherry
Anethum graveolens L.		1		?			Dill
cf. *Apium graveolens* L.				4*			Wild celery
Ranunculus cf. *acris* L.				3*			Meadow Buttercup
R. sceleratus L.				1*			Celery-leaved Crowfoot
Ranunculus sp.		1*		1*			Buttercup
Papaver sp.		1*					Poppy
Viola sp.				2,1*			Violet
Agrostemma githago L.					(1)		Corn Cockle
Lychnis flos-cuculi L.	(1)						Ragged Robin
Stellaria media (L.) Vill.	1						Chickweed
Linum catharticum L.				1			Purging Flax
Rumex acetosella agg.				1*			Sheep's Sorrel
Rumex sp.	1			1			Dock
Urtica dioica L.	1				2		Stinging Nettle
Solanum nigrum L.	1		1				Black Nightshade
Plantago lanceolata L.					1		Ribwort
Sambucus nigra L.	24f	1f		4	1		Elder
Anthemis cotula L.				(3)			Stinking Mayweed
Senecio vulgaris L.	1*				2		Groundsel
Bellis perennis L.				1			Daisy
Achillea millefolium L.				1			Yarrow
cf. *Cirsium* sp.	1		1	3*			Thistle
cf. *Centaurea* sp.				3*			Knapweed
cf. Compositae		3	1	6,6*	7		Dandelions etc.
Lolium perenne L.		(1)					Rye-grass
Unidentified badly preserved seeds				4,1*		(1)	
Weight of soil sample (in grams)	8640	5485	6406	7902	3267	1821	

Key: ( ) carbonised;
* fossil;
Fr. fragments only;
f fragments also present.

The charcoal samples (Identification by C. R. Cartwright, M.A.)

Features 10, 123 and 126 produced large quantities of iron slag and charcoal, and feature 22 contained much burnt stone and charcoal. The species of wood which produced the charcoal were identified as follows:

Feature 10	*Quercus*	sp.	(oak)
Feature 22	*Corylus*	sp.	(hazel)
	Betula	sp.	(birch)
	Crataegus	sp.	(hawthorn)
Feature 123	*Quercus*	sp.	
Feature 126	*Quercus*	sp.	

An interesting point is the lack of oak charcoal in feature 22, which contained many burnt stones but very little slag, in comparison with the major slag containing features, all of which contained only oak charcoal.

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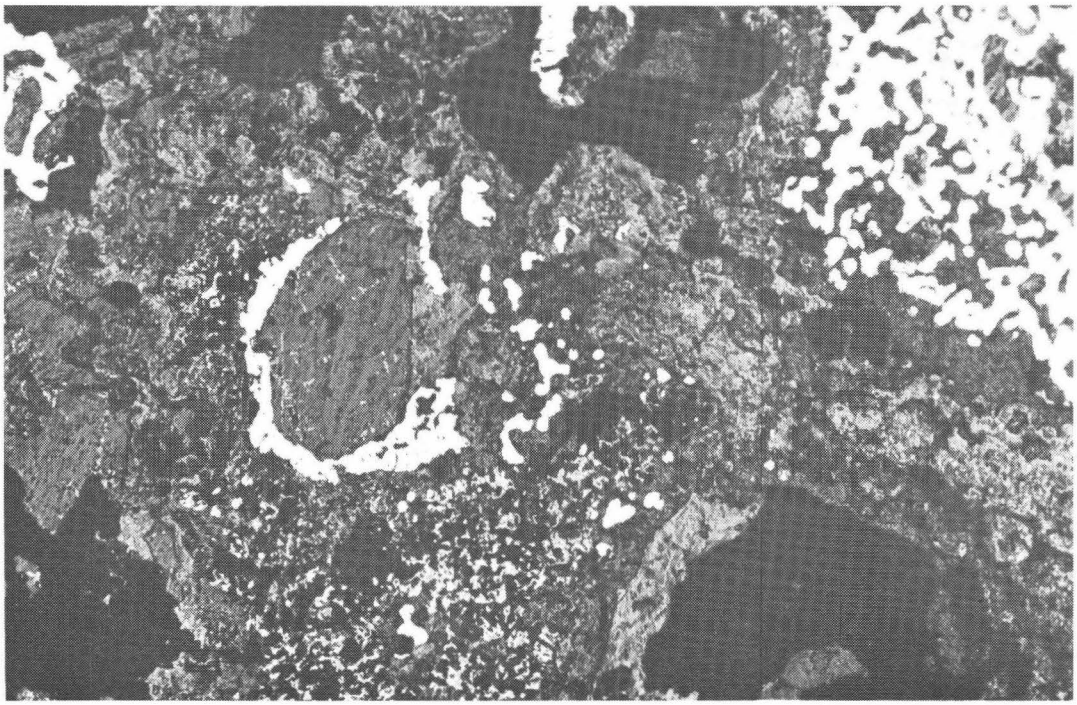
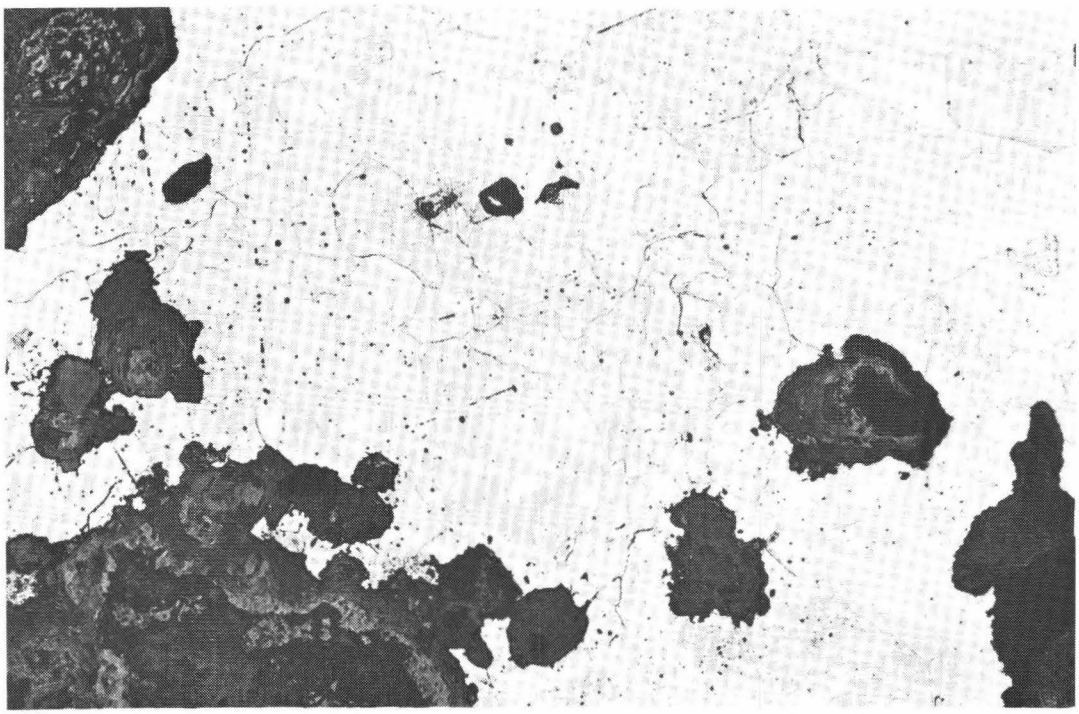
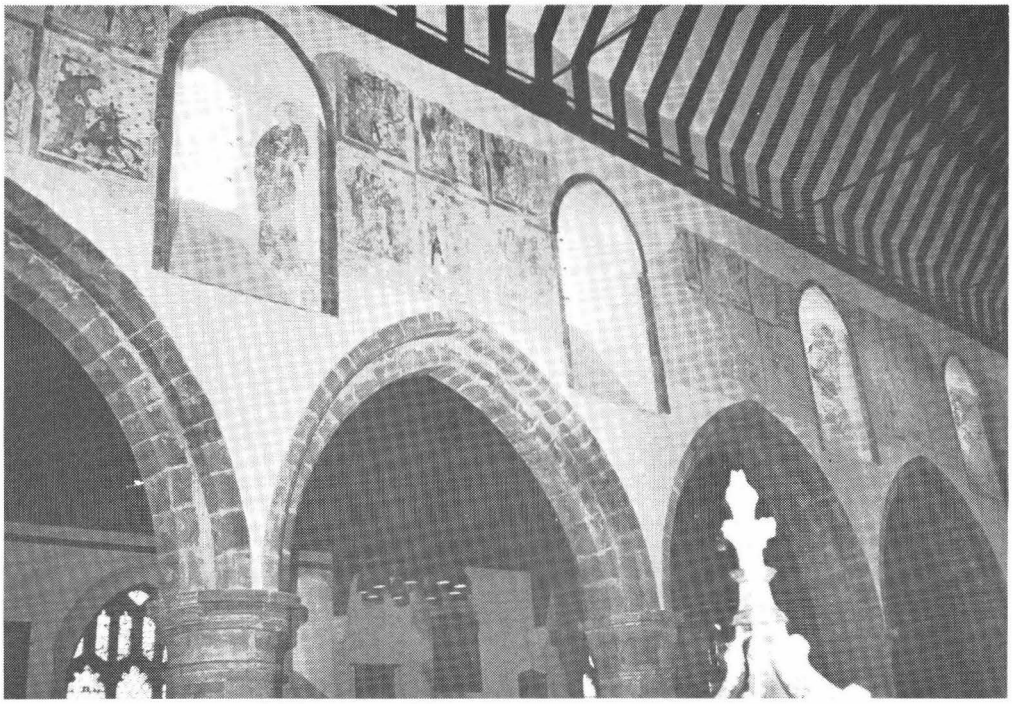


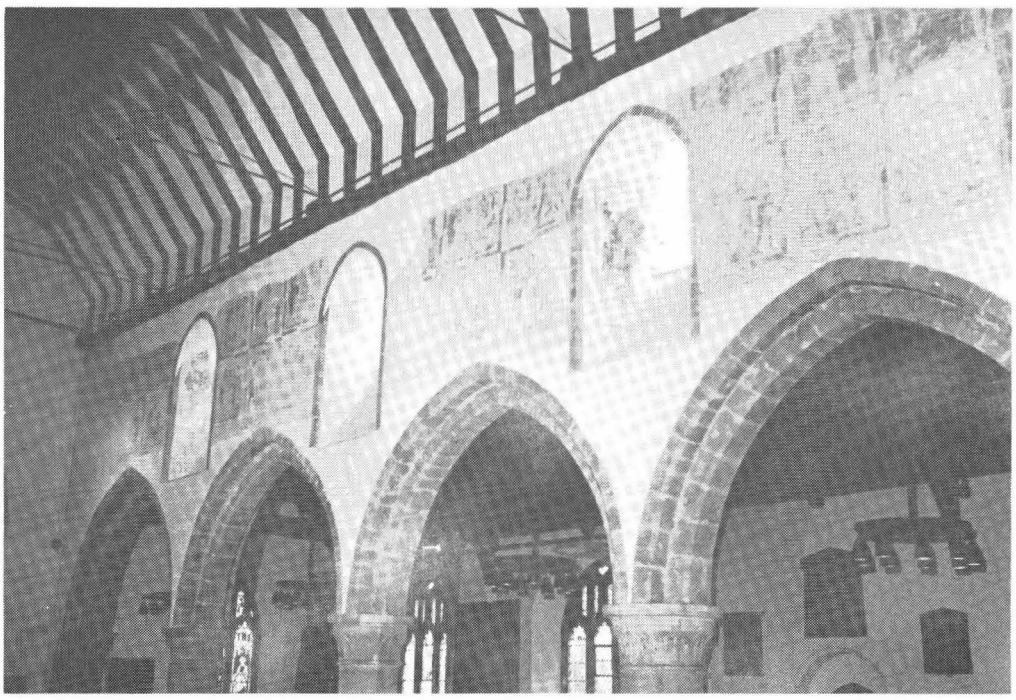
1. Steyning, Tanyard Lane, 1977. Microphotograph of iron slag from feature 10 (×200). Photo: D. Butler.



2. Steyning, Tanyard Lane, 1977. Microphotograph of iron slag from feature 126 (×200). Photo: D. Butler.



I. BATTLE. North nave arcade, looking East. (All plates by Mr. Ralph Wood).

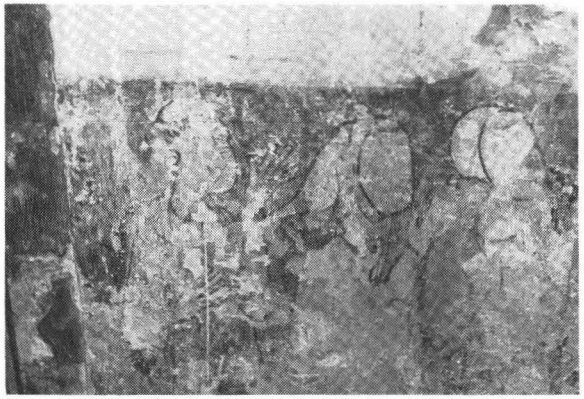


II. BATTLE. North nave arcade, looking West.

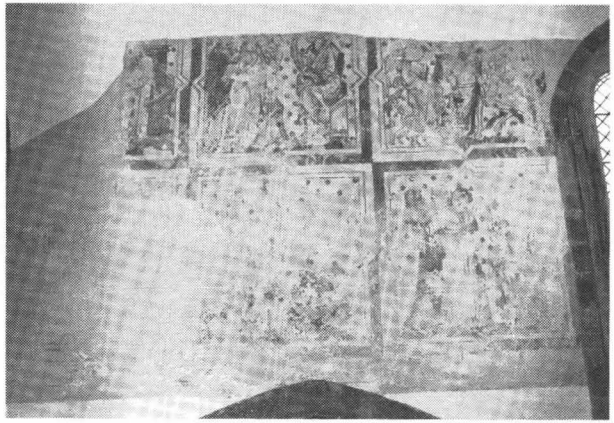
III. BATTLE. North wall of nave, East end. Procession of the Blessed, part of a Doom.

IV. BATTLE. North wall of nave, East end. Procession of the Blessed, part of a Doom.

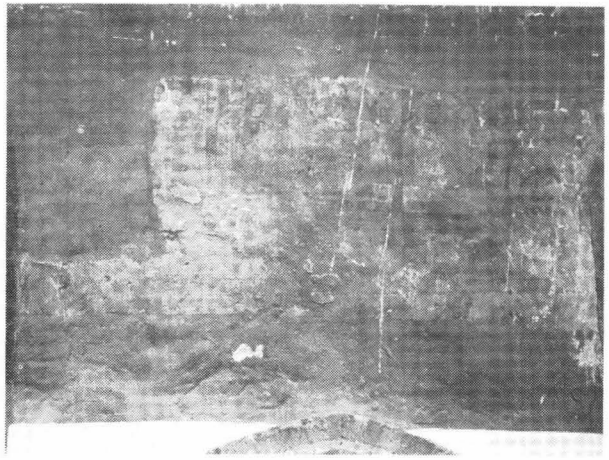
V. BATTLE. North wall of nave, East end. Procession of the Blessed, part of a Doom.



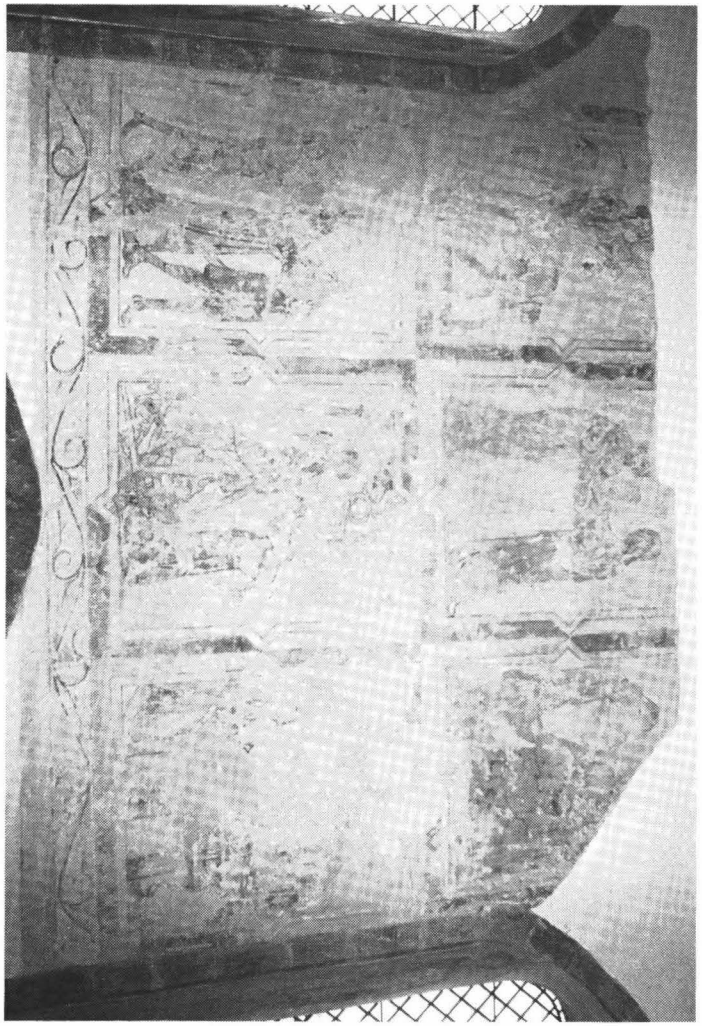
VI. BATTLE. North wall of nave, East end. Procession of the Blessed, part of a Doom.



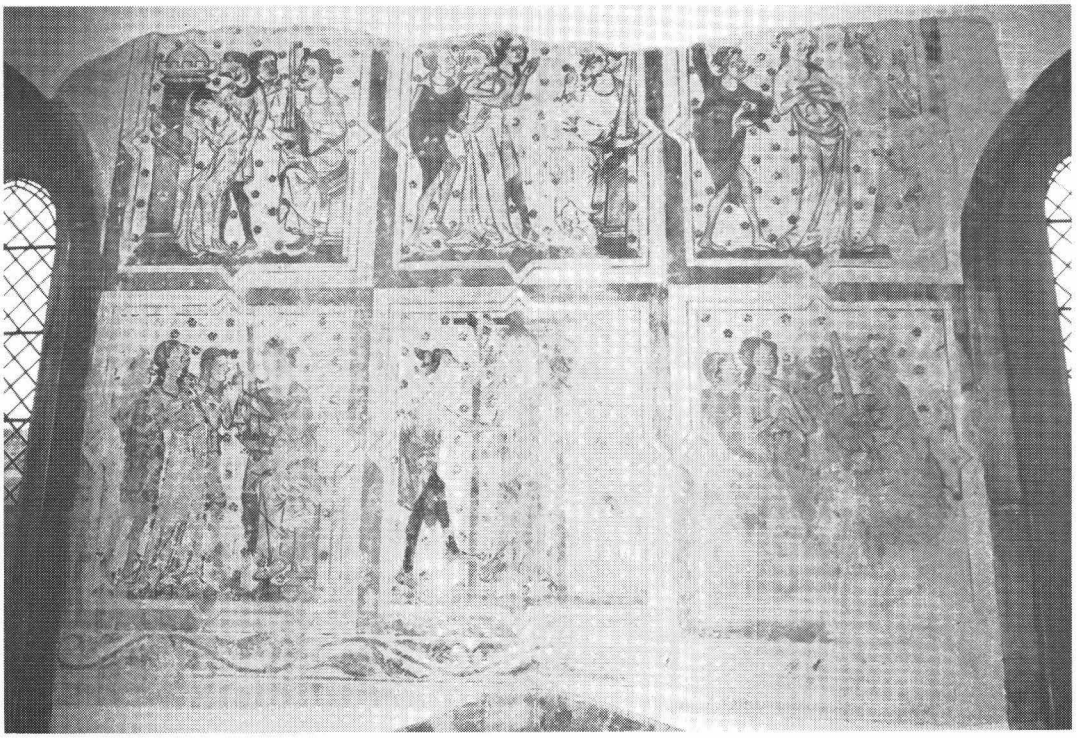
VIII. BATTLE. Above North nave arcade. Life of St. Margaret of Antioch. Scenes 4, 5 and 6 (upper) right to left. Scenes 19, 20, 21 (lower) left to right. Compare this with Plate IX, the same area before treatment.



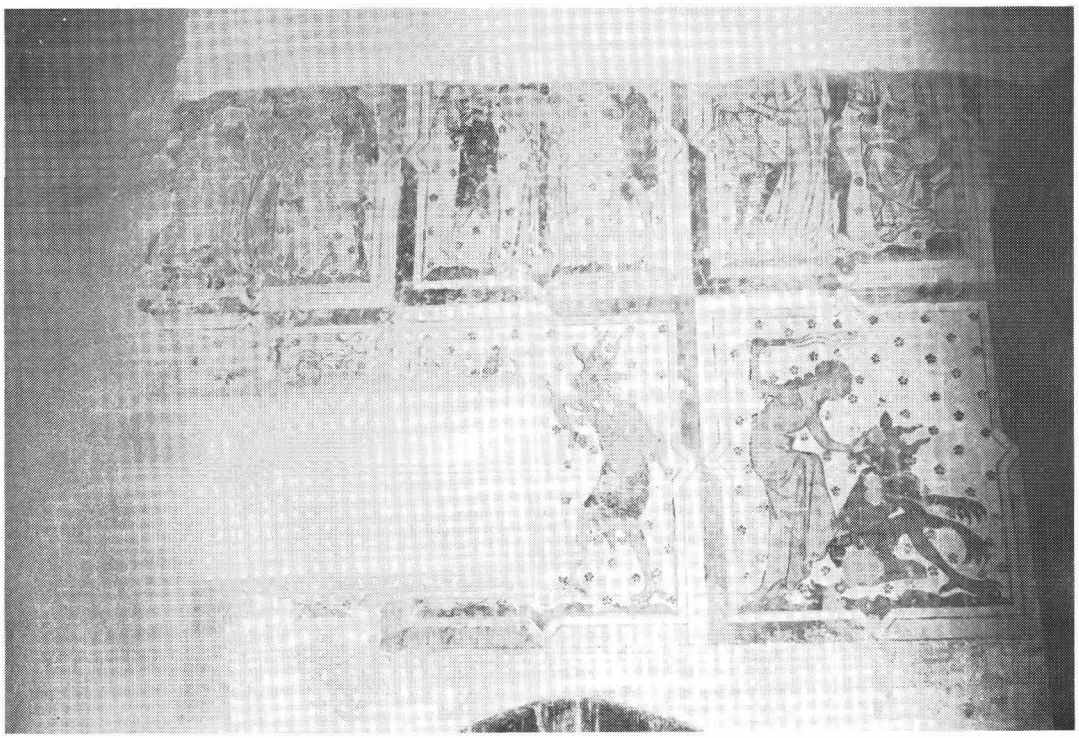
IX. BATTLE. Above North nave arcade, bay 3 before treatment. Compare with Plate VIII, the same area after conservation.



VII. BATTLE. Above North nave arcade. Life of St. Margaret of Antioch. Scenes 1, 2 and 3 (upper) right to left. Scenes 22, 23, 24 (lower) left to right.



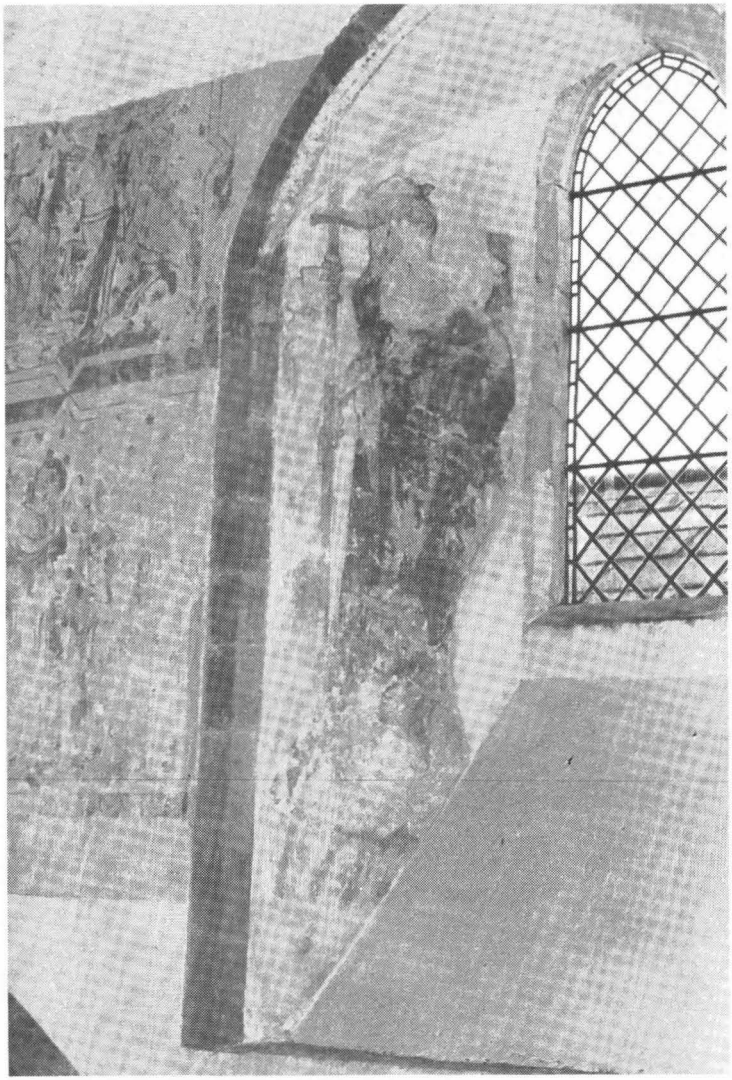
X. BATTLE. Above North nave arcade. Life of St. Margaret of Antioch. Scenes 7, 8 and 9 (upper) right to left. Scenes 16, 17 and 18 (lower) left to right.



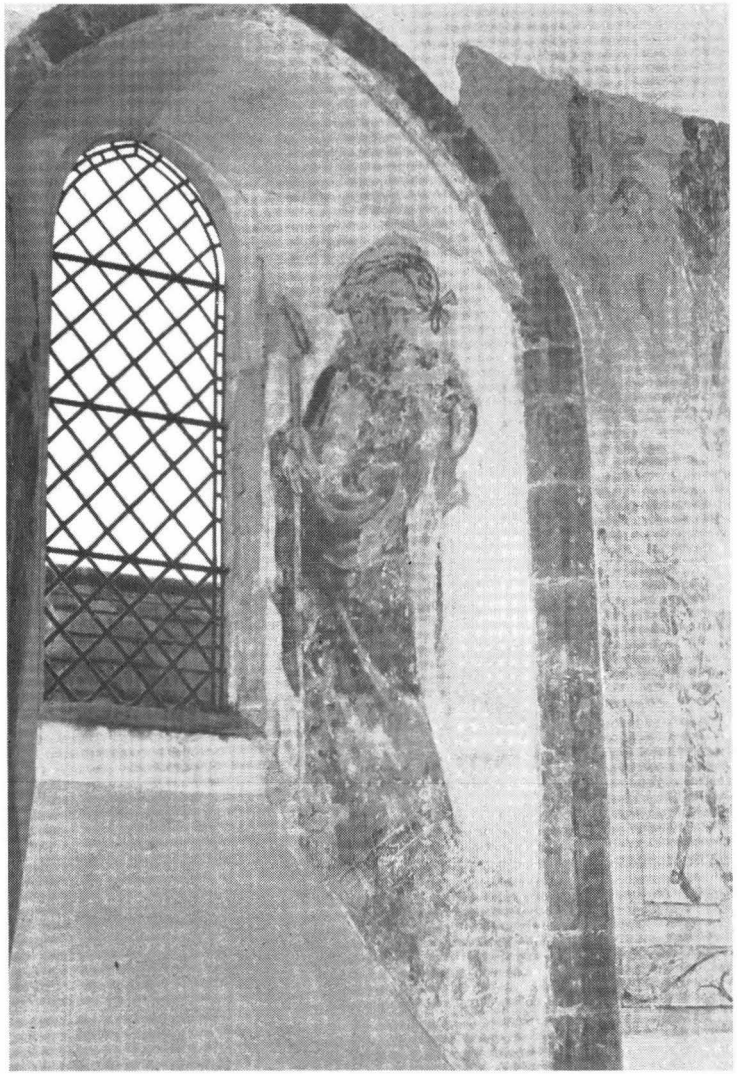
XI. BATTLE. Above North nave arcade. Life of St. Margaret of Antioch. West end, damage by former West gallery. Scenes 10, 11 and 12 (upper) right to left. Scenes 13, 14 and 15 (lower) left to right.

XIIa. BATTLE. North wall of nave, West clerestory window, West splay. Moses.

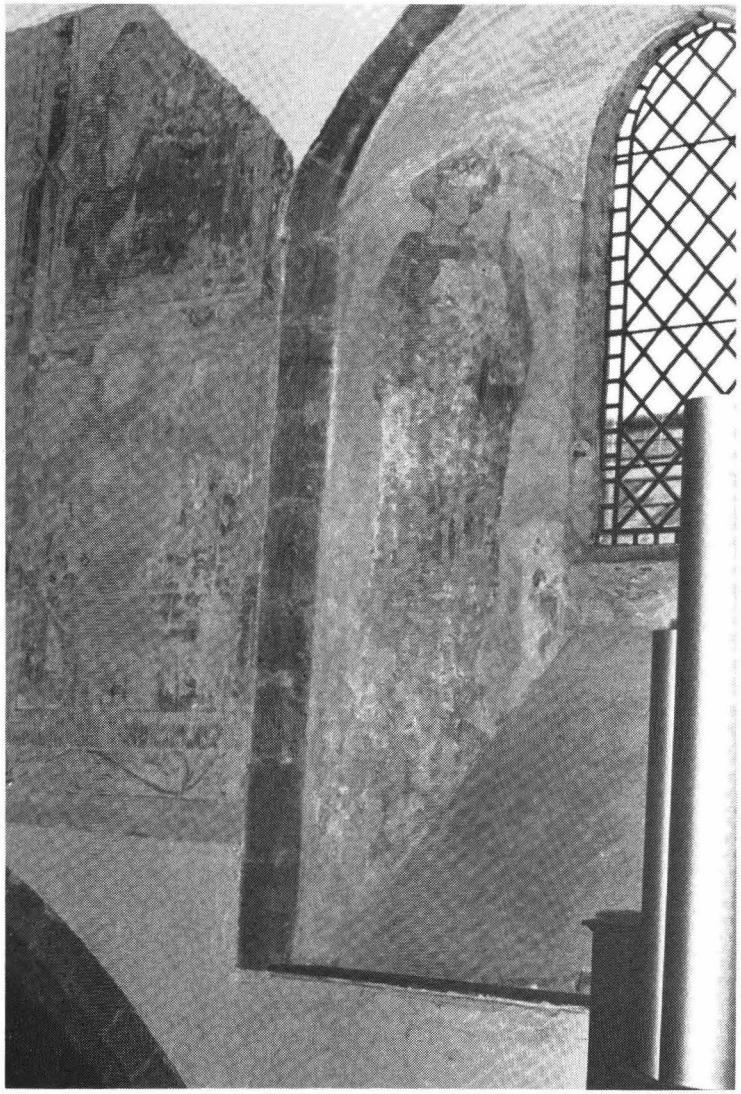
XIIb. BATTLE. North wall of nave, West clerestory window, East splay. ? St. John Evangelist.



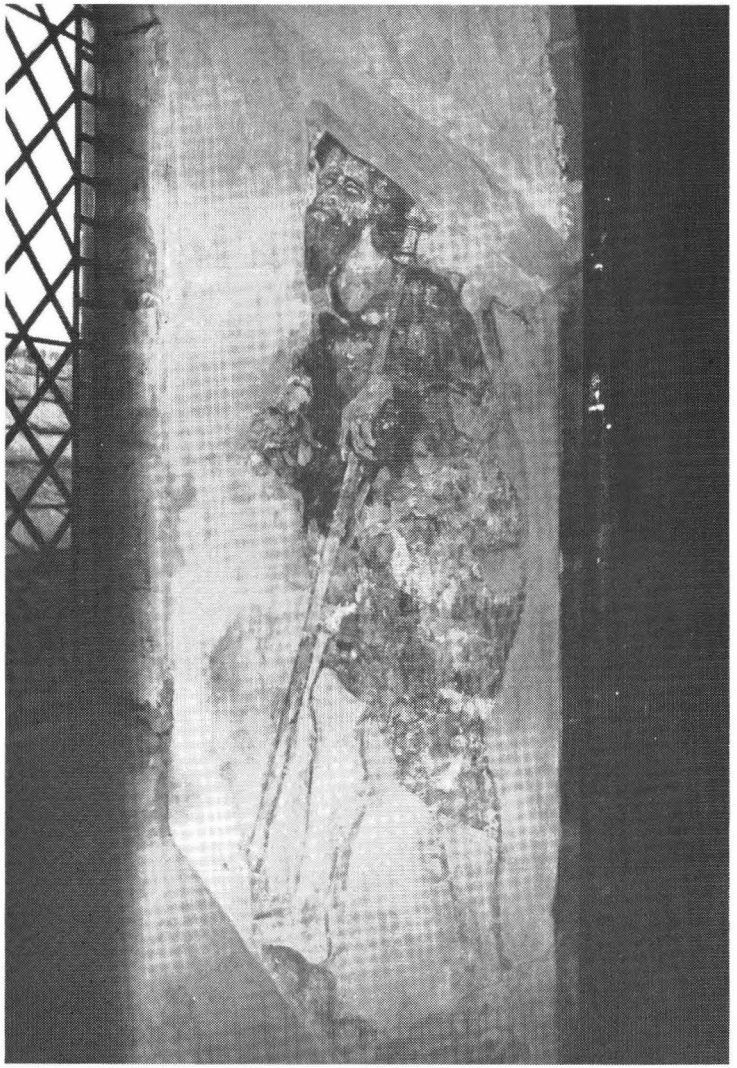
XIIIa. BATTLE. North wall of nave, third clerestory window from West, West splay. Unidentified figure.



XIIIb. BATTLE. North wall of nave, third clerestory window from West, East splay. Unidentified figure.



XIVa. BATTLE. North wall of nave, Easternmost clerestory window, West splay. Unidentified figure.



XIVb. BATTLE. North wall of nave, Easternmost clerestory window, East splay. ? St. John Baptist.

WALL PAINTINGS IN ST. MARY'S CHURCH, BATTLE

by *E. Clive Rouse, M.B.E., F.S.A.*

GENERAL

As long ago as 1845 extensive remains of wall painting were disclosed in the parish church of St. Mary, Battle; some further discoveries were subsequently made and briefly reported.[1] A book containing watercolour sketches with a description was produced; and by far the most extensive account was that published in the B.A.A. Journal, Vol. 2 of 1847 by J. G. Waller, reproducing many of the drawings by Mr. W. H. Brooke of Hastings.

It is surprising that in view of the extent and importance of the paintings they have received virtually no notice elsewhere, and certainly not by Tristram or Caiger Smith.[2] Beyond the sketches and records mentioned above, no steps seem to have been taken for conservation or analysis. Some were white-washed over again; and many others have since been destroyed. Since 1845 the walls have been regularly brushed down, and scraped by builders' ladders, so that it is a miracle that anything survives. Indeed, the North wall paintings were so obscure that virtually nothing could be seen from the ground, and there was a move to limewash the whole area. (Plate IX should be compared with plate VIII; the same area before and after cleaning and conservation).

In 1952 my attention was drawn to the paintings by R. H. D'Elboux, who asked me to comment on W. H. Brooke's drawings. The next step was a request from Mr. J. L. Denman, then the Church Architect, to inspect the paintings. This I did in 1959 and prepared a full report. It took until 1973 before anything further transpired; I paid a second visit with my senior Assistant, Miss Ann Ballantyne, when a close inspection and tests were possible from ladders. This proved, as I had already stated, that much of the paintings survived, areas still remained to be uncovered, that they were of exceptional quality, and that I believed that much of the nineteenth century identifications to be erroneous.

The Church Architect was now Mr. Ralph D. Wood, and he has been of the greatest practical assistance ever since. Grants were eventually obtained from the Pilgrim Trust, via the Council for Places of Worship, and the Leach Trust, without whose generous help the work could not have been carried through.

Work was actually started at the East end of the North Nave wall in the early autumn of 1976, and continued for varying periods in each year, working westwards, and was completed in 1978. All my three Assistants, Miss Ann Ballantyne (now Mrs. J. Murrell), Miss Anna Hulbert and Miss Madeleine Katkov worked on the paintings at various times, and their skill, patience and hard work, sometimes under difficult conditions, has been admirable.

[1] Keyser, C. E. *List of Buildings having Mural Decorations*, 1883, 21. Wall, J. C. *Medieval Wall Paintings*, N. D. 148, 205. *Arch. Journal* V, 69. *B.A.A. Journ.* ii, 141. *The Builder*, 1864, 733. *Arch. Journ.* XXXIV, 278.

[2] E. W. Tristram, *English Wall Painting of the Fourteenth Century*, 1955. A. Caiger-Smith, *English Medieval Mural Paintings*, 1963. They even escaped the notice of the ubiquitous and observant Pevsner in his Sussex volume of *The Buildings of England*, pp. 407-8, 1965.

THE PAINTINGS

In order to complete the picture of the medieval decoration of Battle Church one should perhaps briefly list the destroyed paintings.

1. *EAST WALL OF NAVE, ABOVE CHANCEL ARCH*

This wall has been entirely replastered, the paintings destroyed, and the tie-beam and braced king-post removed. This was due to repairs to settlement cracks, and the reconstruction of the roof in the late nineteenth century.

(a) At the top was a representation of the Three Living and Three Dead. This seems to have been correctly identified and reasonably accurately recorded.

(b) The central zone of the wall below this was clearly part of the Doom or Last Judgment. There was probably a central figure of Christ in Majesty, destroyed even in Brooke's time by a Royal Arms of Charles II. Flanking this was a series of figures apparently in canopied niches, possibly the Apostles, headed by the Virgin on the North, and John Baptist on the South, perhaps with saints. Brooke found traces of inscriptions here which might relate either to the upper or lower rows. The much contracted Latin seems to ask the intervention of the Saints and Martyrs in glory with thanks to Our Lord and the Virgin, and including St. Nicholas, *St. Margaret* and the Apostles and Virgin Martyrs.

(c) The lower zone or row contained more figures, and both these are continued on the North wall. They appear to be a procession of the Blessed, to be received into the Heavenly Jerusalem.

(d) The small spandrels at the base of the arch may well have contained a limited representation of the General Resurrection.

2. *CHANCEL*

(a) Brooke records some single-line masonry pattern, a small fragment of which I saw on my first inspection.

(b) On the South wall is a considerable area of painting, some of which still survives but has not been cleaned or treated. Brooke records this, but could not identify it, suggesting only a Baptism or Confirmation—unlikely in this position and in isolation.

3. *NAVE*

The most extensive paintings are found here, on the whole of the North wall above the arcade and in the clerestory window splays.

(a) Brooke records painting on the South return wall, where one would expect a continuation of the Doom; and on this side Hell is usually represented. I found isolated traces of painting here, just enough to prove the former existence of subject-matter. But insufficient to identify or justify elaborate uncovering and conservation.

The North wall has the most important survival of painting; and the complete scheme can now be identified. (Plates I and II).

(b) At the East End, on the return wall adjoining the chancel arch, Brooke's findings were confirmed, but a slightly different interpretation must be placed on the scene. The former rood loft door (now blocked) is here; and the painting is between it and the first clerestory window. It is in two zones, corresponding to the recorded painting formerly above the

chancel arch. The upper has six or seven figures in canopied niches, of which little survives. Below, there is a lengthy procession of figures moving eastwards—the Blessed about to be received by St. Peter into the Heavenly Jerusalem. They were formerly described as 'female saints.' There is a censing angel at the head, followed in strict order of precedence by a King, an Archbishop, a Bishop or Abbot, a Priest, a Clerk, a Queen, Unidentified, two Peasants or Laymen, the rear being brought up by another Priest or Monk. (Plates IV to VI). It is unfortunate that the new organ pipes have been placed here, now largely obscuring the subject, and rendering conservation extremely difficult.

4. *LIFE OF ST. MARGARET*

The rest of the wall, between the clerestory windows is occupied by a life of St. Margaret of Antioch in 24 scenes, there being six compartments in two zones or tiers in each section, not a Passion Cycle of our Lord and other scenes, as first identified by Waller and Brooke. The choice of this Saint for such prominence is somewhat curious. The Parish Church of Battle is dedicated to St. Mary, and it is possible that there has been a change of dedication. Arnold-Foster lists 256 dedications to St. Margaret, plus 29 double dedications or others,[3] so that she is one of the most numerous. The scenes are contained in framed compartments with a counterchanged motif, and scrollwork at the base. The tops of most of the scenes have been damaged or destroyed by roof repairs in the last century.

In the clerestory window splays are almost lifesize single figures, facing each other in pairs. There were originally eight, but two have been destroyed by water entry and plaster failure. They will be considered separately.

The story of St. Margaret is to be read from East to West in the upper tier, returning West to East in the lower, so that scene 1 is above scene 24. The scenes are shown in simplified diagrammatic form in Figs. 1 to 4.

The version follows closely that given in the *Golden Legend*—the *Legenda Aurea,* a collection of lives of the Saints compiled by Jacobus de Voragine, which became current in manuscript form and the popular basis for much wall painting subject-matter from the mid thirteenth century on. Caxton's translation of 1483 has the legend in Vol. 4, pp. 66-72, published by J. M. Dent in 7 volumes, Temple Classics series, 1900. A summary of the scenes is as follows:

1. Birth of the Saint.
2. She is handed over to her Christian Nurse.
3. The Provost Olybrius and an attendant riding espy the Saint. (Plate VII).
4. These two approach her sitting spinning with a distaff among sheep. (Plate VIII).
5. The Saint, seized by two evil attendants disputes before the Provost, on throne to right (Plate VIII).

From now on the scenes tend to be repetitive, alternating with her appearances before the Provost to dispute or argue with him, and her imprisonments and tortures. The Provost is represented in the same way throughout, with crown, crossed legs, sword and accusing finger, on a throne, usually on the right.

6. The Saint in prison; she leans out of a tower on right. (Left side damaged). (Plate VIII).

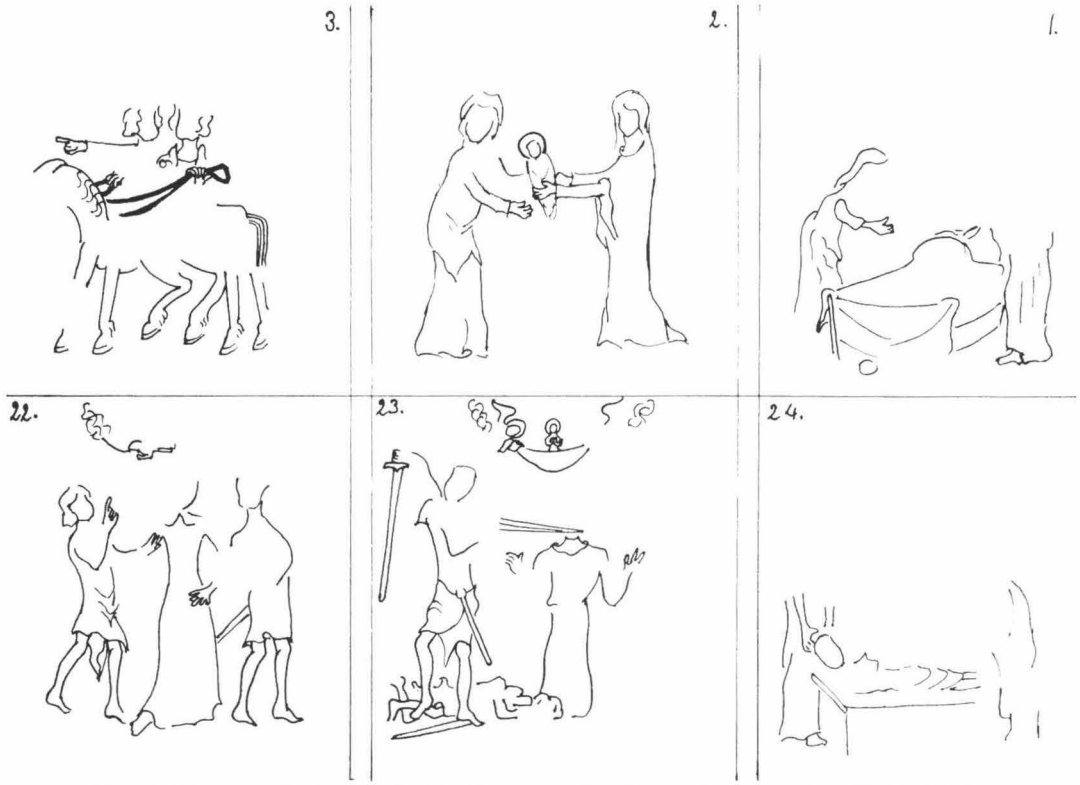


Fig. 1. Diagrammatic key to the St. Margaret series (Human figures are about 2ft. 6in. high).

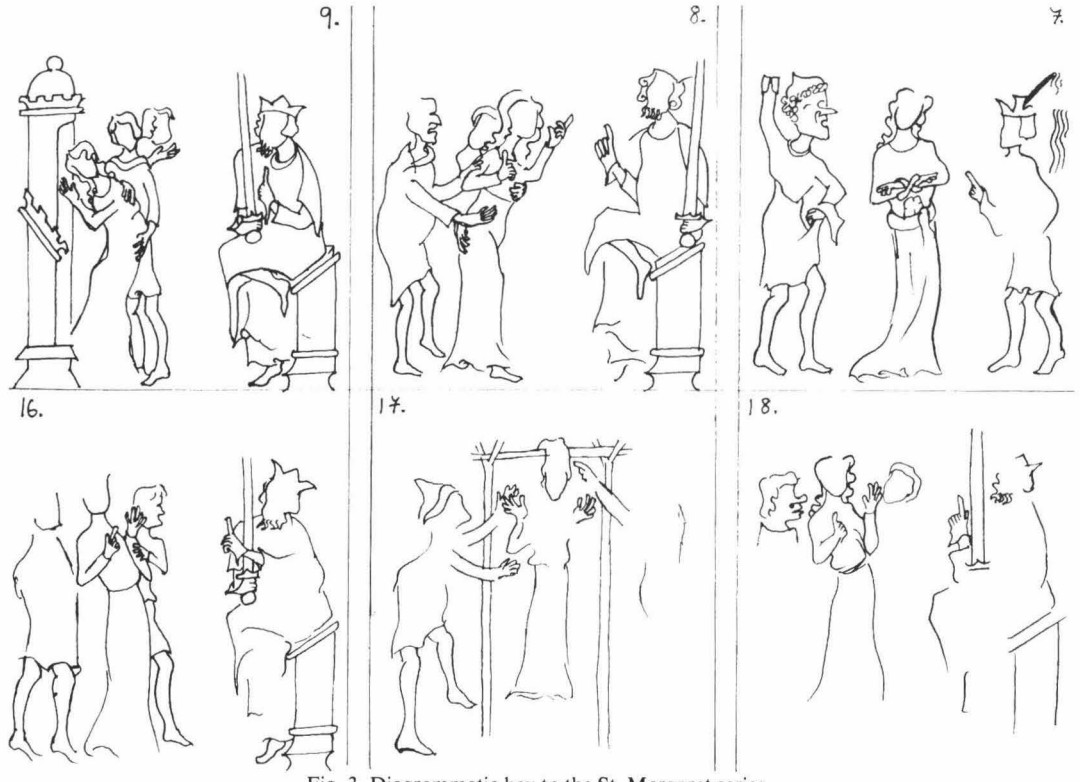


Fig. 3. Diagrammatic key to the St. Margaret series.

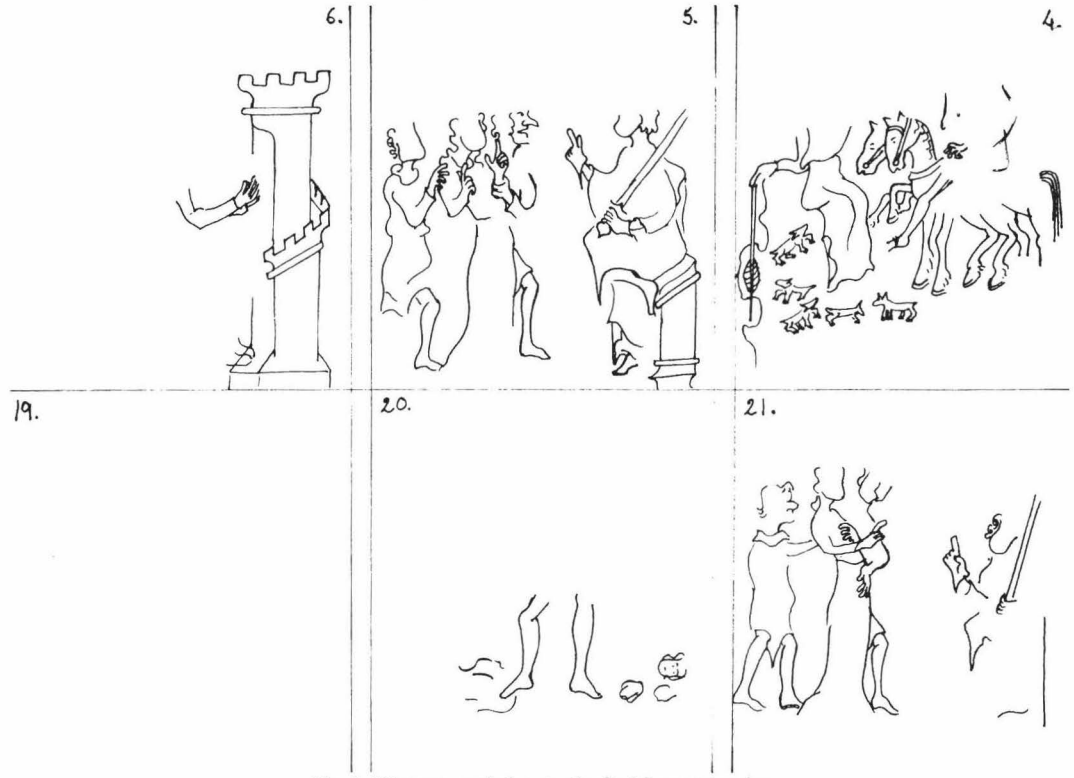


Fig. 2. Diagrammatic key to the St. Margaret series.

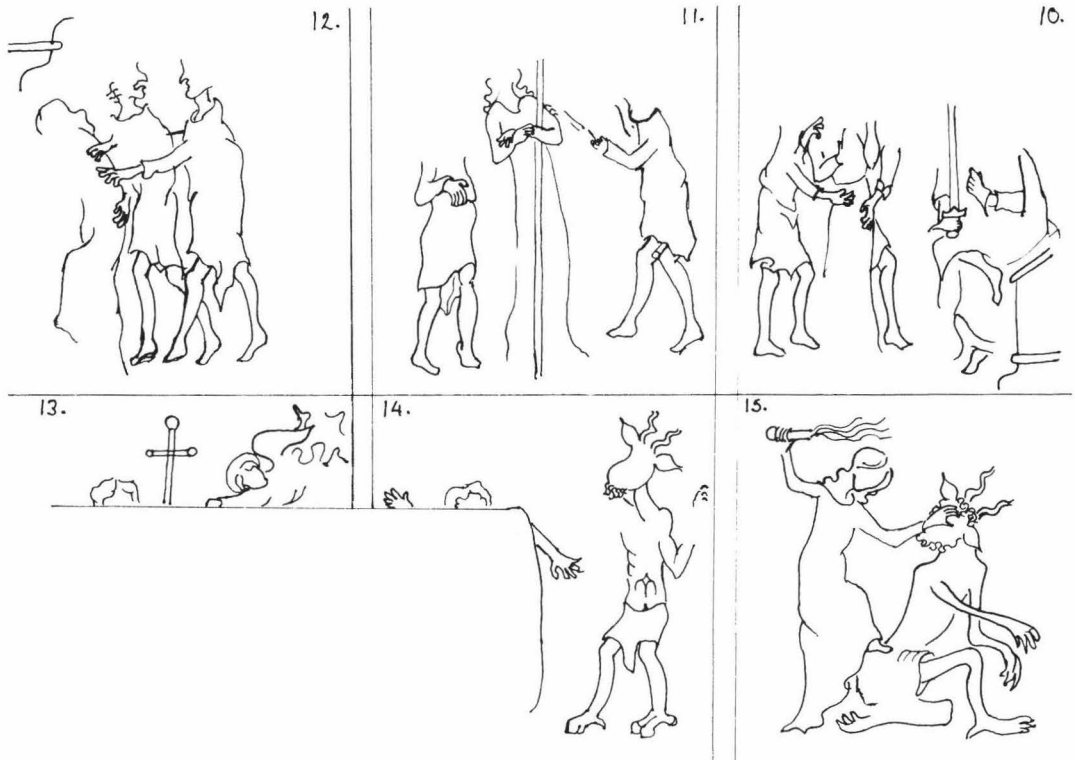


Fig. 4. Diagrammatic key to the St. Margaret series.

7. The Saint, in centre, stripped to the waist, hands bound before her, flanked by two evil tormentors? scourging her. (Plate X).
8. The Saint in centre being man-handled by two torturers disputes further with the Provost on the right. (Plate X).
9. The throned Provost again on right, condemns the Saint to prison once more; she is being pushed into the tower again by two torturors one of whom is speaking to the Provost, crossed legs, sword in hand. (Plate X).
10. This and the following two scenes are damaged at the top. Much as in scene 9, the Saint, her right hand raised, between two torturors who man-handle her, again before the Provost. (Plate XI).
11. The Saint further tormented: first man on right exposes himself to the Saint, and holds a rope or whip extending to St. Margaret's left shoulder. She has wrists crossed (? tied) standing behind a stake at the base of which coals are heaped. (Plate XI).
12. Two men conversing as they push the Saint back into prison once again. (Plate XI).
13. All but top fraction destroyed by former gallery. This was the scene of the bursting of the dragon's (the Devil's) belly and the Saint emerging unharmed holding a cross, the top of which is preserved, a guardian angel flies down, blessing, on the right.
14. The Saint admonishes the Devil. (Plate XI).
15. The Saint chastises the Devil having overcome him. (The last two scenes are the only ones accurately drawn in the old account, probably because they were visible at close quarters from the former West gallery). (Plate XI).
16. The Saint, both hands raised in argument, between the two guards, again before the Provost on right, sword in one hand, the other raised in judgment ordering further tortures. (Plate X).
17. The Saint tied by her hair to a gibbet, again attended by the two evil tormentors. (Damaged by entry of water). (Plate X).
18. The Saint, leaning back, her right hand held by one of the guards behind her, the Provost with sword on the right as usual. (Very badly damaged by entry of water). (Plate X).
19. (Almost totally destroyed by damp and plaster failure). (Plate VIII).
20. (Badly damaged). Man in green robe, yellow hose and black shoes, similar to executioner in scene 23. Confused mass at his feet, including at least 4 heads. This probably refers to the miracle of five thousand being converted by the Saint, and all beheaded at the Provost's orders. (Plate VIII).
21. The Saint again held between two torturors, with one hand raised and finger pointing to heaven, the Provost with crossed legs and sword hand raised and finger pointing condemning her to death. (Plate VIII).
22. The Saint led to execution by two tormentors, the Hand of God above. (Plate VII).
23. Beheaded by Malchus, who falls dead with the sword at her feet. Her Soul carried to heaven in a napkin by an angel. (Plate VII).
24. Burial of the Saint. (Plate VII).

DISCUSSION

The only other extensive series in wall painting of the Life of St. Margaret is on the South wall at Tarrant Crawford, Dorset, though individual scenes are of frequent occurrence, i.e. at Risby, Gloucester Cathedral, Hartley Wintney, etc., etc. The favourite scenes were the breaking of the dragon's belly and the chastising of the dragon by the Saint, often shown holding him captive by her girdle. The breaking of the dragon's belly accounts for the symbolical reason for St. Margaret being invoked by women in child-birth. The Caxton version is as follows: while she was in prison she prayed that the Devil that was tempting her to yield to the Provost's will and forsake her Christian principles would be shown to her in bodily form. "And then appeared a horrible great dragon and assailed her and would have devoured her, ... and in another place it is said that he swallowed her into his belly, she making the sign of the Cross. And the belly brake asunder, and so she issued out all whole and sound. This swallowing and breaking of the belly of the dragon is said it is apocryphal." This part of the story is shown in scenes 13, 14 and 15, badly damaged by the eighteenth century gallery since removed. But the Cross, and the angel intervening, as well as the admonishing and chastising of the Devil are clear. The whole, of course, must be read as picture language for the overcoming of evil by good.

Other conventions or deliberate exaggerations are well demonstrated in the series. The Saint is a graceful, slender, well-proportioned figure, whereas the torturers, Provost's attendants and executioner are deliberate caricatures, with ugly, brutal features. The Provost himself is always shown cross-legged, crowned, seated on a throne with sword and gauntlet gloves. The crossing of the legs in Medieval iconography was held to be an interruption of the normal flow of life, and could only be indulged in by important people. The pointing finger indicates condemnation. The gauntlet is a sign of rank, and the sword indicates power or cruelty.

It is interesting that the six Easternmost panels (scenes 1-3 and 22-24) have plain backgrounds, whereas all the other scenes have backgrounds powdered with 5-foils. The character of the scroll beneath the panels also changes. On the East it is slender, with trefoil or three-leaved thin ends (Plate VI), whereas towards the West it is heavier and coarser with more palmette-like foliations (Plate VIII).

The framing of scenes in the way that the Battle paintings are shown is frequently found in manuscripts as in Queen Mary's Psalter (Brit. Mus. Royal MS. 2Bvii), the Romsey Psalter in New York, the Barlow Psalter (Bodleian Library MS. Barlow 22, Oxford) and many others.

THE WINDOW SPLAYS

The great figures in the clerestory window-splays present considerably more difficulty, partly owing to their damaged condition. They are clearly meant to be regarded as pairs, since they look towards each other and not towards the nave of the church, on either side of each window. The treatment of figures in pairs, again, is a characteristic feature of many Manuscripts. The most usual are contrasting pairs consisting of a Prophet and an Apostle, each with an inscribed scroll from their works. Such are found in the Peterborough Psalter, Corpus Christi College, Cambridge MS. 53 (formerly E 12) folios 8-18. And in Queen Mary's Psalter there are two folios similar. There are also pairs of Apostles, each holding a scroll with the appropriate sentence from the Apostles' Creed said to have been given them at Pentecost. These are seen in the wall paintings at Longthorpe Tower (Archaeologia Vol. XCVI, 1955, Plates III, V, VII, XI).

The Battle figures are not as simple as this. The only one which can be identified with certainty is that in the West splay of the West window, which is clearly Moses, with the characteristic "horns" on his head, and holding a rod or staff with entwined serpent at the top in his right hand, and the tablets of the Law in his left. (Plate XIIa). Opposite him is a younger man with shorter hair and faint, short beard, bare headed and bare-footed and holding a long scroll in one hand to which he points with the other. This is possibly to suggest the Old and the New Testament. Both stand on a yellow and white base representing rough ground. (Plate XIIb).

The pair in the next window to the East have been destroyed by entry of water and plaster failure in the past, only isolated scraps of colour surviving. The following window Eastward has a fine pair of enigmatic figures. That on the West splay appears to be elderly, and holds in his right hand a long cross-headed staff, and a cup or chalice in his left. There appears to be some kind of headdress. (Plate XIIIa). The opposite figure is even more puzzling. There seems to be some sort of hat or headdress with perhaps a torque or wreath. In the right hand is another long staff with some object at an angle at the top. On the other side there may be another, shorter staff, with perhaps a curved top or ribbon. Each has a very long robe or cloak, and the feet are not visible, on the same background. I can offer no suggestion or explanation of these figures. (Plate XIIIb).

The final pair to the East are a little clearer. On the West is a young, short-haired figure, clean-shaven, perhaps with some object in the left hand. This might be St. John Evangelist. (Plate XIVa). The opposite figure is different from the rest, having long, dark shaggy beard and hair, a rough garment to the knees and bare feet and legs. A long staff is carried in the left hand. This suggests St. John Baptist, or possibly St. James Major. (Plate XIVb). There seems to be no coherent scheme or connexion between the figures. None has a halo—indeed St. Margaret throughout her series has no halo either. They are not all Prophets, probably not all Apostles and not all miscellaneous Saints, and to have a seemingly disconnected set like this is most unusual.

TECHNIQUE, PROVENANCE, ETC.

The paintings are of the highest quality, and artistically very fine and consequently of great importance. The drawing and setting-out are skilful and confident. There has been a much wider range of colour than in the normal parish church painting, though, sadly, from a distance of 20ft or more these can hardly be discerned. There has been extensive use of green (a copper salt) and even traces of blue in the large figures as well as the normal red and yellow ochres (iron oxides), black, and lime white.

One should not perhaps be surprised at this in view of the close association with Battle Abbey on the opposite side of the road. The relationship is not unlike that between Westminster Abbey and St. Margaret's parish church, Westminster. The Church was founded by Abbot Ralph (1107-24) probably about 1115 and up to the Reformation was served from the Abbey, enjoying the privileges of Royal Patronage and having a Dean as Incumbent. Little of the early twelfth century church remains: but there were extensions in the late twelfth century, and in the thirteenth and fourteenth centuries. On stylistic grounds, i.e. the scrolls, costume, background, etc., one would be inclined to place these paintings at the end of the thirteenth or early in the fourteenth century. No close manuscript parallels come to mind; but in view of the Abbey's influence and prestige clearly the best artists and craftsmen were available. It is not known whether Battle Abbey itself had a Scriptorium of any note or reputation from whence manuscripts could be traced: but perhaps artists from Canterbury might have been employed. Other Benedictine houses having notable scriptoria and a

fine artistic tradition are St. Albans and Bury St. Edmunds and, of course, Westminster itself under Royal patronage.

TECHNICAL

It may perhaps be of use to include a note on the technical aspects of conservation of these paintings. They are executed in secco, using mainly earth colours (red and yellow ochres, or oxides of iron) plus lime white and lamp black, and with touches of green and blue already referred to. They are painted direct on to a lime plaster with a lime-putty ground, the vehicle being clear lime-water, and the medium size, perhaps bound with casein. They had, of course, been covered with limewash at the Reformation and had remained obscured until the nineteenth century. They were roughly and not completely uncovered, and a good deal of touching up and overpainting and outlining was done. They were then given some kind of surface fixative which was very difficult to remove, a wide range of solvents having to be used. The Victorian overpainting was removed, the whole area fully uncovered, and the surfaces cleaned. Very many plaster repairs had to be effected, in lime-putty and sand. In some areas the background was stained and blotchy, and a new, toned lime-wash ground was applied in many places to show up the remains of painting. No touching-up of the actual paintings was done. The surrounding walls were treated with a toning limewash. A full photographic record was made at every stage, and for this Mr. Ralph Wood is to be thanked. The diagrammatic key sketch is by Miss Madeleine Katkov. It is a matter of great satisfaction that this remarkable series has been rescued from obscurity and almost certain destruction, and has been identified and interpreted.

The Society is extremely grateful to the Francis Coates Charitable Foundation for a generous grant towards the cost of illustrations in this paper.

THE 1574 LISTS OF WEALDEN IRONWORKS

by C. S. Cattell

In 1574 there appeared a series of documents which form the most complete record of the extent of the Wealden iron industry for any one period in its history. The aim of this paper is to re-interpret the evidence contained in these documents relating to ironworks in the Weald and to pose questions that arise. Such questions have largely been neglected in the past. Answers to some of them have been attempted in the new light of knowledge shed upon the period. Those which remain unanswered, it is hoped, will stimulate further research by local historians and those interested in the Wealden iron industry as a whole. The prime concern has been with the problems *of interpretation, rather than with the actual identification of sites, many of which can be, or have been, identified beyond any element of doubt. There is some* possibility *that other sites, as yet unknown, remain to be found. Certain probable sites are indicated. That such a situation still exists after over one hundred years of research into the industry can be illustrated by the discovery of the hitherto unknown sixteenth century site of Ardingly furnace.*[1]

INTRODUCTION

It seems that the first person to concern himself with the evidence contained in the 1574 lists was M. A. Lower,[2] an early pioneer in the study of the Wealden iron industry. The 1574 documents had been discovered and made known to him by a fellow member of the Sussex Archaeological Society, W. D. Cooper. From the transcript of the list published, it would seem that it had been made from two lists held in the Public Record Office.[3] From lists subsequently found it is clear that this transcript does not represent the summation of information for 1574. Nevertheless, few sites are missing. Lower made no attempt to identify the recorded sites but merely inserted in brackets his own identifications of *some* of the less obvious places. This he achieved satisfactorily except for the association of *Moore fforrest* (Worth Forest) with Petworth. The transcripts themselves, however, contained a few errors in spelling, none serious or misleading except his rendering of *Retherfeld* (Rotherfield) as Netherfeld.

[1] In the Inquisition Post Mortem of Francis Challoner (Public Record Office, hereafter P.R.O., *Inquisitiones Post Mortem* 232/66, dated 2nd September, 34 Eliz., 1592; this is also summarised in Sussex Record Society, " Sussex Inquisitions," Vol. 33, 1927, p. 31), who died 30th July, 1592, there is reference to a messuage and land belonging to it called Sauceland in Ardingly and certain buildings by the furnace, lately erected (" *ffurnace de nove edivicat* ") upon the premises. From the nature of the slag at the site of Ardingly forge (TQ 334289), which contrary to Straker's information (*Wealden Iron*, 1931, p. 409) still possesses a bay which contains much slag, there are no grounds for suggesting that this site was ever operated as a furnace. Indeed, the location of Ardingly furnace appears to have been 400 metres to the south east (TQ 337287) on a small stream which flows between the properties still known as Great and Little Saucelands. Here an ornamental pond remains, the bay of which contains traces of blast furnace slag, with more prolific dumps of slag slightly downstream on the south bank of the stream. This site was probably short-lived since the Inquisition Post Mortem of Francis' son, Thomas Challoner, who died 31st March, 3 Jas. 1 (1605) (see Sussex Record Society, " Sussex Inquisitions," Vol. 33, 1927, p. 52), although referring to Saucelands, made no mention of the furnace at this date, c.1605.

[2] M. A. Lower, " Ironworks of the County of Sussex," *Sussex Archaeological Collections* (hereafter *S.A.C.*), Vol. 2 (1849), pp. 169-220.

[3] P.R.O. State Papers Domestic, SP 12/95, f.51, piece 21 and f.128, piece 61.

Lower's paper referred solely to Sussex although his transcript referred also to sites in Kent. This deficiency of Lower's treatment became more serious when subsequent writers took Lower's information for the basis of their discussions. Thus, Topley transferred Lower's transcripts into a direct numerical statement that there were thirty-eight forges and thirty-two furnaces in Sussex in addition to " ' dyvers fordges and furnaces ' " which he considered " would considerably add to the number ".[1]

Lower's information was also used by M. C. Delaney[2] and G. Sweeting[3] although both authors seem to have been aware of the fact that Lower had been concerned solely with Sussex. Consideration of the 1574 evidence was next undertaken by writers who contributed to the Victoria County History series. L. F. Salzman, for Sussex, achieved a fine synthesis on the iron industry although he barely mentioned the 1574 evidence.[4] Ethel M. Hewitt, for Kent, referred to the 1574 material but failed to trace the exact identities of the sites mentioned.[5] In contrast, the writer for Surrey tackled the problem of identification in an admirable and logical way.[6] It is probably significant, however, that for Surrey there were few difficulties to be encountered.

E. Straker[7] discussed the circumstances in which the lists were drawn up, in his Part 1, " Historical and Explanatory " but did not discuss in detail the difficulties of interpretation. This deficiency he partly compensated for in Part II, " Topographical and Descriptive Survey ", but treatment was not always exhaustive, nor did he find it possible to examine the full implications of the many ambiguities in the lists.

In 1933, D. and G. Matthew[8] published a further transcript of one of the lists.[9] This list they believed, had been drawn up by John Baker in 1577/8 and hence was likely to be a " completed survey " and final record of the surveys made in 1574. Although dated tentatively to October, 1577, there are no real grounds for supposing that this list is any more complete than, or superior to, the other lists. Subsequently, this transcript was reproduced by E. Straker[10] who added in parentheses his interpretation of the less obvious locations.

In the study of the Wealden iron industry then, few writers have concerned themselves with an investigation of the nature and validity of the 1574 evidence. Instead, the main objective has been the reproduction of transcripts of *some* of the lists or with the *number* of sites that they appear to indicate.

Since it is true that many of the ironworks are not named or located in precise terms it may be thought that the latter approach is more valid. However, the difficulties of interpretation inherent in the nature of the documents mean that confusion will be generated if numbers alone are considered without concern for their identity. Only by an attempt to relate the 1574 evidence to presently known sites and documentary evidence can an estimation of the number of sites working at that date, and the disclosure of the possibility of unknown sites awaiting discovery be made.

[1] W. Topley, *Geology of the Weald* (1875), p. 330.
[2] M. C. Delaney, *The Historical Geography of the Wealden Iron Industry* (1921).
[3] G. Sweeting, " Wealden Iron Ore and the History of the Industry," *Proceedings of the Geologists Association*, Vol. 55 (1944), pp. 1-20.
[4] *Victoria County History* (hereafter *V.C.H.*), *of Sussex*, Vol. 2 (1907), pp. 241-9.
[5] *V.C.H., of Kent*, Vol. 3 (1932), pp. 384-89.
[6] *V.C.H., of Surrey*, Vol. 2 (1907), pp. 263-276.
[7] E. Straker, *Wealden Iron* (1931).
[8] D. and G. Matthew, " Iron Furnaces in South Eastern England and English Ports and Landing Places, 1578," *English Historical Review*, Vol. 48 (1933), pp. 91-6.
[9] P.R.O. State Papers Domestic, SP 12/117, piece 39.
[10] E. Straker, " Wealden Ironworks in 1574," *Sussex Notes and Queries* (hereafter *S.N.Q.*), Vol. 7 (1938), pp. 97-103.

GENERAL PROBLEMS OF INTERPRETATION

From documents held in the Public Record Office and the British Museum it appears that there are seven separate lists[1] extant which relate to the year 1574 or thereabouts. Their dating in some cases has been uncertain. For convenience of discussion the lists have been given letters and Lists *a*, *e*, *f*, and *g*, which are composite in nature have been further divided so giving eleven lists thus:

At the Public Record Office (P.R.O.)	(a)	*	SP 12/95 f.48 piece 20. Dated 15th Feb., 1574.
	(b)	*	SP 12/95 f.51 piece 21. Dated 15th Feb., 1573/4.
	(c)	†	SP 12/95 f.128 piece 61. Dated 16th Mar., 1573/4.
	(d)		SP 12/95 f.175 piece 79. Dated 22nd Feb. ? (April 4th, 1574, in the Calendar of State Papers Domestic).
	(e)	*	SP 12/96 f.111, page 199. Dated May, 1574, in the Calendar of State Papers Domestic.
	(f)	*	SP 12/117 piece 39. Dated Oct. ?, 1577, in the Calendar of State Papers Domestic.
At the British Library (B.L.) or P.R.O.	(g)	*	Stowe Mss. 570 f.103. Not dated (B.L.).
	(h)	†	SP 12/95 f.49 piece 20. Dated 15th Feb., 1574 (P.R.O.).
	(i)	†	SP 12/96 f.113, page 204. Dated May, 1574, in the Calendar of State Papers Domestic (P.R.O.).
	(j)	†	SP 12/117 piece 39. Dated Oct. ?, 1577, in the Calendar of State Papers Domestic (P.R.O.).
	(k)	†	Stowe Mss. 570 f.103. Not dated (B.L.).

Lists marked thus * or thus † are approximately similar to other lists bearing the same symbol.

References in the present paper are to Lists *a*, *c*, and *d*, with references to similar lists being omitted and inferred only. In general, it is only when one of the similar copies differs from Lists *a* or *c* in some point of detail under discussion that they have been specifically cited.

Division of the lists into three types can be made on the basis of their content, form and order. Firstly, there are the lists, often entitled the " Declaration of Christopher Baker " (*a*, *b*, *e*, *f*, *g*) which give the names of owners under counties (presumably of their residence and not of the location of their ironworks). In some instances the names of occupiers are also given and for certain entries the location of the works, mostly in terms of the parish, but in some cases, more specifically e.g.: "A furnace called Marshall " or " Brugsell forge in Salehurst ". Less easy to identify are the references to sites within the Forests of St. Leonard's, Worth, Ashdown and Waterdown. Secondly, there are the Lists *c*, *h*, *i*, *j*, *k*. Lists *h*, *i*, *j*, and *k* follow immediately on from Lists *a*, *e*, *f*, and *g*, respectively, in the *State Papers Domestic* and *Stowe Manuscripts*, apparently written contemporaneously. They have been separated here as being distinct in form from List *a*, etc., and exist as a separate entity in the form of List *c*. These lists seem to consist of the names of the occupiers who might also have been the owners. References to ironworks are again related to parishes but also, more often, to the actual name of the works thus: " *Waldon* furnace ", " Priorie furnace ", " *Powley* " (Pounsley). Finally, there is List *d*, which, unlike the others, is a statement of some of the intricate owner/occupier relationships and partnerships which existed for some of the ironworks. It appears to be

[1] P.R.O. State Papers Domestic, SP 12/95, f.48, piece 20; f.51, piece 21; f.128, piece 61; f.175, piece 79; SP 12/96, f.111, page 199; SP 12/117, piece 39; and in the British Library, Stowe Mss. 570, f.103.

accurate and precise. References to the ironworks are only in terms of the parishes within which they lay, with a few exceptions where the actual names of the sites are given e.g. " Clipperham furnace ", " *Hamesel* furnace ". From the picture presented by earlier interpreters of the lists, it seems that this list was either unknown or not drawn upon by them. It is best used as a key to the understanding of ambiguous references in the other lists.

The interpretation of the lists is confronted with a number of other difficulties. Firstly, discrepancies occur between similar lists in that an entry in one may be omitted in another; the number of sites indicated by the reference may differ between lists; the type of site indicated, whether furnace or forge, may also differ. These may have been clerical errors made when the lists were drawn up. To this is added the possibility, that, though in most instances all the individual entries in a list are for separate sites, there are grounds for suspecting that some sites may be referred to twice in the same list, e.g. in List *a*: " The Queens Ma.tie one forge in St. Leonards in the handes of Roger Gratwick " and later in the same list " Roger Gratwick one forge in Ifeild als two forges in forrest of St. Leonards ".

Thirdly, there are the difficulties of exact identification and location of some sites due to the imprecision of the reference to large geographical areas such as " the parish " or " the Wealden Forest ". Finally, confusion and ambiguity are derived from the use of the abbreviation " *als* ". Its form is unvaried throughout the documents but in some instances it clearly means ' also ' as in: " Henrie Bowyer one forge in *Tursleye* als a double furnace at Newbridge " (*a*) or " Reynolds one furnace in Milplace als a forge at Brambleton " (*a*). Elsewhere it seems that ' *alias* ' is meant as in " Roger Whitfeild one forge in *Rowfraunt* als a forge at *Wathe* " (*a*), or "Arthur Milton one furnace in *Retherfeild* als a furnace called *Huggens* furnace . . ." (*a*). In other cases a decision over the meaning of " als ", is less easily made, and recourse to additional evidence gleaned from the lists and other contemporary documents is necessary. No single list is comprehensive and an assessment of the total number of ironworks has to be made by reference to all the lists.

TOPOGRAPHICAL INTERPRETATIONS

The interpretation of the lists as they relate to the western Weald presents two special difficulties. Firstly, the preamble to List *a* refers to " a new furnace sett upp in *Haselmoore* by my L. Montague wch as yet hathe never wrought and whether they shall blow sowes for Iron or ordenance I know not". The identification of the ironworks referred to here is problematical since as yet there is no positive proof that a furnace site existed within the parish of Haslemere. The nearest contemporary furnace was that of Imbhams which, although it lay within the parish of Chiddingfold, was perhaps near enough to the boundary with Haslemere to have been assigned to the latter parish. The fact that Imbhams furnace was set up by Lord Montague in 1570[1] strengthens the conjecture that this site was meant by the 1574 reference. Straker suggested this possibility[2] but if it is accepted that the furnace was set up in 1570, could it be feasible that it had still " never wrought " in 1574? Another possible suggestion is that Shottermill forge in Haslemere was intended, the word ' furnace ' being an error. The direct reference to the blowing of ' sowes ' would seem to be against this argument.

[1] E. Straker, op. cit., 1931, p. 420, cites as his source for this information a publication entitled " Bygone Haslemere," p. 151, although the present author has been unable to trace this source.

[2] E. Straker, op. cit., 1931, p. 421.

Secondly, references to the ironworks of the western Weald of Sussex, present some other difficulties. They take the following form: " The late Erle of Northumberland one forge and one furnace in Petworthe greate parke in the handes of Mr. Blackwell " (*a*, *b*, *e*, *f*, *g*) or " Mrs. Blackwell, a forge and a furnace in Northchappell " (*h*, *c*) or " William Walpole having the occupying of a furnes and a forge in parishe of Petworthe belonging to one Margaret Blacwell of London late wife to William Blacwell " (*d*). Since Petworth Park lay for the most part within the parish of North Chapel[1] it seems that the different forms of reference relate to the same two sites. Straker correctly identified the furnace as being Frith furnace[2] and although he mentioned the forge he failed to assign a location to it. The forge, as Wyndham has shown[3] was Mitchellpark forge, also situated within Petworth Park. Further, Straker interpreted the entries for Shillinglee, in the parish of Kirdford on the basis of these entries: " Thomas Smithe of Petworthe one forge and one furnace in shillinglee als a double furnace neere Northe Chappell " (*a*), also, " Thomas Smyth of Petworth i forge and i furnace in Shillinglee " (*b*), " Thomas Smythe a Duble furnace nere Northechappell " (*c*), " Thomas Smith of Petworthe a furnace in Shilinglee parrk in the ph. of *Cherford;* a furnace; occupying under his father a forge in *Halfield* wch works belongs to Mr. Wm. Boyer of Hampshire. He has also in *Cherford* a forge a building in his owne ground which as yet has not wrought ". (*d*) as indicating Shillinglee furnace, Mitchellpark forge, and Frith furnace.[4] The furnace was, undoubtedly, Shillinglee, but Straker transcribed " als " as ' also ' and so had to find a further site to fit the reference, writing thus: " the double furnace may have been Mrs. Blackwell's at Frith ".[5] It seems here that " als " should be interpreted as ' alias ' and therefore indicating that the double furnace was in fact that of Shillinglee. As earlier stated the identification of Thomas Smith's forge in Shillinglee (*a*), in Kirdford, as stated in (*d*), with Mitchellpark forge by Straker is no longer tenable. This leaves the problem of finding a forge site to fit the description of a forge in Shillinglee Park or Kirdford that belonged to Thomas Smith. For this the site of Wassell forge seems the most likely as this was worked by his son, John Smith, after Thomas Smith's death in 1579,[6] and was situated in the parish of Kirdford. Whether it was within the park of Shillinglee will remain uncertain until the boundaries of the latter in 1574 are identified.

The location of the forge owned by Mr. William Boyer of Hampshire and occupied by Thomas Smith under his father in Halfield is uncertain. The names of William and Henry Bowyer were associated with Tilgate furnace and Tinsley forge, Worth, in 1588/9, 1607 and 1608[7] and a Simon Bowyer worked Burningfold furnace and forge in Dunsfold parish about 1580.[8] There seems to be little possibility of error in the recording of the names since in List *d*,

[1] H. A. Wyndham, 4th Baron Leconfield, *Petworth Manor in the Seventeenth Century*, 1954, map XV.

[2] E. Straker, op. cit., 1931, p. 428.

[3] H. A. Wyndham, op. cit., p. 65 and p. 93.

[4] E. Straker, op. cit., 1931, p. 429.

[5] E. Straker, op. cit., 1931, p. 429.

[6] G. H. Kenyon, " Petworth Town and Trades, 1610-1760," *S.A.C.*, Vol. 96 (1958), p. 45. Also see H. A. Wyndham, op. cit., p. 94, who indicated that it had only recently been set up. This accords with the 1574 evidence that it " as yet has not wrought " (d).

[7] In 1588/9, one Henry Boyer died on 8th September, 31 Eliz., his son and heir also being called Henry. The deed referred to two iron mills in Tinsley and Tilgate, P.R.O. *Inquisitiones Post Mortem*, 225/60. On 18th May, 1607, a deed of confirmation was made by Sir Thomas Henley of Courshorne in Cranbrook, Kent, to William Bowyer of lands including an ironwork called Tynsley, in Worth (West Sussex Record Office, Lytton Ms. 125). A further deed of 1st March, 5 Jas. I (1608) confirmed that Sir Henry Bowyer had been seised of an ironwork called Tynsley and that they were to pass to his heir or if none, to William Bowyer (Guildford Museum and Muniment Room, *Loseley Mss.*, 1084/19).

[8] E. Straker, op. cit., 1931, p. 422.

the only reference to Mr. William Boyer of Hampshire, the entry immediately following is to Henry Bowyer thus: " Henry Bowyer getn. a forge in Tinsley. a furnace in Strudgate parke beside *Moore forrest.* Has a forge and fornace in Ashedowne." Further, in the list of those warned to appear Henry Bower is described as " of Tynsley ". As William Boyer was described as " of Hampshire " and as the other works occupied by Smith were in the western Weald, it is here conjectured that the forge in ' *Halfield* ' was also here, the name perhaps a mispelling for Alfold. No forge sites are at present known in this area.

The 1574 evidence for sites within Forests makes onerous any attempt to link references to an exact location. For Worth Forest the lists contain the entry: " Henry Bowyer one furnace in *Moore foreste* " (*a*, *b*). According to Straker, Tilgate furnace may have been indicated.[1] It seems more likely, however, that Strudgate furnace was implied for in List *d* is: " Henry Bowyer, getn. a forge in Tinsley, a furnace in Strudgate parke beside *Moore forrest.*" Straker overlooked this possibility despite his quotation from an indenture of 1584 that Strudgate furnace belonged to Lord Abergavenny and lay within " Strudgate Park or Walk, sometime parcel of the Forest of Worth ".[2] The other mention of Worth Forest reads: " The L. Aburgaveny, the Earles of Darby and Surrey, ii forges, i furnace in *Mooresforrest* in the handes of Ersfelde " (*b*, *e*, *f*, *g*). Two forges only are mentioned in List *a*. In the absence of contrary evidence Straker's assumption that this furnace, occupied by Eversfield in Worth Forest, was in fact Worth furnace,[3] since he held land here in 1580 and 1582, must be accepted. The 1574 lists, however, state that the works were held of the Lord Abergavenny, whereas Worth furnace was always associated with the Duke of Norfolk. Unless, after Norfolk's execution in 1572, Howard, third Duke of Norfolk, had passed the works to Lord Abergavenny by 1574 and they later passed back into Norfolk hands, the possibility that a separate site from Worth furnace is indicated, cannot be disregarded. Straker also suggested this possibility to explain the widely divergent rents paid for ' Worth Furnace ' between 1550 and 1580.[4] Identification of Eversfield's two forges occupied under Lord Abergavenny, the Earls of Derby and Surrey is very uncertain. Without supporting evidence, it may be conjectured that one of the forges may have been Blackwater Green forge, as suggested by Straker.[5] Of the other, Straker made no mention. Rowfant Supra may have been meant; this site was working in 1653 but ruined by 1664.

The recognition of sites mentioned in the 1574 lists for Ashdown Forest must still remain, for the most part, conjectural. In List *a* it is stated: " Henrie Bowyer one forge in *Turseleye* als a double furnace at Newbridge." The same list and also (*b*, *d*) has " The Queen's Ma.tie one forge and one furnace in Ashedowne in the handes of Henrie Bowyer ". The furnace mentioned in the latter instance may have been that referred to earlier, Newbridge. But whether Bowyer was holding Newbridge as his own property or working it by lease from the Queen is uncertain. It may be significant that in List *b* of " The names of owners of the Ironworkes " the reference to Henry Bowyer holding Newbridge furnace is omitted although he is down for ' Tynsley ' forge. If Newbridge is not the furnace indicated, then, in the absence of documentary evidence, Straker's suggestion that Steel furnace[6] or Crowborough Warren

[1] E. Straker, op. cit., 1931, p. 465.
[2] E. Straker, op cit., 1931, p. 407.
[3] E. Straker, op. cit., 1931, p. 464.
[4] E. Straker, op. cit., 1931, p. 464.
[5] E. Straker, op. cit., 1931, p. 466.
[6] E. Straker, op. cit., 1931, p. 247.

furnace[1] may have been meant, can only be repeated. Perhaps even Stumlet furnace was implied. The forge may have been that at Steel, Pippingford furnace and forge.

The entries for the forest of St. Leonards are slightly less confused. Roger Gratwick occupied two forges in the Forest, of the Queen (*a*, *c*, *d*, *g;* only one forge is mentioned as being worked by Gratwick for the Queen in lists *a*, *b*, probably in error) which were the Upper and Lower Forges of St. Leonards. In Lists *a* and *b* Gratwick is described as holding one forge in *Ilfield*, but in Lists *d* and *g* he is down for one furnace in *Ilfield*. As Straker suggested both sites may be indicated[2] but the only corroborative information is from a recently discovered Proceeding of the Court of Requests[3] which shows that Bewbush furnace (also called Ifield Furnace) was held by Thomas Ilman of Ifield by deed dated 16th February, 1568/9, who subsequently mortgaged the property to Roger Gratwicke some time in the 1570s.

In his interpretation of references to the parish of Fletching, Straker seems to have generated some confusion. The lists record: " The l. of Bucherst i fg. in Fletchinge in the handes of Mr. Leeche " (*b*)
" The l. of Bucherst i forge in Shefelde in the h. of Mr. Relf " (*b*, *c*)
" The l. of Buckhurste one forge in ffleeching in ye hande of Mr. Relfe " (*a*)
" The l. of Buckherst l forge in ffletching in the handes of Mr. Relfe al. a forge at Sheffelde " (*g*).
Straker stated " in one only of the 1574 lists *Shefild* is named as belonging to Lord Buckhurst[4] and in connection with Fletching forge.[5] In 1574 this forge belonged to ' the lord of Buckhurst ', in one list it is stated to be worked by Leeche, in another by Rolfe. The latter probably a mis-copy, as in the next entry, also for Lord Buckhurst, William Rolfe was working Heathfield furnace. . . ." Here Straker was in error since this was not the next entry and Lord Buckhurst's name is not associated with the parish of Heathfield or William Relfe's name. In List *d* it is clearly stated " William Relfe occ. of his owne one furnace called *herfeild* in the ph. of Hethfeld ". Comparing the entries: " The l. of Bucherst i forge in Fletchinge in the h. of Mr. Leeche (*b*) The l. of Bucherst i forge in Shefelde in the h. of Mr. Relf (*b*) with those in the Stowe Ms. (*g*)
" The l. Buckherst l forge in Fletching in the handes of Mr. Leeche al a forge at Sheffelde " (*g*)
it is obvious that " al " here means ' also ' and the fact that both Leech and Relf are listed as occupying forges of Lord Buckhurst in Fletching is explained, not as an error as Straker suggested,[6] but by concluding that both Sheffield forge and Fletching forge were indicated. Both sites lay within the parish of Fletching.

For Horsted Keynes it is recorded that Anthony Morley held a furnace called Horsted Keynes and a forge at Freshfield (*a*, *b*, *c*, *d*) and from *d* it is learned that he was " owner of one forge in Freshefeild and farmer to a furnace in horsted ". The lists also relate that one Mr. Barrington held a forge and furnace in Horsted Keynes (*a*, *b*). Straker believed that as both Barrington and Morley gave bonds for Horsted Keynes they must have both held an interest in the works.[7] It seems likely that the name Barrington can be identified with one

[1] E. Straker, op. cit., 1931, p. 252.
[2] E. Straker, op. cit., 1931, pp. 458-460.
[3] P.R.O. Court of Requests, 226/4.
[4] E. Straker, op. cit., 1931, p. 414.
[5] E. Straker, op. cit., 1931, p. 415.
[6] E. Straker, op. cit., 1931, p. 415.
[7] E. Straker, op. cit., 1931, p. 410.

Drewe Barantyne of Broadhurste, Horsted Keynes, who was holding the manors of Horsted Keynes and Broadhurst in 1565.[1] The relationship is thus made clear: Barrington was the owner of the furnace and Morley the occupier. Barrington's forge of 1574 can be identified with Freshfield forge which was held by Drewe Barantyne in 1564 and 1565.[2] Straker suggested that Freshfield forge was the site perhaps belonging to Anthony Morley in 1574.[3] This seems improbable, and the possibility that Morley was occupying the forge under a lease from Barrington is not admissible in the light of the evidence contained in list *d* which clearly stated that Morley was " owner of one forge in Freshfeild " as opposed to an occupier. Unless this is an error, it appears that another, as yet undiscovered, forge in the manor of Freshfield needs to be traced. Straker omitted to mention this entry which showed Barrington to be holding a forge as well as the furnace.

For Slaugham and Cuckfield the lists accredit " Mr. Challenor and Mr. Covert one forge and one furnace in Slaugham " (*a*, *b*), " Ninian Challoner a furnace in Blackfeild and a forge at Gasbins Bridge " (*b*, *c*) and " Mr. Challoner one forge at Ardingley " (*a*, *b*). From *d* it is noted that Ninian Challoner farmed one forge in Ardingley from " Mr. France. Challynor " thus the conjecture made by Col. F. W. T. Attree,[4] and referred to by Straker,[5] that the Challoner indicated as occupier of the forge was Francis, is disproved. Straker correctly associated Ninian Challoner and Mr. Covert with Slaugham furnace,[6] but neglected to mention the forge that was also recorded. The evidence from *d* that " Nynion Challynor gent. frameth the one half of a forge and a furnace of Richard Covert being in Cockfeld the other half being his owne " gives rise to a number of tentative explanations. The partnership may have been in Blackfield furnace and Holmsted Bridge forge, which we know to have been owned by Challoner, with a further partnership in a furnace and forge in Slaugham, the forge being as yet undiscovered.[7] Alternatively, the partnership may have been solely in Slaugham furnace in Slaugham, also held in partnership. The forge said to be in Slaugham may have been an error for Holmsted Bridge forge in Cuckfield. Blackfold furnace, Cuckfield completing the reference to the partnership in a furnace and forge with a further error in the reference to a partnership in a furnace in Cuckfield the three sites only being needed: or that the partnership was in Slaugham furnace and an unknown forge in that parish and also in Cuckfield furnace and forge in Cuckfield parish, with Challoner owning of his own Holmsted Bridge forge and Blackfield furnace. The information given by Straker[8] and quoted also by Schubert[9] that by 1576 Sir Walter Covert owned a furnace at Cuckfield (supposed by Straker to have been Cuckfield furnace and forge) fails to clarify the situation since Holmsted forge and Blackfold furnace, both within Cuckfield may have equally been indicated and further that the owner in the 1574 list is given as *Richard* Covert.

The entry, " John Blacket a furnace at Hodly " (*c*, *h*) according to Straker[10] referred to Gravetye furnace in West Hoathly. He gave no information to support this claim and the next mention of the site was not until 1761. In the absence of information to the contrary,

[1] East Sussex Record Office (hereafter E.S.R.O.), Glynde Ms. 2048.
[2] E.S.R.O., Glynde Mss. 2048, 2046.
[3] E. Straker, op. cit., 1931, p. 411.
[4] F. W. T. Attree, " Notes on the Family of Chaloner of Cuckfield," *S.A.C.*, Vol. 44 (1901), p. 130.
[5] E. Straker, op. cit., 1931, p. 409.
[6] E. Straker, op. cit., 1931, p. 404.
[7] E. Straker, op. cit., 1931, p. 404, noted that place name evidence and slag only indicate the presence of a furnace at this site in Slaugham.
[8] E. Straker, op. cit., 1931, p. 416.
[9] H. R. Schubert, *History of the British Iron and Steel Industry*, 1955, p. 372.
[10] E. Straker, op. cit., 1931, p. 236.

this identification of the name has to be accepted. It should, however, be noted that East Hoathly could equally well have been meant or even the *Hoadley* or *Hothely* which Straker mentions for Lamberhurst.[1]

Concerning Maresfield parish, Straker wrote of Maresfield Powder Mills furnace, " I consider this site as being that held by John Faukenor of Waldern at Marsfield in 1574 "[2] in distinction to the references to Hogge's furnace and forge in Maresfield. Strength is given to this assumption by information contained in List *d*; " John Farroner (Faukenor) farmor to one forge and a furnace of ye L. Gages during the life and after to John Gage her son situated in the ph. of Marfeile ". That this site was connected with the Gage family is shown by a counterpart of a lease, by Edward Gage, of Maresfield Forge, dated 20th August, 1589.[3] Straker's reasons for supposing the reference; " Raphe Hogge a furnace and a forge called Marshall " (*c*) (in Lists *a*, *b*, referred to as holding a furnace only) to have indicated Old Forge furnace and forge[4] are acceptable in that positive evidence to the contrary is not available. However, from a suit in the Court of Requests[5] it appears that a David Middleton built a Marshalls furnace, between 1614 and 1619, at his own expense, after entering into a partnership with one William Crowe. This raises questions about the exact location and identification of the sites referred to in these proceedings as Marshalls furnace and Marshalls forge and their relationship to those of 1574.

Straker made no mention of " Mr. Brian Hogge his furnace in the pishe of Bucksteed or in Franckfeild ph. . . ." one of the five mills " employed to no other use but to the makeing of Ordnance " as related in the preamble to the lists. Nowhere else does this name occur in any of the lists nor to date, in other documents concerned with the iron industry. It may be that Ralphe Hogge is meant, as Mr. Brian Hogge is listed immediately below as one of the receivers and sellers of ordnance, and in 1574 Ralphe Hogge held the position of the Queen's " gonstone maker and gonfounder ".[6] From a further Calendar of the State Papers Domestic it is learned that by 1568 he had built two furnaces.[7] Old Forge furnace may have been one of these, the other may have been Oldlands, which lay in Buxted, the latter site being associated with his name.[8]

Despite the evidence of documents concerning Mayfield that have come to light since Straker published his interpretations of the 1574 lists in 1931 and 1938, the picture of iron-working in the parish for this date is still vague. Arthur Middleton's furnace lying in Mayfield called " Huggens " is unmistakably Huggets furnace. Equally explicit is " Thomas Ellis farmethe one forge of Sir John Pelham lying in Mayfield called Bibleham forge " (*d*, *c*). The entry, " Sr. Tho. Gresham a furnace in Mayfeild " (*a*, *b*, *c*, *e*), as Straker suggested[9] from evidence contained in E. M. Bell-Irving's book " Mayfield " would appear to refer to Mayfield furnace. The remaining entries for Mayfield:

Isteed a forge in Mayfeild (*a*, *b*, *c*, *d*)
Richard Crowe a forge at Mayfilde (*c*)

[1] E. Straker, op. cit., 1931, pp. 269-270.
[2] E. Straker, op. cit., 1931, p. 400.
[3] E.S.R.O., Gage Ms., Box 13, no. 45.
[4] E. Straker, op. cit., 1931, p. 398.
[5] P.R.O. Court of Requests, 319/23.
[6] P.R.O. Calendar of State Papers Domestic, Eliz. 1, Vol. 4 (1566-1569), p. 260 and State Papers Domestic, Eliz. 1, Vol. 95, no. 16.
[7] P.R.O. Calendar of State Papers Domestic, Eliz. 1, Vol. 4 (1566-1569), p. 260.
[8] E. Straker, op. cit., 1931, p. 394.
[9] E. Straker, op. cit., 1931, p. 292.

Richard Greene a forge at Mayfeld (*h*)
John Baker one furnace in Mayfeld (*d*) are less certain. Straker wrote: " the 1574 lists, . . . mention two Mayfield forges worked by Isted and by Richard Greene. Hawksden may be one of these."[1] Hawksden was Glynde property and from the probate of the will of Thomas Morley of Glynde,[2] dated 14th July, 1559 (the will was made on 9th January, 1559) it is learned that he bequeathed to his daughter, Anne, £40 upon her marriage to be levied from a fourth part of his woods, iron mill and furnace at Mayfield. From a lease in the same collection[3] Thomas Isted of Hastings was taking land near to the forge held by him in Mayfield. The lease was dated 17th May, 1590. The first indication of the possible location of these sites is from a further lease dated 13th January, 1594, of lands called Barnes and Hawksden Park in Mayfield to Abraham Langham of Wadhurst from Harbert Morley of Glynde with reservations to Morley, including " an iron mill or furnace " on the premises.[4] By 1599 this is described as Hawksden *furnace* and forge.[5] That the ironworks in Hawksden Park has been at times both a furnace and a forge seems to be indicated by these references and the fact that blast furnace slag has been incorporated into the bay. Although the bay has been reconstructed several times in the history of the works[6] it is most probable that the furnace slag would have been obtained from where it was dumped during the course of smelting. If Isted's site on or near Morley's land in 1590 is identical with this site of Hawksden furnace and forge then it seems possible that Hawksden may have been the forge belonging to the Isted of the 1574 list. Neither in this list nor the deed of 1590[7] is mentioned the existence of a furnace with the forge and it could be that Isted's site was not Hawksden. Indeed since the first mention of a forge for Hawksden was in 1599 it may have been solely a furnace before this date. From the 1574 List *d* we are told that Isted occupied his *own* forge—" Thomas Isted occ. of his owne one forge in Mayfeld "—in distinction to " farming " a forge. From the 1590 deed Isted still appears to be owning his unnamed forge, yet the 1594 deed for the " iron mill or furnace on Hawkesden Parke and Barnes " appears from the reservations in the lease to be worked by Morley's own workmen.

Straker made no mention of the reference to a John Baker working a furnace in Mayfield. If Hawksden was a furnace, at least before 1599, could this have belonged to Baker? Old Mill furnace in Mayfield is a possible location for this site, although Straker stated that it was " not mentioned in 1574; it was most likely founded later ".[8] He did however make reference to a deed in the Drake Collection, dated 16th December, 1618, indicating that John Baker owned Old Mill furnace at that time and for some time before, and that it was leased to John Fuller and Richard Maynard, deceased, and others. From a proceeding in the Court of Chancery dated 2nd May, 1561, information is gained of a suit concerning seven tons of rough iron or sows, at five marks per ton, which were taken from John Relfe's place within Mayfield called the Olde Myll by one Agnes Maynard of Mayfield, widow.[9] The quantity of sow iron involved and the name of John Relfe (mentioned in the lists of 1574 as an owner of a furnace in Heathfield) could indicate that the furnace was already established at Old Mill. If so, it may at some time between 1561 and 1574 have passed into the occupation of the Bakers. Again, Agnes Maynard of the 1561 document may have been related to the deceased Richard

[1] E. Straker, op. cit., 1931, p. 294.
[2] E.S.R.O., Glynde Ms. 184.
[3] E.S.R.O., Glynde Ms. 1224.
[4] E.S.R.O., Glynde Ms. 1225.
[5] E.S.R.O., Glynde Mss. 126, 127.
[6] E.S.R.O., Glynde Ms. 2818.
[7] E.S.R.O., Glynde Ms. 1224.
[8] E. Straker, op. cit., 1931, p. 285.
[9] P.R.O. Chancery Proceedings, 150/81.

Maynard who was mentioned in 1618 as holding an interest in the furnace. It is unfortunate that further information about the nature of the dispute between Relfe and Agnes Maynard cannot be gained from the Chancery documents. If this assumption should be proved to be in error, then evidence exists to suggest another possible location for the furnace in Mayfield held by John Baker in 1574.

Straker,[1] citing Lower[2] as his source, stated that Coushopley furnace on the borders of Mayfield and Wadhurst was not recorded in the 1574 lists and indicated as his first reference for its working, the making of guns and shot in 1664. From documents of the Chancery, it is apparent that the furnace at Coushopley was working as early as 1546 or 1547.[3] From this document it is learned that a *Curtissley* furnace (other variants of the name were Coushossley, Cushaplea, Cursuplea, Corsupley, Curshuple, Cursiplott, Cursey Platt) was held by John Berham of Wadhurst (probably a member of the Barham family) for six and a half years of one John Alyyf from 29th January, 1547, and Berham subsequently made over his interest in the furnace to John Baker of Wydyham (Withyham) in consideration that the latter should deliver to John Berham at the furnace twelve tons of sows yearly for the use of Berham at his forges of Brookland and Verredge. From the details of the case it seems that the suit was being made some time after 1551/1552. It may have been possible that John Baker continued to work the furnace at the time of the 1574 survey.

The sites of the forges of Richard Crow (*c*) and of Richard Green (*h*) (described as of Winchelsey from the list of the ironmasters warned to appear) in Mayfield are not known at present. It may be that Green is an alias or a mis-spelling for Crow, since the position of the names in the two lists (*h* and *c*) which are approximately identical, is more or less the same. No proof can be offered of this. A Thomas Green of Winchelsey did however live at this time and was connected with the delivery of *bar* iron to Bodiam Bridge, head of navigation on the Rother.[4] The as yet undocumented site of Moat Mill forge may have been one site. The forge place name immediately below Mayfield furnace probably indicates that a forge existed here at one time even though there are now no traces of it remaining in the field. Similarly the name Hammer Wood at Wellbrook may relate to a former forge site. Straker made no reference to the forge belonging to Richard Crow.

To be concluded

[1] E. Straker, op. cit., 1931, p. 288.
[2] M. A. Lower, art. cit., pp. 169-220.
[3] P.R.O. Early Chancery Proceedings, 1202/14.
[4] P.R.O. Court of Requests, 211/19. One Thomas Green of Winchelsey was to have delivered six tons of *bar* iron to John Love of Winchelsea at Bodiam Bridge, by St. James's Day, 25th July, 1575. Bodiam Bridge, one time head of navigation on the River Rother, served as a focal outlet for iron coming from parts of the Rother basin. Green may have been a forgemaster or merely a carrier of iron.

WILLIAM BULLAKER, 1531-1608, GRAMMARIAN AND PHONETICIAN. A BIOGRAPHICAL STUDY

by Timothy J. McCann, B.A.

William Bullaker is important as the author of the first English grammar, and as a tireless advocate of spelling reform in a number of works written in his own phonetic system at the end of the sixteenth century. His literary output has been much studied recently, notably by the School of English at the University of Leeds in the 1960s. This paper is an attempt at writing a biography of Bullaker based on the evidence of his own writings and surviving documentary material. Four main sources have been used. The evidence in the Petworth inclosure dispute proves for the first time that Bullaker received his education in Petworth, and identifies the source of his spelling and pronunciation. The election dispute in Chichester in 1586 shows Bullaker as one of the leaders of the radical group in the city prepared to oppose the Mayor and Corporation. Bullaker's poems and introductions to his own works give information about his military service, his study of civil law and his educational interests, as well as giving glimpses of his personal delight in nature. Finally, the harassment that he and his family received on account of their persistent catholic recusancy, enables a fairly detailed account of the whereabouts and movements of the Bullaker family to be constructed from the papers of the ecclesiastical courts in Chichester.

William Bullaker was the second son of William Bolokeherde of Highden, a hamlet in the parish of Washington in Sussex, and Elizabeth Bowyer of Broadwater. His birthplace has not yet been established, but he was probably born in 1531. An entry in the Deposition Book of the Consistory Court of Chichester dated 22 July 1578, records that, "Willhelmus Bullaker civitatis Cicestrensis generosus aetatis xlvij annorum aut circiter liber condicionis testis."[1] In his *Pamphlet for Grammar,* Bullaker wrote that in 1586, "naerer steps of thre scor yerz, than fifty, my fet fynd,"[2] and in his deposition in the Petworth enclosure dispute in 1596, he claimed to be sixty four. B. Danielsson and R. C. Alston, who, in their introduction to the facsimile reprint of Bullaker's, *A Short Introduction or Guiding,* revealed that the Bullakers were a Sussex family, point out that the family "is localised in the fifteenth sixteenth and seventeenth centuries in two parts of England only: Sussex and Eastern Hampshire. We have not succeeded in finding a single late Middle English or Modern English reference to the name outside these areas, despite an exhaustive search of printed and unprinted sources in Tudor times and later."[3]

William Bullaker was the second of three children. His elder brother Peter was probably born in 1528,[4] and later became Surveyor of the King's Lands and Revenues in the County of Sussex.[5] His sister Catherine married Anthony Young, the head of a well to do family from the parish of Ambersham. The evidence of family wills and Inquisitions Post Mortem shows that the family possessed extensive holdings of land throughout the county, and both William and Peter Bullaker, and later William's son John, are styled 'gentelman,' when referred to in documents.

Danielsson and Alston suggest that William Bullaker was probably educated at the Prebendal School in Chichester, where John Holt had composed the first Latin Grammar in English, but Bullaker himself claims to have been at school in Petworth in the evidence he gave in the Petworth inclosure dispute.

At some time before 1592, the Earl of Northumberland enclosed part of the Cunygre or Coney garth Park at Petworth. The tenants of the Earl's manor at Petworth held common rights over the area enclosed, and the Earl was obliged by custom to give them equivalent rights over another area. The tenants were dissatisfied with the arrangements made for the enclosure and giving them equivalent common rights, and brought a case in Chancery. This was not the first time the tenants of Petworth had had trouble of this sort, for in "aboute the second yeere of King Edward the Sixte" the then Earl had enclosed some common ground, and the tenants had torn down the palings.

In the later case, depositions were taken from a number of witnesses for both sides, mostly from old tenants or long-time inhabitants of the area. Among those who deposed on the Earl's behalf, on 20 April 1596, was William Bullaker. He was described in the list of witnesses as one of those who "be no tenants but may passe as good witnesses."[6] Bullaker revealed that he had left Petworth by about 1549, saying "he then lyvinge about 10 myles from Petworth heard by reports of others that in the tyme of the commotion about the second yeere of King Edward the Sixte" about the previous dispute over enclosure. He deposed that "he hath bene seldome in the towne of Petworth these forty yeares or more," and so was presumably chosen to depose as a reliable and respectable witness to the status of the Cunygre Park, and the rights exercised over it in years past. Bullaker carried on to say that "touchinge the parke called the Cunygree he hathe knowne it bothe in his childhood going to schoole in Petworth and some tyme since, but hath not beene in the said parke thrice these fortie yeares or more."[7] In an earlier deposition of 14 April 1592, he was more specific about his education, saying that "he hathe knowne the said Mannour of Petworth ever sythence his child hoode for that he was brought upp and went to schoole longe tyme in Petworthe."[8]

His close association with Petworth is confirmed by the number of his relations who held positions of influence in the town. The Steward of the manorial court was John Bowyer, a kinsman on his mothers side, and he was later succeeded by his son and William Bullaker's cousin, William Bowyer. Peter Bullaker when Deputy Surveyor under Anthony Stringer worked in the town. Anthony Young, whose family had come out of Yorkshire into Sussex with the Earl of Northumberland in the time of King Edward IV, married Catherine Bullaker, and when he died in 1560, the Bullaker family inherited the Manors of Ambersham and Topley with appurtenances and other lands.[9]

In his poem, the *Pamphlet for Grammar,* Bullaker revealed his love of country life and rural pursuits, presumably nurtured during his formative years on the Petworth Estate—

> When tym and leizur gau me laeu,
> or fre'nd did it reqyr,
> I did deliht in hawk or hound,
> mor at my fre'nds dezyr.
>
> Than al-toogether for plaezur:
> in tilag had I skil,
> the yong too bre'd, the old to fe'd,
> with other things not il.[10]

In his *Booke at Large,* William Bullaker revealed that he had been teaching in the 1550s. He wrote in the preface to the book, that he "found the lacke of the like, by handling of learners, whose memories and diligence I found very apt, but brought into a labyrinthus (in respect of the playne and perfect way to reade and write English speach, though I used all meanes to instruct them more easily) . . . in true Ortography both the eye, the voyce, and the eare consent most perfectly, without any let, doubt or maze. Which want of concord in the eye, voice and eare, I did perceyue almost thirtie yeares past, by the very voyce of children, who guided by the eye with the letter, and giuing voyce according to the name thereof, as they were taught to name letters, yeelded to the care of the hearer a cleane contrary sound to the word looked for, . . . Heerby grewe quarels in the teacher, and lothsomnesse in the learner, and great payne to both: and the conclusion was, that both teacher and learner must go by rote."[11]

He continued to teach, and the Act Books of the peculiar jurisdiction of the Dean of Chichester record that William Bullaker was twice presented to the court for teaching without a licence from the ordinary.[12] The presentments were dated the 5 October 1582,[13] and the 30 June 1586.[14]

In the *Pamphlet for Grammar,* William Bullaker also revealed that he had been a "student of martiall affaires," and that he had twice been abroad on military service—

Nor yet, for faintnes, of corag,
sith, wiling mynd me laedd,
twyc, intoo foren foz contry,
under the ensyn spredd,

Seruing twoo knihts, riht-worship-ful,
both sodhorz of renown,
riht-skil-ful in, warly affairz,
too seru in feld, or town

With whoom I vzd such diligenc,
that they putt trust in me,
mor than in som, of elder herz,
and hiher of degree:

I serud also, in garizon,
with capten Turnor too,
too get knowledg, in martial faets,
the muster-books can shew:

In al which tymz I stidied then,
ye sinc, az ernestly,
the sodhorz art, az Grammar-rul,
and could say: now for me:

If credit waer ge'u'n vntoo me:
a tool in stor-hows hydd,
may seru az wel az other doo,
when ther iz tym and ne'd.[15]

The marginal notes to the poem—"Soldier vnder Sir Rich. Wingfeeld in Queene Maries time.—Under Sir Ad. Poinings at new Hauen.—and—Under capten Turnor in garison," have been identified by Danielsson and Alston as referring to the English campaign in France in 1557 and 1558; the occupation of Le Havre in September 1562 under Sir Adrian Poynings and the Earl of Warwick; and, either Captain Richard Turnor, who was water-bailiff of Brill under Sir Thomas Cecil in 1585, or, more likely, Captain Edward Turnour, who was in charge of the fortifications at Portsmouth in 1559.[16]

William Bullaker also reveals other biographical information in later stanzas of the same poem. He mentions that he had been a student of civil law—

> My mynd waz bent in al my lyf,
> too wish my contryz wael,
> long tym studying the lawz of it,
> that c'iu'illy doo dael,
>
> Until I saw throwh colord riht,
> good conscienc baer smal sway,
> and raezn ranged not in rank,
> az I had known the day.[17]

Bullaker had put his knowledge of law to practice in the manorial court at Petworth. In his deposition in the enclosure dispute, he mentioned that "he was clerke to one Peter Bullaker brother to him this deponant who was then Surveyor of the Kinges lands and revenews within the said countye of Sussex," and that he was "present with the said deputy surveyor at dyvers courtes holden at the said Mannour."[18] In the same deposition, he stated that he had a detailed knowledge of the history and customs of the Petworth Manor, a claim which is amply born out by his detailed testimony, and he mentioned that he had read all the Court Rolls, and had made a survey of all things that belonged to the Surveyor's office.

William Bullaker's first known association with Chichester was on the 30 January 1570/1, when he married Elizabeth Diggons in the north transept of Chichester Cathedral,[19] where the parish of St. Peter the Great or the Subdeanery held their services until the present church was built in 1848. His wife was the daughter of John Diggons, a citizen and alderman of Chichester, who had been Mayor of the city in 1548, 1556 and 1567.[20] From the day of their marriage until 1585, the Bullakers lived in a house, which is still standing,[21] abutting on the city walls on the west side of South Street in Chichester, and which John Diggons had provided for them.

After he settled in Chichester, William Bullaker played his part in the administrative life of the city. The primary Visitation of Dean Martin Culpepper in March and April of 1578 notes that William Bullaker and John Osborne were churchwardens in the parish of St. Andrew in Chichester.[22] The Registers of Churchwardens Presentments for 1579 record that "John Osborne hath bene churchwarden almost v yeres, William Bullokar almost iiij yeres and yacomptes offered by Osborne hath bene deferred for a long time, but Bullokar ys not accompable".[23] A list of those summoned to the Guildhall in Chichester in 1577 by a writ of venire facias to inquire into the three articles, which was found among the city Quarter Sessions records, includes William Bullaker's name, but a marginal note adds that he did not come.[24] A further list, dated 1577/8, which also includes his name, bears a marginal note adding that he was pardoned from attending.[25] The roll for 1585 records that William Bullaker was head constable of his ward.[26]

In 1586, William Bullaker played an active part in the proceedings of the disputed election for the representation of the city of Chichester. At this date, Chichester was still governed by the medieval merchant gilds. The custom at the election of the two candidates who were to represent the city in Parliament, was that the gild had the right of nomination and the commoners of election, and, when there seemed to be no prospect of a contest, the Mayor and his fellow gildsmen had been accustomed not only to elect their own man, but also to nominate the commoners representative. Since 1572, Dr. Valentine Dale, a Master of Requests, had been the senior burgess and the choice of the merchant gilds, and Richard Lewkenor, the Recorder of Chichester, the commoners choice.

James Colbrand, a Chichester gentleman and the Captain of the city's trained bands, who had previously been a Member of Parliament for Ludgershall in Wiltshire, tried unsuccessfully to win the commoners seat in the election of 1584. In 1586 he tried again, and William Bullaker was one of his staunchest supporters. Dr. Dale was duly re-elected by the ruling body, but Lewkenor and Colbrand disputed a protracted poll on the 7 October, each disputing the rights of under-tenants, free citizens and the inhabitants of the Cathedral Close to vote. Ultimately the election was decided in Lewkenor's favour, but Colbrand did not give in, and seems to have drawn up a rival indenture and to have travelled with it to Westminster as if he expected the Mayor to return him as one of the members for Chichester.[27] When that stratagem failed, a Star Chamber case was brought between Colbrand and Bullaker on the one hand, and the Mayor and citizens of Chichester on the other. Again Colbrand was unsuccessful.

The case papers from the Star Chamber reveal the part that William Bullaker played on Colbrand's behalf. On being asked whether or not he assembled or gathered together a great number of the citizens of Chichester in his house and garden or in James Colbrand's house or garden on the 26 October 1586,[28] Bullaker replied that "being sent from London by Mr. James Colbrande to the Cittie of Chichester to bring from there a note of the names of those which gave their voices for the ellecton of the said Mr. Colbrande to be a burgesse for the saide citie of Chichester for the last parliament this defendant abote the tyme mentioned in the articles he being at the said cittie of Chichester and ther spekying with some of those whoe he dyd knoe had geven ther voices for the said Mr. Colbrande to be a burgesse for the said cittie to serve in the said last parliament dyd signefye to them the cause of this defendent then comyng to Chichester and that this defendent wolde that day in Mr. Colbrandes hall take a note of the names of those which gave ther voices to the said Mr. Colbrande and this defendant then desyring the persons who were so saide to be then present dyd desier them that they wolde signefye to suche as they dyd knoe had geven ther voices for Mr. Colbrande that they wolde also be then at the said Mr. Colbrandes house wheryn the same daye they dyd come to the said Mr. Colbrande his house to this defendant and ther mete with other defendantes dyd nomber thre or fouer score persons by two or thre fouer or fyve at ones and they dyd then put their handds and seales to a testemonyell testefyng that they gave ther voices in the said ellecton for the said Mr. Colbrande to be a burgesse for the said citie for the said parliament."[29]

He was asked whether most of those who had assembled to sign the testimonial were not members of the trained bands; inhabitants of St. Mary's Hospital in Chichester; or were receiving poor relief. Bullaker replied that some of the people had been inmates of St. Mary's Hospital, and some of them had been trained soldiers living in Chichester. He did not know whether or not any of them were in receipt of poor relief from the Poor Man's Box, or from the alms of the Mayor, Aldermen and citizens of the city, but he did know that all those who had assembled at Mr. Colbrand's house to signify that they had voted for Mr. Colbrand, had been allowed by the Mayor

to give their voices for the election of burgesses for the city in parliamentary elections, both at this election and at other previous elections.

To the other questions, Bullaker answered that he had not offered any of the assembly any reward for coming to the meeting, or promised to do anything for any of them. He maintained that the purpose of the assembly was only for the people to put their hands and seals on the testimonial, and it was not to bring any cause against the Mayor and magistrates of the city. Finally, he revealed that James Colbrand had paid him to come down from London to collect the signatures, and had paid his charges from Chichester to London with the testimonial.

William and Elizabeth Bullaker had four children. Katherine their first daughter was born in 1571, and she was baptised in the parish of St. Peter the Great on the 28th January 1571/2.[30] A second daughter, Anne, was baptised on the 1 December 1573, in the parish of St. Andrew.[31] John, the only son, was baptised at St. Andrew's on the 8 November 1574.[32] Although no trace has been found of the death of Katherine, it is probable that she did not live long, because when, in 1576, a third daughter was born, she was christened Catherine at St. Andrew's church on the 25 March.[33]

In 1585, John Diggons, William Bullaker's father-in-law, died, and was buried at St. Andrew's Chichester.[34] His will, which was written on the 1 March, and was proved in the peculiar court of the Dean of Chichester on the 16 November 1585,[35] included various bequests to William Bullaker's family. In the will itself, he wrote: "I give unto my daughter Bullaker (Elizabeth, William's wife) my little silver goblet." In the first codicil, dated the 3 November 1585, he added: "I give to ye children of my sonne William Bulloker XXd yearly to be paid them out of the house wherein Mr. Turgis dwelleth by my executor duringe all ye yeares as yet to come in the said howse. Item I give to ye two daughters of my sonne William Bulloker iiijd. over and above ye xd. given afore by ye name of my childrens children and their part of the xxd." Finally in a codicil dated the 6 November 1585, he wrote: "I will that the iiijd. a fore given to ye daughters of William Bulloker shalbe put out for them to their use by the discretion of my overseers."

Shortly after the death of John Diggons, the Bullakers sold their house in South Street, Chichester. The conveyance, dated the 1 April 1586, describes the property as, "all that one messuage or Tenement with a Stable and a garden thereunto adioyninge with thappertenaunces scituat lyinge and adioyninge to the walles of the cittie aforesaid on the Sowth syde of the Sowth street of the same cittie on the Eastsyde to the Tenement of the deane and Chapters of the cittie aforesaid nowe in the tenure of one Richard Chatfeelde on the north syde, and to the garden called the Chaunters gardein on the west syde."[36] William and Elizabeth Bullaker received one hundred marks for the property from Richard Stanney, and moved to a house in East Street, Chichester. The first Rent Roll of the city property of the Mayor and Corporation of Chichester records under East Street, "Item of William Bulloker for his tenement wherein he dwelleth ijs. iijd."[37]

While he was living in Chichester, William Bullaker wrote and published all his books. In the preface of *Aesops Fablz* he mentioned that in 1585 he had published the *Psalter* in his 'tru' method; that he had translated 'Tully's Offices'; and that he was working on his *Grammar at Larg,* which, he wrote, "staieth from the print ageinst my wil, for lack of ability too imprint the sam, az the weihtines of the work reqyreth."[38] He also announced in his *Booke at large* that he contemplated compiling a dictionary, which perhaps formed the basis of his son John Bullaker's *English Expositor* published in 1616.[39] However, the fact remains that only five distinct texts by William Bullaker have survived.

In 1580, he published *A Short Introduction or Guiding.*[40] The book was published before, though written after, the *Booke at large* since the title page announced, "a booke deuised by the

same Author at large, for the amendment of ortographie for Inglish speech, which shall be imprinted shortly, which book at large answereth all obiections,"[41] and it was intended by the author as a short summary of the arguments he later intended to put forward in his *Booke at large.* Again, on the title page, he continued, "this pamphlet is printed for a short proofe of the same worke at large, both for the first shew of the use of that amendment, and a briefe collection (out of the same booke at large) of the commodities like to growe by the use of the same amendment." He also revealed his plans for future publications in the same preface, writing, "By the helpe whereof a ruled Grammar for Inglish is made (not yet in print): to the great helpe of a perfite Dictionarie in time to come, and alreadie purposed." Bullaker added in a prefatory poem, entitled "This pamphlet to the Reader":—

Condemne me not before ye trie,
my cause in euerie part:
Reason and Truth, will plead for me.
use you an upright hart.

My Brother (booke at large) can tell,
if you haue any doubt
And can make answere verie well
that I doo go about,

To shew my Father is but poore
and lackth wherewith he might
Set forth my Brother me before,
most comely to your sight.

My sister (Grammer) lieth at home,
abyding my good chaunce:
If I speede ill, she will then mourne,
and neuer hir aduaunce.

My Cousin Dictionarie too,
I know doth lack me much,
Whose second cheefe part, many know
deforde with byle and botch.

The *Booke at large* was also published in 1580, although Bullaker himself tells us in the preface, that he began work on the book in 1573;—"about seuen yeares past, perceyuing more and more the great want of amendment, I determined with my selfe to lay my privat doings aside, . . . to provide some remedie." He tells us in his opening remarks—("Bullokar to his Countrie")—that he had completed the book two years before it was published, but that a friend told him of the books on orthography and pronunciation written by Sir Thomas Smith[42] and John Hart.[43] However, after reading their works, he merely "reioyced that men of such calling, learning and experience had travelled in the same purpose," and found that his and theirs were "arguments to one effect, touching the

great abuses in writing and printing of English speach." He discovered that his "doings did, and doth differ from theirs only in the amendment of those abuses," for they "left out of their amendment divers of the letters now in vse, and also brought in diuers of new figure and fashion . . . strange to the eye, and therby more studie to the memory." Bullaker's intention was "to follow the figures of the old letters, and the vse of them . . . as much as possible might be bringing my purpose to passe." But still he delayed publication in order to collect more opinions and criticisms of his ideas:—"I woulde have it go forward in such sort, that if any woulde shew cause of better amendment, I would gladly have accepted it." So he determined to make a preliminary show of his intent—"I did in August last set vp in this Cittie of London in the most publike places thereof a brife shew of my intent," and "published a Pamphlet hereof in divers places into the hands of men of vnderstanding."

A fuller account of his procedure is contained in Bullaker's *Aesops Fablz,* where he wrote, "after that I had wrought the Amendment of Orthography for English and made a Grammar for the same speech . . . I began to publish the same in the city of London, making my first show in the most public places thereof, the eighth day of August, 1580, by imprinting one page or side of half a sheet of paper, having in it forty letters or figures with their capitals or pairs, the divisions of vowels and half-vowels, with a table showing the names of those letters. And also those same letters, written in the Roman, Italian, Chancery and Secretary-hand."[44] There is an entry in the Stationer's Register, dated the 10 June 1580, to Henry Denham for "A treatise of orthographie in English by William Bullokar,"[45] which probably refers to the *Booke at large,* and the book itself is dated 1580.

In 1581, he published a second edition of *A Short Introduction or Guiding.* [46] The corrections which he made to the first edition in the *Booke at large,* are incorporated in the second edition, and both editions are reprinted in the Leeds Texts and Monographs series.[47]

Aesops Fablz in tru Ortography with Grammar notz,[48] with its subtitle that 'Her-unto ar also ioned the short sentences of the wyz Cato im-printed with lyk form and order: both of which Authorz ar translated out-of Latin in-to English', was published in 1585 by Edmund Bollifant. The same publisher printed Bullaker's fifth and last known distinct text, his *Pamphlet for Grammar,*[49] in 1586. At that date, William Bullaker had clearly not given up hope of publishing his *Grammar at large,* since he refers to it in the preface to the reader, as a twin, a fellow of more fame, "who shall in swaddling clothes lie still," until it takes its name "from her most sacred hands that sits in royal princely seat." But his appeal to Queen Elizabeth went unheeded, and the Grammar was never published.

William Bullaker was almost fifty before he published his first book, but for the last thirty years of his life he remained silent. Dobson points out that "of all the spelling reformers Bullaker probably worked the hardest and made the most sacrifices,"[50] but Bullaker had to find the money to publish the results of his work from his own pocket, and he mentioned himself that his means were small. The lack of financial patronage, and the fact that his proposed reforms fell on deaf ears, suggest that he stopped writing and retired disillusioned. Nonetheless, he left behind a body of writing in his phonetic system larger than anybody in the sixteenth or seventeenth centuries, and, as Dobson argues, he is evidence of the spread of Standard English, and shows that lower class people whose natural speech was dialectical or vulgar were giving up that speech in favour of another form which they regarded as better. But his system of spelling was too complex to gain general acceptance.

His literary interests were inherited by his son John, who, as well as compiling the dictionary for which he is famous, was the author of a description of the Passion of Our Lord in verse,[51] which

he dated 1618, and which was published in 1622. His grandson Thomas became secretary to Christopher Davenport, the Franciscan Provincial in England,[52] and wrote an account of his own life, which was used as the basis of Richard Mason's contemporary biography,[53] and which perished during the French Revolution.

Although we have no more evidence from his writings for the last twenty two years of William Bullaker's life, the fact that he and several members of his family were Catholics, has ensured that much biographical information can be gleaned from the records of the harassment his family received because of their persistent recusancy. In 1582, Fr. John Chapman was arrested in the house of Peter Bullaker's widow.[54] Cardinal Gasquet noted[55] that Mrs. Edberrow Bullaker, a widow from Warblington in Hampshire, was in the House of Correction at Winchester in 1583 because "in August 1582 John Chapman, formerly Rector of Langton Herring in Dorset and now a 'seminary and massing priest' was discovered in the house of Mrs. Bullaker in Warblington, where he had resided for some time." Elizabeth Bullaker, her mother-in-law and William Bullaker's mother, was in the House of Correction with her. Both were admitted to the House of Correction rather than to the Gaol because Bishop Watson said that the latter "hath many backward persons" or recusants.[56] Edberrow, whose mother was a member of the Catholic Pounde family, had been returned as a recusant in 1577,[57] and had sheltered John Chapman at Warblington from August 1581 until his capture.

John Chapman led a colourful life before finding refuge with Edberrow Bullaker. After leaving his living in Dorset, and travelling to France, he was ordained priest at Chalons in March 1581. His statement before Bishop Watson[58] revealed that after leaving Rheims he came via Paris and Rouen to Dieppe, and then crossed to Rye. He landed about midsummer 1581, and after spending a short time at London and Taunton, he was seen by Edward Jones[59] at the Shelley family house at Mapledurham near Petersfield in the company of several other priests, before going to Warblington.

Elizabeth Bullaker, William's mother, was listed on the fourth Recusant Roll[60] as owing £160 for being absent from her parish church for eight months in 1585 and 1586. She was then staying with the Catholic Henslowe family at West Boarhunt in Hampshire. Elizabeth Bullaker, William's wife also received harassment on account of her religious faith. On the 4 June 1602, she was recorded in the Detection Book of the Consistory Court of Chichester as having been presented by the churchwardens of St. Andrew's, Chichester for not having received holy communion at Easter that year.[61] In July of the same year, she was presented twice more for the same offence.[62]

John Bullaker, William's son, was the leader of a tightly knit Catholic group in Chichester, which was the only urban community in Sussex where any kind of persistent recusant tradition flourished without the support of a catholic landowner in the seventeenth century.[63] He was regularly presented for teaching without a licence,[64] and in that capacity had a powerful influence over his co-religionists. His house in West Street, Chichester, became a finishing school for the daughters of well to do local catholics, and the women of the household were presented for prosetelysing their non catholic neighbours.[65] He was supported by powerful co-religionists, and was often presented for recusancy while sheltering under the protection of Viscount Montague at Cowdray or the Shelley family at Michelgrove.[66] So persistently was he presented and harried for his recusancy, that it has proved possible to reconstruct a narrative of his life from the persecution he suffered.[67]

William Bullaker's first two grandchildren were baptised in St. Andrew's Church on 2 November 1598,[68] and 29 October 1601.[69] Shortly after the second christening John Bullaker again temporarily moved his family to Midhurst in an attempt to avoid persecution, and during this

time his second son Thomas was born. 1602 and 1604 are variously given as the year in which Thomas Bullaker was born, but, in fact, the exact date of his birth has not been discovered. When he entered the Catholic seminary at Valladolid in Spain in 1621, he was recorded as being eighteen,[70] and, in the Necrology of the English Province of Friars Minor of the Order of St. Francis,[71] he was recorded as being thirty-eight at the date of his martyrdom at Tyburn on 12 October 1642.

Sometime in the first decade of the seventeenth century John Bullaker went abroad and began studying at Caen in Normandy for a doctorate in medicine. However, his absence in France did not signal the end of the interest of the religious authorities in his family, for William Bullaker himself appeared on the Recusant Roll for 1608 as owing £40 for recusancy.[72] Although this entry on the rolls is the only piece of evidence so far discovered to suggest that William Bullaker was a Catholic, it seems likely that his appearance on the Recusant Rolls did not relate to an isolated occurrence in view of the recorded recusancy of his mother, his wife, and his brother, and the subsequent religious history of his son and grandson.[73]

In the winter of 1608/9, the plague struck Chichester, and an estimate from the surviving parish registers suggests that about one quarter of the population of the city perished in the outbreak. An old man in his seventies, William Bullaker was one of the first to succumb, and he was buried in St. Andrew's church in Chichester on 4 March 1608/9.[74] Ellenor, his wife, did not long survive him as she was buried in the same church on 9 September in the same year.[75] William Bullaker died intestate, and his nuncupative will, made on 3 March 1608/9, was proved on 9 June 1609, by his daughter Anne, the wife of William Bartlett.

The will[76] reads as follows—"Testamentum William Bullaker Memorandum. That aboute the third day of Marche accordinge to the Computacion of the Church of England 1608 William Bullaker of the parishe of sainte Androwes within the Cittye of Chichester beinge sicke in bodye yet of goode and perfecte minde and memory in the presence of Thomas Mannerell and Jane Mannerell his wyfe and Judith Bartlett widowe did make and declare his last will and Testament Nuncupatiue in manner and forme followinge or the like in effecte vizt he did will giue and bequeath vnto Agnes Bartlett the wife of William Bartlett his daughter All his goodes and Cattelles whatsoeuer bothe moveable and vnmoveable and of the same his laste will and Testaments nuncupatiue he did make constitute and appointe his said daughter his full and whole Executrix." The Probate Diary[77] records that he died worth only £3 7s. 8d. in personal estate, which perhaps explains the literary silence of the closing decades of his life. John Bullaker was still in France at the time of his father's death, and, as an unabsolved excommunicate, could not benefit under his father's will, but by his writings and his religious observance, he continued his father's work.

FOOTNOTES

[1] West Sussex Record Office, Ep. I/11/3, f. 17.

[2] *William Bullokarz Pamphlet for Grammar: Or rather too be saied hiz Abbreuiation of hiz Grammar for English, extracted out-of hiz Grammar at larg,* London. Edmund Bollifant (1586), preface, stanza 23.

[3] B. Danielsson and R. C. Alston, *The Works of William Bullokar, vol. 1, A Short Introduction or Guiding, 1580-1581.* Leeds Texts and Monographs, New Series i (1966), p. x.

[4] W.S.R.O., Ep. VI/1/2, f. 118. Inquest at Petworth, 10 November 1540, after the death of Richard Bullakherde, on 24 April 1540. Printed in W. D. Peckham (ed.), *The Cartulary of the High Church of Chichester, Sussex Record Society,* vol. 46 (1946), pp. 243-244.

[5] Public Record Office, 117, Bundle 13, No. 57. Sussex Chantry Records No. 8. Letter from Peter Bullaker to Thomas Mildmay, John Wyseman and William Berners as touching his surveyor's office in the County of Sussex. Printed in J. E. Ray (ed.), *Sussex Chantry Records, SRS,* vol. 36 (1931), pp. 137-138.

[6] Petworth House Archives 5451. I am indebted to Lord Egremont for permission to quote from the documents at Petworth House, and to my wife for bringing them to my attention.
[7] PHA 5450, ff. 217-222.
[8] PHA 7362, f. 140.
[9] W.S.R.O., STCI/10, f. 116.
[10] *Pamphlet for Grammar,* Preface, stanzas 30, 31.
[11] *Bullokars Booke at large, for the Amendment of Orthographie for English speech* ... (1580), London. Henry Denham. Preface.
[12] See Timothy J. McCann, 'Catholic Schoolmasters in Sussex, 1558-1603. Addenda and Corrigenda to Beale's Catholic Schoolmasters,' in *Recusant History,* vol. 12 (1974), pp. 235-237.
[13] W.S.R.O., Ep. III/4/4, f. 42.
[14] W.S.R.O., Ep. III/4/4, f. 76.
[15] *Pamphlet for Grammar,* Preface, stanzas 23-27.
[16] B. Danielsson and R. C. Alston, *ibid.,* pp. xi, xii.
[17] *Pamphlet for Grammar,* Preface, stanzas 32, 33.
[18] PHA 7362, f. 144.
[19] W.S.R.O., Par. 44/1/1/1.
[20] Alexander Hay, *A History of Chichester* (1804), p. 569.
[21] Southgate House, 41 South Street, Chichester. I am grateful to Mrs. Clarke for showing me her house.
[22] W.S.R.O., Ep. III/4/4, f. 5.
[23] W.S.R.O., Ep. I/23/5, f. 63.
[24] W.S.R.O., Archives of Chichester City Council, N1, f. 6.
[25] W.S.R.O., Archives of Chichester City Council, N2, f. 2.
[26] W.S.R.O., Archives of Chichester City Council, N3, f. 7.
[27] The Chichester election of 1586 is discussed in detail in J. E. Neale, *The Elizabethan House of Commons* (1949), pp. 261-272.
[28] P.R.O., STAC, 5/8/16.
[29] P.R.O., STAC, 5 c8/16.
[30] W.S.R.O., Par. 44/1/1/1, f. 2.
[31] W.S.R.O., Par. 37/1/1/1, f. 2.
[32] W.S.R.O., Par. 37/1/1/1, f. 3.
[33] W.S.R.O., Par. 37/1/1/1, f. 4.
[34] W.S.R.O., Par. 44/1/1/1, f. 84.
[35] W.S.R.O., STDI/3, f. 17.
[36] W.S.R.O., Add. Ms. 255.
[37] W.S.R.O., Archives of Chichester City Council, AJ1.
[38] *Aesops Fablz in tru Ortography with Grammarnots* (1585), London, Edmund Bollifant. Preface.
[39] *An English Expositor, Teaching with Interpretation of the hardest words used in our language. With Sundry Explications Descriptions and Discourses. By I. B. Doctor of Physicke* (1616), London. John Leggot.
[40] *A Short Introduction or guiding, to print, write, and reade Inglish speech* ... (1580), London. Henrie Denham.
[41] *Ibid.,* Preface.
[42] Sir Thomas Smith, first Regius Professor of Civil Law at Cambridge; Vice-Chancellor of the University; Privy Councillor; and principal secretary to King Edward VI and Queen Elizabeth, advocated a reform of the english alphabet, extending the number of vowels to ten, in an appendix to his, *De recta et emendata Linquae Graecae Pronuntiatione* (1568).
[43] John Hart, Chester Herald, and servant of Queen Elizabeth and William Cecil, planned to reform the english language on a strictly phonetic basis in *An Ortographie conteyning the due order and reason, houe to write or painte thimage of mannes voice, moste like to the life or nature* (1569).
[44] *Aesops Fablz,* f. 2.
[45] E. Arber (ed.). *A Transcript of the Registers of the Company of Stationers of London* (1875), Liber B, vol. II, f. 169.
[46] *A Short Introduction or guiding* ... (1581), London. Henrie Denham.
[47] B. Danielsson and R. C. Alston, *ibid.*
[48] *Aesops Fablz in tru Ortography with Grammarnots* (1585), London. Edmund Bollifant.
[49] *Pamphlet for Grammar* ... (1586), London. Edmund Bollifant.
[50] E. J. Dobson, *English Pronunciation, 1500-1700,* 2nd ed. (1968), pp. 93-117.
[51] *A true Description of the Passion of Our Saviour Iesus Christ. As it was acted by the bloodie Iewes. And registred by the blessed Evangelists.* In English Meetre by Iohn Bullokar. Calend Novemd. 1619, London. Printed by George Purslowe, for Samuel Rand, and are to be sold at his shop neere Holborne Bridge (1622).
[52] Franciscus a Sancta Clara (Christopher Davenport), *Manuale Missionariorum seu Commentatio super Nobiliores Quaestiones Regulae S. Francisci ad Missionarios spectantes,* 2nd ed., Douai (1661), p. 211.
[53] R.P.F. Angelus a S. Francisco (Richard Mason), 'Relatio Compendiosa Vitae ac Mortis Venerandi admodum Patris Fratris Ioannis Baptistae Recollecti ac in Provincia Fratrum Minorum Anglorum Strictioris Observantiae Guardiani Cicestrensis,' in *Certamen Seraphicum Provinciae Angliae pro Sancta Dei Ecclesia in quo brevitur declaratur quomodo FF Minores Angli calamo et sanquine pro fide Christi sanctaque eius Ecclesia certarunt* (1649).
[54] Canon R. E. Scantlebury (ed.), *Hampshire Registers III,* Catholic Record Society, vol. 44 (1950), p. 4.
[55] F. A. Gasquet, *Hampshire Recusants* (1895), p. 37.
[56] Archbishop J. H. King, *Hampshire and the Faith* (nd.), p. 7.
[57] Rev. P. Ryan, 'Diocesan Returns of Recusants for England and Wales, 1577,' in *Miscellanea,* CRS, vol. 22 (1921), p. 39.
[58] British Library. Harleian Ms. 369, f. 22, reproduced in F. A. Gasquet, *ibid.,* pp. 45-47.
[59] Archbishop J. H. King, *ibid.,* p. 16.
[60] Dom Hugh Bowler, *Recusant Roll No. 3, 1594-1595, and Recusant Roll No. 4, 1595-1596, CRS,* vol. 61 (1970), p. 153.
[61] W.S.R.O., Ep. III/4/6, f. 14.
[62] W.S.R.O., Ep. III/4/6, f. 15, 16.
[63] Anthony Fletcher, *A County Community in Peace and War: Sussex, 1600-1660* (1975), p. 99.
[64] W.S.R.O., Ep. III/4/5, ff. 125, 126 and Ep. I/17/10, f. 14.
[65] W.S.R.O., Ep. III/4/11, ff. 78, 79.
[66] He was at Midhurst between 1600 and 1608, W.S.R.O., Ep. I/17/11, ff. 35, 89, 90, 111, 116; Ep. I/17/12, ff. 17, 210, 211; and Cowdray Ms. 2000, f. 133, and in Clapham in 1613, Ep. I/17/15, ff. 13, 39, 43 and Ep. I/13/1, 1613.

[67] See Timothy J. McCann, 'The Catholic Recusancy of Dr. John Bullaker of Chichester, 1574-1627,' in *Recusant History*, vol. 11 (1971), pp. 75-86.

[68] W.S.R.O., Par. 37/1/1/1, f. 12.

[69] W.S.R.O., Par. 37/1/1/1, f. 14.

[70] Canon E. Henson, *Registers of the English College at Valladolid, 1589-1685, CRS*, vol. 30 (1930), p. 141.

[71] R. Trappes-Lomax, *Franciscana, CRS*, vol. 24 (1922), p. 259.

[72] P.R.O., E. 377/16.

[73] The most important sources for the life of Thomas Bullaker are Richard Mason, *Certamen Seraphicum*, and Le Sieur de Marsys, *Histoire de la Persecution presente de Catholiques en Angleterre enrichie de plusiers reflexions morales, politiquese et chretiennes, tant sur le qui concerne leur guerre civile, que la religion, divisee en trois livres*, Paris (1646), vol. i, pp. 57-66, and vol. 3, pp. 94-100. Bishop Challoner's account in his *Memoirs of Missionary Priests* (1924), pp. 428-435, is basically a precis of Richard Mason, as is J. M. Stone's, *Faithful unto Death*, pp. 132-152, while A. Hope's book, *Franciscan Martyrs in England* (1878), pp. 130-155, is based on both Mason and de Marsys. Among the Thomasen Tracts in the British Library is a pamphlet entitled, *An Exact Relation of the Apprehension, Examination, Execution and Confession of Thomas Bullaker* (1642). An account of the martyr from the Convent of the Institute of Mary at Nymphenburg in Bavaria, is printed in J. H. Pollen, *Acts of the English Martyrs* (1891), pp. 352-357.

[74] W.S.R.O., Par. 37/1/1/1, f. 31.

[75] W.S.R.O., Par. 37/1/1/1, f. 32.

[76] W.S.R.O., STDI/3, f. 35.

[77] W.S.R.O., STDIII/I, f. 45.

ARCHITECTURE AND PLANTING AT GOODWOOD, 1723-1750

by *T. P. Connor*

Set in the gentle sweep of the downs towards Chichester, modern Goodwood is largely the creation of the third duke of Richmond (1737-1805). It was he who commissioned the majestic stable block from Chambers in 1759, and who began to carry out Wyatt's impractical if original design for the main house in the form of an octagon, while much of the planting in the park is also his. His father, however, has at least an equal claim as the creator of the landscape, and as a patron of architecture his career was more constant, more varied, and more *avant-garde*. Because so little of his work survives, and because the only monograph on him concentrates on his social life and sporting interests, his papers have not been fully investigated by art historians.[1] As a patron of architects including Galilei, Campbell, Burlington, Roger Morris and Brettingham, and of Kent, Canaletto and, indirectly many other Venetian and Bolognese painters, the second duke of Richmond's activities deserve to be more widely known. It is the object of the present paper to chronicle his architectural patronage, and to show the extent to which the present landscape of Goodwood represents the fruition of his schemes.

Charles, second duke of Richmond (1701-1750) was born at Goodwood, then a small hunting lodge built by the earl of Northumberland in the early seventeenth century.[2] The estate was considerably encumbered, and even when he succeeded his father as duke in 1723, he was unable to clear these liabilities.[3] At this time the family was not wealthy: rumour had it that the duke had been betrothed to his future wife, Sarah, daughter of the first earl Cadogan, in order to settle their parents' gambling debts. The duke admitted later that he had never saved a penny in his life, and lack of money seems to have been one reason for the failure of his grander building projects.

A love of architecture was evident early on in the duke's life and it remained an absorbing interest. While on the grand tour of 1721, Lord March, as he then was, came into contact with Alessandro Galilei, one of the last masters of the Italian baroque, who had just returned home after an unsuccessful period in England. He probably met Galilei through his travelling companion Lord Mandeville, whose father, the duke of Manchester, was then employing the Florentine architect to complete Kimbolton Castle, Hunts.[4] A sketch plan and elevation exists of the house Galilei designed for Lord March, almost certainly intended for Goodwood.[5] It shows a tall main block, articulated by two stories of pilasters, each covering a principal and a subsidiary floor. At ground level, wings swept forward while on the other side of the house, the main block projected into a formal garden. Unfortunately, nothing in the duke's papers shows what he thought at this early stage of this startlingly un-English design, and for the rest of his life he was to be a dedicated Palladian.

It is likely that after Lord March's return to England and accession to the dukedom he was attached to the court of George, Prince of Wales, to whom he was later to be appointed a Lord of the Bedchamber. Architecturally this exalted social milieu is significant, because it is there, in the mid-1720s, that the revival of Palladianism first became high fashion.[6] This was to a great extent the

work of Colen Campbell, the Scottish architect and author of *Vitruvius Britannicus,* who, since 1719, had been Architect to the Prince of Wales. At this time Campbell's clients included Lord Herbert, a Gentleman of the Prince's Bedchamber and Spencer Compton, the Prince's Treasurer. A large proportion of the Prince's courtiers also subscribed to the third volume of Campbell's *Vitruvius Britannicus* which appeared in 1725 and was dedicated to the Prince.

In these circumstances, with his own house old-fashioned and offering little adequate accommodation, the duke may well have wished to ignore his financial limitations, and to modernise Goodwood. Initially he considered additions to the existing structure, and he turned to Campbell for advice. In the summer of 1724, Campbell was expected down at Goodwood to supervise the completion of a detached kitchen for the old house.[7] Nothing survives to record the appearance of this building except the revealing complaint of an estate worker that it had been built more with an eye for its looks than its usefulness, and that money had been wasted on the outside which should have been used to equip it within.[8] Evidently the building created an impression, and in September Lord Derby came to look over it.[9]

With a fashionable architect at his side, the duke's ambitions grew. Campbell was commissioned to make an exact survey of the old house, and, probably during the winter of 1724-5, a design was evolved for replacing it with a new and utterly up-to-date building.[10]

The design, which was published in *Vitruvius Britannicus* (Vol. III, pls. 51-4), (Plate I), shows a square, nine bay house, with a two-storey central hall rising to a domed roof. The front to the park had a hexastyle ionic portico, while the entrance front had a single round-headed door opening onto a court and linked to offices by quadrant colonnades. Variants of this design are contained in a book of drawings at Goodwood.[11] Internally the organisation of the house was greatly improved by the addition of a grand staircase at one corner. Externally the entrance front was given a portico identical to that on the park facade, while another drawing offers a reworking of the same elements for a different effect. The Goodwood project is particularly interesting as an attempt to express the compact Palladian idea of a centrally planned villa, derived from the Rotonda, on the size and scale of the traditional English country house. The first, Palladian, type Campbell had recreated at Mereworth in 1722, and the second he had begun at Houghton at much the same time. The dimensions of Goodwood were to be 125 ft. by 105 ft., roughly half way in size between Mereworth (88 ft. square) and Houghton (166 ft. by 104 ft.). Perhaps because of the failure of the Goodwood project, this attempt to synthesise both Palladian and traditional English house designs was not revived.

The authorship of the new designs for Goodwood is complicated by the fact that those drawings for it at Goodwood are attributed to Roger Morris (1695-1745), who appears at this time to have worked for or with Campbell on some projects while acting independently on others. This commission may have been his first introduction to the duke of Richmond for whom he was often to work during the next twenty years. At this stage at least, Morris was working under Campbell's direction.

In May, 1725, after the design had been published, Campbell sent the duke a detailed estimate for the new house.[12] The whole building would cost £22,440, or £23,940 if the exterior walls were to be finished in Portland stone instead of stucco. The interior, for which the architect began a drawing, was to be "finished in ye best manner, including Joiners work, Smiths work, Carving, plaistering painting, mason &c: as Mereworth Castle".[13] The reference to Mereworth suggests that

the duke may have visited this new and startling house as other members of the Prince's court had certainly done at this time.

Thereafter the project for rebuilding Goodwood died, but the duke may not have abandoned all hope of carrying it out, for, in the early 1730s, when he was heavily involved in building elsewhere, an estate map was prepared which retained the block plan of the intended house.[14]

Although Goodwood was never to be completely rebuilt during the duke's lifetime, he now embarked on a campaign of building elsewhere which is remarkable more for its variety and for the modernity of the taste it exhibits than for the size of the completed structures. In all cases he seems to have used the assistance of the most distinguished architects of the day, but it is likely that, as his own experience of architecture increased, his participation in the process of design became more complete.

Richmond House, Whitehall, had been built by his father, but the second duke carried out extensive renovations to it over a long period. In June, 1725, the house was reported to be 'from top to bottom full of brick mortar dust and rubbish and perfectly worthy of the most ancient society of Masons'.[15] Then, in 1732 a complete rebuilding was envisaged: Lord Hervey reported in October that the duke 'is going to pull down and rebuild his house in town and intends staying in the country all winter'.[16] For the design of this house, the duke turned to Lord Burlington who was by then accepted, on the basis of his elegant house at Chiswick and his publication of the drawings of Palladio and Inigo Jones as the arbiter of architectural taste. Burlington provided a set of drawings for the house, but although the view from its windows was to be immortalised by Canaletto, it is difficult to be certain what the house itself looked like, and so to what extent Burlington's designs were followed.[17] They show a tall, seven bay house, 61 ft. wide, with the three central bays projecting slightly under a simple pediment. The only decoration apart from the pediment was the splayed surround to the central window on the principal floor.

Agreements with the principal workmen were made in June, 1733, and the carcase of the building was apparently completed in the following December, by which time £2,389 had been paid to the bricklayers Churchill and Pratt, the carpenter Wm. Davies and the mason Wm. Fellows.[18] The work was supervised by Burlington's assistant Daniel Garrett who received £20 in April 1736 and £21 in the following December.[19]

The names of the craftsmen employed on the interior of the new Richmond house are not known completely, but the duke was paying the Master Carver, James Richards at this time and this may well have been for work at his London house.[20] Burlington's designs included three of ceilings, based closely on the Queen's House, Greenwich. One of these had an oval centre panel which must have housed the painting of Neptune, Mercury and Flora, attributed to William Kent, which survived the destruction of the house by fire in 1791.[21] The French painter, A. de Clermont was also employed by the duke and received 20 guineas for work in 'Lady Carolina's closet' in 1735.[22] While the interior of the house may have been decorated in the height of contemporary taste, the plain facade received only moderate praise from critics like James Ralph, who felt merely that it 'satisfies the eye, and answers in the prospect'.[23]

Between 1732 and 1743, the duke also rented a house near London, at Greenwich, close to his fellow courtier, Lord Herbert. This was Vanbrugh Castle, a remarkable house built by the architect for himself in 1717.[24] When the duke took over the property, he immediately made alterations to it, but in the sequence of eighteenth-century additions to the house, the two rooms mentioned in the Goodwood accounts are difficult to distinguish.[25] It is interesting to note that for this work the duke,

who for the rest of his long career as a patron of architecture was a staunch Palladian, employed the services of Nicholas Hawksmoor, who received £6.6.0 when the work was complete in May, 1734.

Besides using Lord Burlington's advice in London, the duke also applied his knowledge and taste in his building plans in Sussex. To cement his political influence in Chichester, the duke was the prime mover, and the largest subscriber towards the rebuilding of the city's Council House. The council had reached the decision to rebuild in November, 1729, and, in contrast to the duke's own plans for Goodwood, work went ahead without interruption. The new building was ready for its first meeting in August, 1732.[26] The duke must have undertaken to provide a design but he had great difficulty in obtaining one from Burlington:

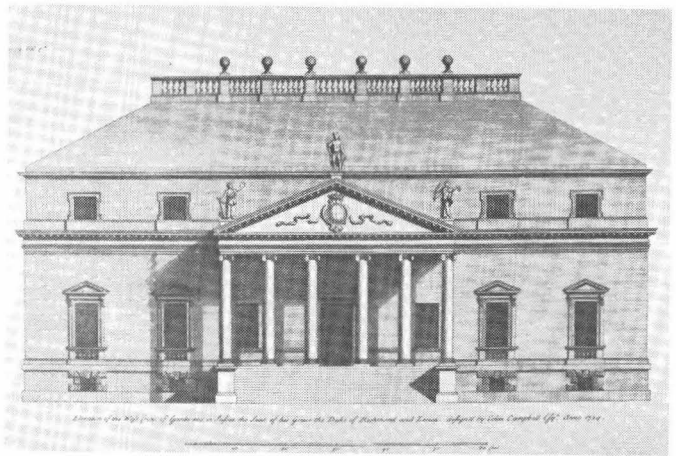
> 'I am very sensible how troublesome I must be to your Lordship about these plans, and am really quite asham'd of it but I must once more beg of you to send the plan for the Town house as soon as possible for the Subscription is full and . . . I dare not go (to Chichester) without a plan'.[27]

This was written in June, 1730, and six weeks later the duke was still waiting for a design.[28]

As executed, the Council House is significantly different from Burlington's surviving drawings for the building[29] (Plate III). The original design appears to have consisted of a two-and-a-half storey elevation fronting a chamber measuring 40 ft. by 26 ft., with an apsed recess at the end opposite to the front. Access to the principal floor was made by a wide spiral stair, which, together with a square room on the other side, formed two substantial projections on the long sides of the buildings. These would not have fitted the site and were abandoned, but even so, the existing facade is quite different from Burlington's elevation. It consists of an unusual combination of the widely cleft pediment, used much as Palladio had on his church facades, and a triumphal arch, raised above an arcaded ground floor. Since the 1740s this building has been attributed to Roger Morris who had continued working for the duke after Campbell's death, and who would have been his most likely nomination as builder.[30] The unconventional design of the facade is unlike any other design by Morris, but he was an original architect, and he may have been assisted in the evolution of this design by the duke.

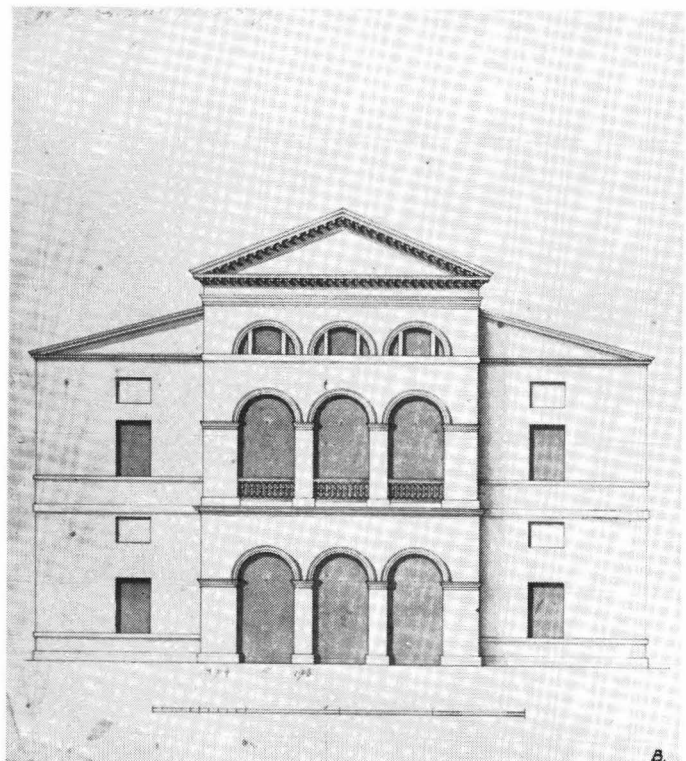
While work was proceeding at Chichester, the duke was also building at Charlton, north-west of Goodwood, where his hunt kennels were situated. In August, 1730, he wrote to his steward to set aside money for 'my building at Charlton', and for work there and at Goodwood, William Elmes, bricklayer, was paid £144 between 1729 and 1731.[31] An undated letter from the duke to Lord Burlington, again imploring him to make a decision about a design—this time about some chimneypieces, says 'Don't forget my Casino and pray remember to keep the opening to the buffet in the dining room as wide as possible. The dining room Kitchen and Cellar being the apartments I have always most at heart'.[32] The 'Casino' still retains the original dining room, with a typically Palladian overmantle, though the fire-surround has disappeared. The room has an unusual alcove, normally designed to hold a bed, but in this case where the bed-head would have been there is a window. It seems, in the light of the duke's letter, to have housed the buffet or serving table, linked to the kitchens below by steep stairs. East of the house is a small stable block which appears to have been designed at the same time.

With builders busy at Charlton, Chichester, Greenwich and Richmond house, internal alterations were also being made at Goodwood. Some of the workmen employed here were the leaders of their craft, though little survives of their work. The plasterer Isaac Mansfield for example, had worked at Castle Howard, at Burlington House and at the Senate House in Cambridge. John Hughes, another of the plasterers mentioned in fragmentary accounts, had worked for Campbell at



1. West elevation of a design for Goodwood by Colen Campbell, 1725
Vitruvius Britannicus III, 1725, pl.54

2. Estate Map of Goodwood, 1725.
Vitruvius Britannicus III, 1725, pls. 51-2



3. Front elevation of design for the Council House, Chichester, by Lord Burlington, *c.*1730. Reproduced by kind permission of the Trustees of the Chatsworth Settlement from the drawing at the RIBA (Boy. (2) 3)

both Burlington and Leicester Houses in London and at Compton Place at the other end of Sussex. Hughes's bill records the construction of 301 ft. of cornice which must refer to the alteration of a number of the old rooms.[34] This may have been the occasion of the construction of the 'New Drawing Room' mentioned in an inventory of 1739, which is not to be found on Campbell's survey plan of 1724.[35] Hughes's bill is countersigned by Roger Morris, indicating that these alterations were supervised by him. Apart from this, however, little was done at Goodwood for twenty years after the abandonment of Campbell's plans, and for a long time the duke's interests were concentrated on the park.

The open downland estate which the duke inherited must have appeared unpromising. The soil was dry and light: there would be little chance to use water to extend the range of contrasts possible from imaginative planting. Further, Goodwood does not seem to have been heavily wooded on the early eighteenth century. Its present parkland was the creation of the second duke, continued, on a larger scale, by his successor.

The estate plan published by Campbell is probably an accurate record of the park layout in c.1724[36] (Plate II). The arrangement of carefully cut walks leading to an amphitheatre and mounds to the north-east of the house is shown on the 1731 estate map, and its outlines survived in the Ordnance Survey map of 1881. This type of planting was typical of the gardening of the early 1720s, epitomised at Claremont or in the first stages of Chiswick. The later developments at Goodwood are less easy to illustrate in the absence of a series of plans of the park, but two areas of the duke's activities are well documented: his tree planting, and the buildings he erected in the new garden. There is unfortunately no direct evidence of the duke's interest in the theoretical and aesthetic ideas behind current changes in garden design, but indirect evidence suggests strongly that he was, and references in his gardening letters to 'Mr. Southcote' suggest that he was well acquainted with the latter's innovations at Woburn Farm, in Surrey.

The duke's letters to the arboriculturalist Peter Collinson show his keenness to stock the park as variously as possible.[37] Collinson was given a clear hand to buy for Goodwood and to act for the duke at the dispersal of the enormous nursery built up for the eighth Lord Petre at Thorndon, Essex. This must have been the major horticultural event of the 1740s, and the duke was particularly anxious to buy there small cedar of Lebanon plants. He urged Collinson to act quickly, for, if he did not, 'the dukes of Norfolk and Bedford will sweep them all away'.[38] American plants were Collinson's speciality, as the duke acknowledged when he wrote 'I would have them at any rate either for love or mony for you know well they are not to be gott anywhere else'.[39]

The result of all this was an astonishing variety in the plantations at Goodwood. Soon after the duke's death, a traveller who is usually a highly reliable source noted 'thirty different kinds of oaks and four hundred different American trees and shrubs'.[40] It is difficult to reconstruct the way in which this botanical profusion was laid out: Yeakell's small but accurate survey made over thirty years later is the only indication. But there is no doubt that the duke enjoyed the gradual development of his plantations very profoundly, and in the last months of his life he was able to record 'I never saw Goodwood in more beauty'.[41]

Among the new plantations were placed a variety of structures which allowed the duke to experiment in architecture, even if, as always, it was on a small scale. Eighteenth-century views record the existence of a small pedimented building, known as Cogidubun's temple, which survived to the end of the last century, a tall column, and the buildings associated with the duke's well-known menagerie.[42] This collection of animals seemed sometimes to the estate workers to be more trouble than they were worth: as one wrote in 1730 'we are very much troubled with Rude Company to see

ye animals [.] Sunday Last we had 4 or 5 hundred good and bad',—mainly, it appeared, bad.[43] While the duke maintained this large collection of rare animals, his wife and daughters began to work on the shell house, for which loads of shells were sent from the West Indies, and which survives today as perhaps the finest example of this fragile rococo fashion.[44]

In 1742 the duke began to plant nine acres of 'a very bleak hill above my park', and with this went the construction of Carné's Seat, the principal monument remaining to the duke's activities at Goodwood.[45] Building probably began in March 1743, and the duke hoped that all would go ahead quickly, but he later had second thoughts, and in 1750 wrote to his wife that he intended to alter the openings on the basement floor.[46] The ceiling of the principal room was originally painted 'after some old Roman designs' but this was removed early in the last century. The attribution of this building to Morris depends on Vertue's account, but in view of the duke's long association with Morris, as well as the orthodox Palladianism of at least the front of the building itself, this attribution seems trustworthy.[47]

Other aspects of the duke's interests were represented in his park. As a member of the Society of Antiquaries he supported the investigation of antiquity, and he even bought and re-erected at Goodwood a tall prehistoric monolith, which was a most precocious example of the use of such monuments in an eighteenth-century landscape. He also entered into the craze for the Gothick, and in 1746 his mason William Ride put the finishing touches to the Gothic Seat which was drawn by Grimm in 1781.[48] The duke's interest in medieval building was something more than the indulgence of the current fashion, for he paid for the restoration of the Chichester Market cross, and for the superb engraving made of it by George Vertue. Already in 1742, the duke and his friend the duke of Montagu were singled out for praise in Batty Langley's *Ancient Architecture Restored and Improved,* which claimed to 'restore the Rules of Ancient Saxon Architecture (vulgarly but mistakenly called Gothic) which have been lost to the Public for upwards of 700 years past'.[49]

The structure which attracted the most attention from contemporaries however, was the 'rock dell', sometimes called 'the Catacombs'. Built at about the same time as Carné's Seat, and situated in the High Wood, immediately north of the main house, it consisted of an 'artificial glen', described as resembling 'Rocks rent by an earthquake and earth sunk by a catastrophe'.[50] This was embellished by the 'ruined wall of an Abbey or Chapel', but this may have been added by the third duke. Around this were what Vertue described as 'stone cells under ground and dark recesses—or passages—subterane. which are as wellcontriv'd as curious, vast stones porpheryes sea pebbles &c varyously disposd'.[51] While Vertue, in 1747, was fascinated by the artifice of the recently completed arrangement, a slightly later visitor was able to perceive more elaborate associations. By 1757 James Hill could write that the imagination was 'astonished and pleased' by the sight. 'This is the Sublime in Gardening; which as a late ingenious author has shown on other Occasions, has its great source in Terror'.[52] The reference is to Burke's *Philosophical Inquiry into . . . the Sublime and Beautiful* which had first appeared in the April of that year. This is perhaps the earliest application of the new aesthetic category to a specific English garden-scene, and it raises in an acute form the question of what expert advice, if any, the duke relied on in the composition of his garden. The sophisticated thrill with which eighteenth-century visitors to Goodwood beheld the rock dell had however disappeared by the time Mason came to write his full-length guide to Goodwood in 1839, where he found little to admire in the garden and was particularly censorious of this feature. 'The introduction of such attempts' he wrote 'is always a matter of doubtful taste, and in the immediate vicinity of groves and highly cultivated garden scenery, its propriety is more than questionable'.[53]

The final phase of the duke's building work at Goodwood is the most puzzling of all his activities there. While piecemeal alterations were undertaken in the early 1740s, major changes to the house were made thereafter. But despite the fact that this part of the duke's work was not obliterated by his successor, contemporary evidence for it is scant and misleading. Pictures of the south front of the house made in 1746 and 1781 show that little was done to what was always regarded as the principal facade. However a sketch made by Vertue during his visit in 1747 reveals a substantially different design. The front is still ⊔ shaped, but the curved gables to the wings have disappeared, together with the round attic windows, and a pediment has been substituted over the central bays.[54] Two explanations of this discrepancy appear possible. Vertue may have been recording a project considered by the duke which was shelved by his death in 1750. More probably, he may have depicted another side of the house, perhaps the north front, about which virtually nothing is known.

In these circumstances, reference to 'New buildings at Goodwood' in a letter of 1750 by the architect Matthew Brettingham acquires significance. Brettingham had been called to measure work at Richmond House in 1745, and this appears to have been his first professional engagement outside Norfolk.[55] Now, in the early months of 1750 he was writing to the duchess of Richmond about Goodwood. Brettingham said that he had chosen 'the several Assortments of stuff proper for finishing the New Buildings'.[56] The lettter specifies only window fittings, but some articles were bulky enough to need to be transported by sea.

One indication of where Brettingham may have been employed at Goodwood is provided by an early printed description of the house which states that the second duke was responsible for building the present west front.[57] This plain, two-storey, pedimented front has recently been attributed to Chambers, on the grounds of his authenticated activity at the house in 1758-9 concerning the building of the stables.[58] Stylistically however it is hard to accept that this tame facade is by the same hand as the powerful and sophisticated design of the stables which stand in such close juxtaposition to it. It may therefore be that there were two building campaigns at Goodwood within a decade: Brettingham's west facade of *c.*1747-50 for the second duke, and Chambers's work on the stables of 1758-9 for his son.

Substantial alterations must have been undertaken at some time in order to house the major artistic treasure of eighteenth-century Goodwood: the set of allegorical paintings of 'British Worthies' by contemporary Italian artists.[59] As early as 1722 the playwright and art-dealer Owen McSwiny had been involved in buying paintings for the young Lord March, and he eventually persuaded him to acquire a series of perhaps fourteen large canvases. These illustrated in a grand symbolical manner the achievements of recent British heroes, including William III, the duke of Marlborough, Isaac Newton and the duke's own father-in-law, Lord Cadogan. The inventory of 1739 had referred to twelve pictures framed in panels in the Great Dining Room, and there, in 1747, Vertue gave precise descriptions of ten of them.[60] It appears to have been a unique set of paintings, but the idea behind it was similar to that of the Temple of British Worthies at Stowe, Bucks., (1731 ff.), where William III and Newton were also depicted. The room at Goodwood must have been an impressive sight, a vivid realisation of the political and intellectual self-confidence upon which early Georgian artistic patronage rested, and as typical of its age as the gallery of Van Dycks at Althrop or the Herbert portraits in the double cube room at Wilton.

Throughout his life the duke had mixed with architects, from Galilei to Brettingham. His

library contained all the current treatises; Leoni's Alberti and three editions of Palladio's *Quattro Libri* including the rare unfinished translation by Campbell, as well as Gibbs's *Book of Architecture* and the *Designs of Inigo Jones*. In these circumstances it is not surprising that he might have tried his hand at architectural design. Evidence for this is unfortunately indirect, but he was considered an authority on the subject among his own family. Thus he was the architectural advisor of his Irish kinsman, Sir Thomas Prendergast, and in 1739 gave detailed advice on alterations being made at Lough Coutra, near Gort, Co. Galway.[61] Before this he had been expected to provide a design for the church of Gort, but, Prendergast added, in fear perhaps of some truly Palladian design, "No Porticoes I beg; my Lord Tyrawley inform'd you how ill they would suit our climate'.[62] None of these designs survive, and all trace has also vanished of designs for chimneypieces, sought from the duke by another kinsman, Charles Brudenell, for his equally vanished house at Luffenham, Rutland.[63]

In August 1750 the duke was taken ill and died on his way home to his beloved Goodwood. No memorial marks the spot in Chichester cathedral where he arranged for himself and his father to be buried. Very little survives of his work at Goodwood: the extensive nurseries and many of his garden buildings have disappeared while the great allegorical paintings have been dispersed. The old house which the duke wanted to replace but had to be content to alter was transformed by his successor. Richmond House was burnt to the ground in 1791. Despite these casualties, the second duke of Richmond deserves to be remembered as an original patron of painting and architecture, perhaps even an amateur architect himself, and as the creator of a unique landscape.

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FOOTNOTES

[1] Earl of March, *A Duke and his Friends*. 2 vols. (1911).

[2] F. Steer and A. Venables, *The Goodwood Archives* II, (1970) p.96. The dimensions given refer only to the central block of the house; the wings shown by Campbell (see below, note 10) must have been added slightly later.

[3] *Ibid.* p.95.

[4] Historical Manuscripts Commission, *Various Collections* VIII, p.306.

[5] I. Toesca, "Alessandro Galilei in Inghilterra", *English Miscellany* III (1952) figs. 5, 6.

[6] T. P. Connor, "Colen Campbell as architect to the Prince of Wales" *Architectural History* XXII, (1979) pp. 64-71.

[7] West Sussex Record Office, Goodwood Mss. (hereafter abbreviated as G.) 104: P. de Carné's letters; 22 Aug. 1724, no. 343.

[8] *Ibid.* 28 Aug. 1724, no. 344.

[9] *Ibid.* 8 Sept. 1724, no. 345.

[10] J. Harris, *Catalogue of the Royal Institute of British Architects, Drawings Collection: Colen Campbell*, Gregg (1973), pp.9-10, figs. 9,13.

[11] These are on loan to the RIBA, and some are illustrated by Harris, *op. cit.*, figs. 16-22.

[12] G. 135.

[13] Campbell's drawing is Harris, *op. cit.* fig. 13.

[14] G. E/4992 Map of the Goodwood Estate, 1731.

[15] G. 103, no. 200. The duke was Grand Master of the Freemasons in 1725, and masonry probably explains his contacts with Langley, from whom he was also to purchase 'bustos', made perhaps of Langley's Artificial Stone: G. 126 Account Book, 23 Sept. 1732.

[16] Earl of Ilchester, *Lord Hervey and his Friends* Murray (1952), p.142.

[17] These drawings are on loan to the RIBA.

[18] G. 126; 1731-4 Account Book: 15 Jul.-3 Dec. 1733.

[19] G. 130; 1735-8 Account Book: 24 Apr.-23 Dec. 1736.

[20] G. 126; 12 Dec. 1733.

[21] E. Croft-Murray, *Decorative Painting in England*, 1537-1837, Country Life II (1970) p. 234.

[22] G. 130; 24 Apr., 22 Jun. 1736.

[23] J. Ralph, *A Critical Review of the Buildings of London and Westminster*, (1734), p.45.

[24] K. Downes, *Vanbrugh,* Zwemmer (1978) pp. 99-100. The duke was paying rent from 29 May 1732 for Vanbrugh Castle (G. 126).

[25] G. 126; 3 Sept 1732, 29 May 1734.

[26] Chichester Corporation Minute Books, August 1732.

[27] Chatsworth Mss. 201:0, D. of Richmond to Lord Burlington, 29 Jun 1730.

[28] G. 102, no. 113: D. of Richmond to Labbé, 19 Aug. 1730.

[29] Two sets of drawings survive: one pair inscribed by the duke of Richmond, *(Catalogue of RIBA Drawings Collection: B.* Gregg (1972), p.99, figs. 76, 77), do not have the wings and show a side elevation 87ft. long. The other pair, (Chatsworth Drawings B.16, B.17), show the more elaborate first stage, but carry the inscription in Lord Burlington's hand 'to be reduced to 25ft.'

[30] Walpole Society, *Vertue Notebooks* V p.142. a payment of 2 guins. to Morris in Aug. 1732 "to distribute amongst ye workmen that reard ye Building" fits the date of building of the Council House exactly. G. 126; 16 Aug. 1732.

[31] G. 117, 104.

[32] See n. 27, above.

[33] G. 121: 1/206; G. Beard, *Decorative Plasterwork in Great Britain,* Faber (1975) pp. 60-1, 227-8.

[34] G. 121: 1/107.

[35] G. 99. Inventory of houses belonging to the duke of Richmond, 1739, p.54 ff.

[36] C. Campbell, *Vitruvius Britannicus* III, (1725), pls. 51-2.

[37] British Library. Add. Mss. 28726-7 Letters to Collinson, see especially Add. Ms. 28726 f.108 "no man liveing loves propagation (in an honest way) more than I do."

[38] *Ibid.* Add. Ms. 28726 f.127; G. 108. no. 794.

[39] BL. Add. Ms. 28726 f.122.

[40] *The Travels in England of Bishop Pococke.* ed. J. J. Cartwright, Camden Society (1888) II, p.111.

[41] BL. Dept. of Manuscripts Loan 57/103/2538, Bathurst Papers, Lennox letters.

[42] BL. Add. Mss. 5676 ff.127-9, Drawings of S. Grimm.

[43] G. 108: 815.

[44] Earl of March, *op. cit.* II, pp.442, 721.

[45] BL. Add. Mss. 28726 f.127.

[46] As n. 41, above; furniture for Carné's seat was to be bought in France in 1749.

[47] Walpole Society, *Vertue Notebooks* V. p.143; the present back elevation has a marked neo-classical character which suggests that it may have been altered in the 1770s. See illustration in *Country Life,* 16 Jul. 1932, fig. 2.

[48] G. 136: 2/18; see H. M. Colvin, *A Biographical Dictionary of British Architects,* Murray (1978), p.693.

[49] B. Langley, *Ancient Architecture Restored* (1742), Dedication.

[50] W. H. Mason, *Goodwood Its House Park and Grounds* (1839), p.157; J. Hill, *Eden: Or A Complete Body of Gardening* (1757) p.587. I am indebted to Mr. John Harris for this reference.

[51] Walpole Society, *Vertue Notebooks* V. p.143.

[52] See n. 50, above.

[53] *Ibid.*

[54] Wootton's picture of 1746 is illustrated by Steer and Venables, *op. cit.* II, frontis.; Vertue's sketch is Walpole Society, *Vertue Notebooks* V. p.142.

[55] G. 109, nos. 847, 863; G. 130 records a payment 'to Mr. Brickingham the Surveyor & his assistant for their journey and expenses' as early as 13 Nov. 1737.

[56] G. 109, no. 847.

[57] D. Defoe, *A Tour thro' the whole Island of Great Britain,* 7th. ed. (1769), I. pp. 209-10, where the front is said to be "one of the Wings to the House his Grace proposed to erect, had he lived a few years later."

[58] J. Harris, *Chambers.* Zwemmer (1970), p.209; I am indebted to Mr. Harris for a discussion of this problem.

[59] F. Haskell, *Patrons and Painters.* Chatto & Windus (1963) pp. 289-91; see G. 105, McSwiny's letters.

[60] Walpole Society, *Vertue Notebooks* V. pp. 143-4.

[61] G. 107: no. 706, 715.

[62] Earl of March, *op. cit.* I. p.202.

[63] G. 103: no. 202; the duke may also have been responsible for the monument to his huntsman Thomas Johnson in Singleton Church; G. 103: no. 207.

THE BUILDING OF STANMER HOUSE AND THE EARLY DEVELOPMENT OF THE PARK *c.* 1720 TO 1750

by *Sue Farrant, B.A., Ph.D.*

Today Stanmer House is situated on the chalk downland just on the northern boundary of modern Brighton although when the present house was built, Brighton was a small seafaring town over four miles to the south.[1] Although Stanmer is familiar to many people, little has been published about the erection of the house or the early development of the Park.

By 1721 when the building of the present Stanmer House began, only a few country houses had been rebuilt in the new Palladian style. The architect was Nicolas Dubois, a Frenchman who made a major contribution to the adoption of the new style in Britain when he translated Palladio's most important book into English in 1715.[2] Although he was not a mason by training, in 1719, Dubois was appointed to the important office of Master Mason in the Office of Works which maintained royal establishments. His appointment was apparently a consequence of the patronage of powerful politicians who also helped into government posts other architects who are now better known than Dubois for their Palladian style buildings. Dubois was very involved as a member of the Board which ran the Office of Works, and Stanmer Park is one of his few ventures for private patrons.[3]

Due to his employment, Dubois was probably very aware of the new attitude towards landscaping which was that parks should use the best features of the landscape and enhance them by carefully placed clumps of trees, woods and areas of water. Advocates of this style considered it to be cheaper to maintain than the formal garden but, in addition, suggested that it was aesthetically a more appropriate setting for a Palladian style house. An advantage of parks was that they gave views across boundaries. Hedges were not favoured, the rural landscape around the country house was considered to have enough of these as the consequence of enclosure and the increasingly ordered and careful management of the British 'countryside'. The park was to be a contrast with the rural surroundings and so boundaries within the view of the house were frequently indicated by ditches called ha-has and hidden by trees. The lack of visible boundaries and careful tree planting in the distance made the park look larger and gave the impression that more land was devoted to it.[4] At Stanmer, clumps of trees were planted in the distance to the front of the house (on the eastern side).

In order to describe how the estate became the property of the Pelhams, it is necessary to begin the story just over a decade before they bought it. In 1700, Peter Gott, a successful ironmaster from Lamberhurst (in Kent), purchased the estate from Bridget Michelbourne and Sibella Martin, her married sister, who were the daughters and heiresses of Edward Michelbourne. For £8,000 he acquired the lordship of the Manor of Stanmer and the property which belonged to it.[5]

Peter Gott and his family occupied the house which formerly stood on the site of the present house. In 1712, shortly after his death, the property had to be sold. The house was very comfortably and richly furnished; an inventory of 'Mr. Gott's indoor goods' had a total value of just

over £1,200. Some of the furnishings are described here, although the original inventory is more detailed. In the Great Stair Case and Hall there were 47 Indian Prints, great and small, an eight day clock in a flower case, an eight leaved Indian screen, in addition to chairs, tables and other furnishings. In the hall, and in the living rooms mentioned below, there were fireplaces in which stood firebacks and fire dogs. The Dining Room windows were graced by two pairs of chequered window curtains with vallances and pulleys.

In addition to stools and easy chairs, there was a chess set and a writing desk. The most attractive room was probably the Little Parlour in which there were ten walnut chairs covered with crimson velvet, window curtains trimmed with a scarlet fringe, an Indian tea table and tea stand, eight saucers and five cups of scalloped china and three chocolate cups. There was a with-drawing room with windows that were framed by 'florence silk' curtains, and embellished by a large pier glass with an 'Earched Topp'. The Great Parlour had three half length portraits in gilt frames hanging on the walls. That the best rooms were so well furnished and numerous implies that the house was quite large. No evidence of its appearance or size has been discovered.

Henry Pelham of Lewes purchased the estate from Peter Gott's son Samuel in 1712-13 for £7,500 and resided in the house until his death in 1721. The estate passed to his eldest son, Henry, and soon after, in July 1721, he decided to reside there.[6] For a member of the Pelham family, influential in Sussex affairs, Stanmer was a good location for a country seat. It was near to Lewes, which was the principal administrative and social centre for eastern Sussex. From Stanmer Henry could travel quite easily to reach the Downland and scarp foot country estates of influential acquaintances such as the Morleys at Glynde, the Gages at Firle, the Campions at Danny and the Stapleys at Patcham. Travel to London, via Lewes and East Grinstead, was relatively easy. From Stanmer, the family could reach their estates on the Downs and in the Weald quite easily, for the greater part of the Wealden estate of this branch of the Pelhams in the early eighteenth century lay to the north of Stanmer.

By August 1722, Henry had chosen Dubois as his architect. Dubois acted as architect and overseer for the house, its outbuildings and the surrounding gardens and landscaping; he received six per cent of the total cost and his travelling expenses. Some of Dubois' correspondence and the final building account for the house survived, and from this evidence it is possible to outline the building chronology of the house.[7]

The house and grounds closest to it appear to have been the main responsibility of Dubois. For £14,200 not only was the house built and the interior decorated, but outhouses, a coachhouse, stables, a forge, a coalstore, a pig house, a pigeon house, and a new farmhouse were built. The gardens, kitchen garden, ponds, and a bowling green were also laid out and a horse gin erected over the well. The demolition of a substantial part of the old house and at least some of its outbuildings was also done, although some of the outbuildings (such as part of the stables) were retained and repaired.[8]

Not all of the house which Dubois designed and built has survived. The house that we see today is L-shaped, with the main front facing north-east, and the garden front facing south-east. There was another substantial wing on the north-west side of the house, which contained all of the service rooms and which was linked to the dining room in the garden front by a colonnade. The service wing was severely damaged during the second world war and was demolished, along with the colonnade when Brighton Corporation purchased the house. The main front was simpler, without the present porch which was built around 1800, and the right hand bay which was built in the 1860s.[9] The landscaping around the house has been altered too, but it is likely that Dubois'

work was subsequently amended rather than replaced, as the history of the house in its first 30 or so years will show.

The choice of building materials had to be approved by Henry Pelham, who naturally did not wish to be overcharged or allow existing resources to be wasted. Some of the material from the old buildings was re-used, but Dubois and Henry Pelham agreed that most of the building work should be with bricks.[10] Most of these were burnt in Brighton and were made from clay from the vicinity of the modern Western Road, using coal from ships which beached at Brighton. Other bricks and tiles were purchased from works in Ringmer, Chailey and Barcombe. Boulders were purchased from collectors who worked on Brighton beach. The main front and the garden front were faced with sandstone salvaged from a demolished house called Kenwards which Pelham owned in Lindfield. The timber which was locally available was described by Dubois as being too short for most of his requirements and unfit for girders, and so he purchased yellow fir in London and had it delivered via Shoreham. Wood for scaffolding was bought in the Weald. Lime was burnt on the site using chalk from quarries nearby and sand was carted from Brighton beach.[11]

Dubois did not reside at Stanmer as he had work to do elsewhere. He visited periodically in order to supervise and schedule the work. As usual there was a clerk of the works, who received a salary of £40 per annum. A 'measurer' (quantity surveyor) attended when required and received a guinea a day for 60 days' attendance. Alfred Morris of Lewes was the builder and most of the workforce was local. Higher quality work and materials were acquired from London, where Dubois probably knew people whom he preferred to use. A plasterer who worked on the interior, and the blacksmith who made the gates for the terrace were from London. Wainscotting and a chimney piece in Torbay stone were also acquired from the capital.[12]

By mid-November 1722, Dubois had expected the foundations to be completed, before the frosts could damage them. However, Morris was behind schedule, his excuse being a shortage of lime, which the clerk of the works claimed had lasted only a week. Dubois complained to Henry Pelham and asked for Morris to be sacked because he was trying to complete work elsewhere when he should be working at Stanmer. In addition, the foundation work was poor, and it had not been covered with straw to protect it against the frost. Dubois' relationships with some of the workmen were not happy, they called him 'the French son of a bitch'.[13]

Dubois' priority was to complete the house, in October 1723 the walls were up and the sandstone facing had been completed, but landscaping had begun.[14]

In March 1724 Henry was deciding on how to decorate the interior. He would not furnish his library after the fashion of an acquaintance who had walked into a London bookshop and on noticing that it happened to have a room of the same dimensions as his new library, purchased the contents. He would buy only what he considered to be useful for his library. Henry's servants were sent to occupy part of the house in September 1724 as he had furnished some of it and was moving in. He had two 'smoaking' rooms; one was for use in the summer and the other for during the winter.[15]

Henry died in June 1725. In the previous September he had visited the well-known hot springs at Bristol for his health because he had a bad cough. He was a bachelor, and Thomas his youngest brother inherited the estate. Their middle brother John had already died unmarried. All activities on the house and estate were stopped unless they were vital and Dubois was told to await the arrival of Thomas from Constantinople. The living accommodation in the house was almost finished but the great staircase had not been erected in the hall. Thus the greater part of the house and the original interior was completed by Henry Pelham.[16]

On his arrival at Stanmer, Thomas Pelham ordered that work should continue, but it is not possible to judge from the accounts or the surviving correspondence whether Thomas ordered any changes to Henry's plans, and Dubois continued to supervise the work. While progress on the environs continued, Thomas began to live the life of the owner of a country estate. In 1726 he stocked the wine cellar from suppliers in London and used his business connections in Turkey in order to acquire some exotic plants and trees for his gardens and kitchen garden. Messrs Chadwick and Toole of Smyrna successfully acquired specimens for his kitchen garden, although subsequent consignments died en route.[17]

Meanwhile work on the outbuildings had progressed considerably and the horse gin was to be installed. The horse gin was referred to as the engine and will be so here. It was described in the accounts as 'one engine that forces three tons of water an hour, by one horse, out of a well 230 feet deep into a cistern or reservoir erected 17 feet above the mouth of the well', was installed by Mr. Foukes, an engine maker, and was apparently built at his works in London, where the elm pipes were also drilled. Then all the parts, which weighed between six and seven tons, were shipped to Shoreham. Transport was expensive and as Thomas Pelham agreed to provide his waggons for the journey from Shoreham, Foukes and Dubois promised to deduct the cost of land carriage from the total cost of the engine (of about £600).

Once it had arrived at Stanmer, Foukes and his men required between 10 and 12 days' labour to install it. Mr. Foukes, said Dubois, would take great care with the work because its success was very important to his reputation. Thomas was asked to provide 'dyet' for Foukes and his principal as was customary when the engine maker worked at a gentleman's house, and Dubois hoped that Foukes would be allowed to dine with the head servant. The other workmen were expected to shift for themselves.[18]

While arranging for the installation of the engine in 1726, Dubois was still planning some of the landscaping. He sent Thomas two designs: for 'Her Grace's Hermitage and Pools', and for the area round the church and churchyard. The church was mainly 14th century and had a broach spire (it was replaced by the present church in 1838). The projected design for the surrounds of the church showed the area as it was and as Dubois thought it should be. He complained to Pelham that the incumbent was trying to thwart his plan by refusing to allow this churchyard wall to be re-aligned as Dubois envisaged. The architect said that the plan would not result in any loss of land as it was an adjustment of the boundary so that what was taken at one place was given back at another. The incumbent refused, remarking that one foot of consecrated ground was worth a mile of unconsecrated. The alteration would, claimed Dubois, give a 'grandsom walk' 15 foot wide from the church yard wall to the first slope of a canal (lake) which he wished to include in the plan.[19]

In November 1726 the engine arrived at Shoreham on the 'Matthew'. Dubois went to Stanmer to inspect the well, which Pelham had complained about, describing it as poorly built. Foukes probably accompanied him for the engine was installed and working in February 1727 when the steward complained to Thomas that some of the pipes leaked and the pumping was not as powerful as it had been. By August 1727 it had been replaced with another one by Foukes.[20]

In 1730 the rebuilding and landscaping as planned by Henry and completed by Thomas was almost finished. In February the ponds and roads were being completed and what may well have been the last bill from Dubois was received. The correspondence suggests that subsequent work during Thomas' lifetime was for maintenance of the gardens and house, although work on the park may have continued.[21]

When in 1737 Thomas Pelham died, his son, who was also called Thomas, was a minor. The estate was cared for by guardians until he came of age in 1748 and returned from his tour abroad in 1750. Correspondence between the steward and James Pelham, a guardian between 1745 and 1750, has survived. It suggests that the park was being laid out during Thomas' minority and that the guardians were conscientious in their care of the grounds. When Thomas II was expected home in the summer of 1749, Streetre was anxious that the house should be prepared. He said that a lot of painting indoors was required in the 'common part' and the windows, shutters and frames in the best part. He noted that the billiards room had not been repainted since it was wainscotted. Thomas still had not appeared in the following spring when Streetre asked James Pelham whether the house 'below stairs' should be whitewashed. Thomas was certainly due home in October 1750 when Streetre reported that Sir Ferdinand Poole had hinted that the gravel on the roads which was heaped up into ridges should be flattened, and asked whether he should put up the hangings.[22]

Thomas Pelham II was born in 1728 and lived until 1805. He was made the First Earl of Chichester in 1801, not long before he died. This Thomas was responsible for the later eighteenth century decoration of several of the main rooms. During his lifetime the plans of his uncle, father and Dubois for the landscaping must have matured and he completed the park which we see today. The degree to which he changed the landscaping as planned by his immediate forebears has not been established.

Stanmer House and its surrounding park became the centre of the family's landed estates described in an earlier article in the *Sussex Archaeological Society Newsletter*.[23]

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[7] B.L. Add. MS 33085.
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[8] Stanmer building accounts, op. cit.

[9] For a description of the house see A. Oswald: Stanmer, Sussex, the seat of the Earl of Chichester, *Country Life*, 71 (1932), pp. 14-21.

[10] Building accounts, op. cit.

[11] Ibid.

[12] B.L. Add. MS 33085, ff 59-60.
Building accounts, op. cit.

[13] B.L. Add. MS 33085, f 351.

[14] Op. cit., ff 69, 78.

[15] Ibid., ff 86, 92-93.

[16] Ibid., ff 94, 138-140 letter, which also notes that the grounds are progressing well.

[17] Ibid., ff 231, 255, 283.

[18] Building accounts, op. cit.
B.L. Add. MS 33085, f 285.

[19] Op. cit.

[20] Ibid., ff 287, 321.

[21] Ibid., ff 387, 430.

[22] B.L. Add. MS 33086, ff 467, 38, 39, 116.

[23] Sue Farrant, 'The formation of estates on the Sussex Downs in the eighteenth century', *Sussex Archaeological Society Newsletter* 24 (April 1978), pp. 149-150.

THE RICHMOND INTEREST AND PARTY POLITICS, 1834-1841

by *D. A. Smith, Ph.D.*

" Nineteenth-century parliamentary historians," Sir Lewis Namier wrote in 1952, " now seem agreed in deferring the full emergence of the modern party till after the Second Reform Bill."[1] The agreement which Namier then perceived has ceased to prevail. Historical scholarship is returning to the view, frequently expressed by mid-nineteenth-century politicians, that the 1830s and the early 1840s were a time of clearly defined two-party politics. The change in scholarly opinion may be traced, for example, in the work of Norman Gash, himself one of Namier's warm admirers. In 1951 Gash wrote of the " loose and immature party system " of the 1830s and 1840s; but in his more recent (1965) *Reaction and reconstruction in English politics, 1832-1852*, Gash comments that the period is " remarkable for some highly modern statements by professional politicians on the function of party."[2] Other students of the reformed Parliament have concurred in and further developed the thesis that in the 1830s politics assumed an unambiguously two-party character. D. E. D. Beales, quoting Gash, writes: " The ' independent ' Member . . . in the sense of the ' non-party ' Member, scarcely existed between 1835 and 1845, and two ' strongly organised, disciplined parliamentary parties ' all but divided the House of Commons between them."[3] And, by careful use of division lists and extensive reference to provincial newspapers, David Close has documented " The Formation of a two-party alignment in the House of Commons between 1832 and 1841."[4]

Nevertheless, the mere existence by the 1840s of a two-party " system " in Parliament does not necessarily demonstrate that the parties themselves were " modern "—whatever that may mean—in every respect. Party outside the walls of Parliament and, in particular, party organisation in the constituencies bore little resemblance to the political machines of today. And though the almost complete division of the House of Commons into two parties may have reflected a similar cleavage of opinion in the electorate,[5] not all the members of the Commons sat there simply because highly partisan voters had returned them. A sizeable number of members were returned by voters who were moved not so much by their own opinions on the issues of the day or by the efforts of party managers, but by the electoral influence of proprietors. According to Gash's calculations in *Politics in the age of Peel*, at least fifty-nine and possibly as many as seventy-one of the borough members for England and Wales alone sat in the Commons by virtue of a proprietor's favour.[6] If these members fit into the two-party pattern of the early reformed Parliaments, the explanation for their doing so must be sought at least partly in considerations which one associates ordinarily not with the political structure of the later

[1] Sir Lewis Namier, *Monarchy and the party system* (Romanes Lecture, 1952), in *Personalities and Powers* (New York, 1965), p. 35.

[2] " Peel and the party system, 1830-1840," *Transactions of the Royal Historical Society*, Fifth Series, Vol. I (1951), p. 63; *Reaction and Reconstruction* (London, 1965), p. 126.

[3] D. E. D. Beales, *Parliamentary parties and the " Independent " Member, 1810-1860*, in Robert Robson (ed.), *Ideas and Institutions of Victorian Britain: Essays in Honour of George Kitson Clark* (New York 1967), p. 18.

[4] *English Historical Review*, Vol. 84, LXXXIV (1969), pp. 257-277.

[5] Ibid., p. 266.

[6] *Politics in the age of Peel* (London, 1953), pp. 438-9.

nineteenth and twentieth centuries but with that of the eighteenth century. In dealing with the political behaviour of such members and with that of their patrons, one can still profit from Namier's warning against treating nineteenth-century politics " anachronistically in terms of a later age."[1]

Prominent among the proprietors whose interests survived the Reform Act and took their place in the political world of the reformed Parliament was Charles Gordon-Lennox, fifth Duke of Richmond. Richmond stood among those " magnates like the Earl Fitzwilliam, the Duke of Rutland, or the Duke of Newcastle, with an interest in more than one constituency " who, after 1832, in Gash's words, " could be numbered on the fingers."[2] Since 1790 the " Richmond interest " had regularly returned one of the two members for Chichester. The Reform Act, far from diminishing the scope of the Richmond influence in Sussex, actually facilitated its expansion. The county was divided into two divisions, East and West, each with two members. Richmond was now able not only to return a member for Chichester but to exert a dominating influence in the election of a member for West Sussex as well.

Richmond used his influence to provide for members of his family. The eldest of his four surviving brothers, Lord George Lennox, first entered the Commons for Chichester in 1819. When the seat for West Sussex became available in 1832, Lord George moved to it, and the vacancy of Chichester fell to the youngest of the Lennox brothers, Lord Arthur. Nor was Richmond's influence in the Commons limited to members for Sussex constituencies. A third brother, Lord William Lennox, shared between 1832 and 1834 the representation of King's Lynn with Lord George Bentinck, Richmond's confidant both on the turf and in the Palace of Westminster. Lord William declined to stand for re-election in 1835, but Richmond's connection with the Bentincks remained sufficiently close for Charles Greville to write that Lord William's successor would owe his seat " to the patronage of the D[uke] of Richmond."[3] Instead of being a characteristic mid-nineteenth-century proprietor with only one seat in hand, Richmond looked more like the chief of an old-style family connection more typical of politics in the preceding century.[4]

This connection had its own political discipline and organisation, but they were not of the kind which increasingly characterised the two-party politics of the nation after the passage of the Reform Act. In the nation at large, the increasing division of opinion in the constituencies assisted and supported the party whips in the Commons and the electoral agents working through the political clubs in articulating and sustaining two-party politics. But the discipline and organisation which the Lennoxes knew flowed from their loyalty and obligations neither to party feelings nor to party leaders and wire-pullers, but to their elder brother, the Duke. Two letters which Lord Arthur wrote to the Duke in 1837 illustrate the nature of the brothers' political relationships. On March 10 Lord Arthur began:

> You are probably aware that a Decision in the House of Commons on Spring Rice's Resolutions respecting Church Rates will take place on Monday next. I am extremely anxious to learn your opinion on the subject, in order that my vote may coincide with the one you will give in the House of Lords when the discussion comes to that place.

[1] *Personalities and Powers*, p. 35.
[2] *Politics in the age of Peel*, p. 211.
[3] *The Greville memoirs*, ed. Lytton Strachey and Roger Fulford (London, 1938), III, 127.
[4] At the time of the general election of 1835, Richmond was forty-three years old; Lord George, forty-one; Lord William, thirty-five; and Lord Arthur, twenty-eight.

Four days later, with Richmond's reply in hand, Lord Arthur resumed:

> . . . I trust I have rightly understood your wishes on the Subject. You object it appears to me to Several Clauses of the bill which will be brought before the House, which Clauses will be fought in Committee, but as you do not mention that you entertain any hostile feelings towards the Main Principle– viz., to Relieve the Dissenters from Church Rates, I presume I shall not be running counter to your feelings if I vote simply for the Introduction of the Measure which will not in any degree pledge me to its details & if the objectionable parts are not removed in Committee, I can oppose the whole Bill on its 3rd Reading if such is your wish.[1]

The Lennoxes, then, took their cues not from the party whips but from Richmond; the politician who desired their votes had in one way or another to secure them from Richmond, not simply from Lord Arthur and Lord George. Had Richmond been a strong party man himself, of course, the brothers' votes would have gone faithfully to Richmond's party, and its whips could have communicated directly with them in anticipation of important divisions. But the Duke proclaimed himself, in August, 1834, to be " unconnected with any party ";[2] this assertion implied also the detachment from party of that political connection based on Richmond's territorial and personal influence.

Thus the history of the Richmond interest after 1834 is the history of a political connection, headed by a self-conceived and self-professed independent, which attempted to resist the pressures towards political bi-polarity. These pressures manifested themselves in both the political arenas in which the Lennoxes were engaged, that of Westminster politics and that of constituency politics. Between 1834 and 1841 the insistent blandishments of two-party politics were to transform the political face, if not the political foundation, of the Richmond interest, and the history of that transformation illuminates the new departure of British politics as a whole.

The Duke of Richmond

If Richmond was no typical proprietor, neither was he just another Duke. In 1834 he might rightly regard himself as a figure of considerable importance in the politics of the five years just past. A " Protestant " Tory alienated from Peel and Wellington in 1829, Richmond accepted a place in the Cabinet which Earl Grey formed in 1830. For three and a half years Richmond as Postmaster General associated himself as a Reformer with the Whigs. He broke with the majority of his colleagues in May, 1834, over the principle of the secular appropriation of the revenues of the Church of Ireland. Acting with Lord Stanley, the Earl of Ripon, and Sir James Graham, Richmond resigned from the Cabinet. The departure of these four passengers in the " Derby Dilly " presaged the break-up of the ministry. Grey himself resigned in July, and in September William IV requested and received the resignation of the demoralised Cabinet headed by Lord Melbourne. Richmond, then, had attended at the birth of the first Whig ministry in over two decades; his withdrawal adumbrated its collapse. As a former Cabinet minister and a constant participant in the Lords' debates, his weight in the politics of the years to come was to rest on much more than his being simply a patron of members of the Commons.

The four ex-ministers of the Dilly continued to make common cause for some time after their resignation. The appeal of this group, headed by Stanley, was aimed at " moderate men of all parties "; in that sense a sympathetic observer might view it as the instrument of the non-partisanship which Richmond proclaimed in August. The " Third Party," as Sir James Graham

1 Goodwood Mss. G15/722, 726.

2 *Parliamentary debates*, Third Series, XXV (August 11, 1834), 1201.

ambitiously described himself and his friends, remained aloof from the administration which Peel formed in November, though its members were prepared for the moment to grant to Peel the fair trial which he requested. Stanley and his followers then aimed to take up a strong centre position in the new Parliament to be chosen in January.

Richmond quickly came to appreciate the difficulties which this non-partisan squadron faced. The general election provided a foretaste of them. Lord William Lennox's retirement from Lynn initiated a search for a successor, and a passenger for the Dilly not already in the Commons proved an exceedingly rare adventurer to find. The conditions for holding the seat were in no way onerous. The new member for Lynn would " be expected to support Lord Stanley, who was to act on the idea of giving Peel a fair trial, but in every other case [his] votes would be free."[1] Yet Lord George Bentinck " ransacked the Bar and applied to Richmond, Ripon, Graham, and Stanley himself "[2] before discovering a reasonably qualified man to accept the seat. Such a man finally appeared in the person of Stratford Canning; but Graham's fulsome congratulations to Richmond—" nothing can be better "[3]—on Canning's election reveal more about Graham's penchant for exaggerated rhetoric than about Canning's merits as an M.P. Canning had already failed to make his mark in the House of Commons; eventually he was to return to the life of diplomacy for which he was so much better fitted. He brought a great name to the Commons, but little else.[4]

The first test of the Dilly's following in the new Parliament came when the Whigs attempted to replace the old speaker, Manners Sutton, with their own man, James Abercromby. For Manners Sutton to be re-elected with the support of Stanley's friends would signalise Peel's dependence upon them; for the Whigs to oust Manners Sutton despite the Stanleyites voting for him would correspondingly damage their hopes of becoming the arbiters of politics. That the vote would be close was clear, and Richmond took pains to see that both his brothers were present and voting when the selection was made. Lord George wrote from Boulogne, on January 28, to ask " on what Day the Speaker will be elected " and " who you wish to be supported."[5] On February 4 Richmond wrote to both Lord George and Lord Arthur, the latter then visiting in the Highlands, instructing them to vote for Manners Sutton.

To vote for Manners Sutton posed no difficulties for Lord Arthur, who, one suspects, was quite prepared to move even closer toward the government. Lord Arthur had caught the scent of a place:

> I have just received a letter from London in which it is said that if I apply for the vacant place of equerry to the Queen that I am sure to get it. Can you help me in the matter? [he asked Richmond] if so pray do. I know nothing at all about the appointment but presume it is in the gift of the Queen and not in the power of the govt. Otherwise of course I would not apply to fill it unless prepared to vote with them, or resign my seat—the latter I should not be sorry to do if I could bet anything by it & that it did not put you to inconvenience. As to supporting them *on all occasions*, WE cannot I suppose pledge OURSELVES to that.[6]

Richmond was far from prepared to support the new government " on all occasions "; and on February 18 Lord Arthur acknowledged his brother's countervailing will: " I am satisfied that I could not fill the situation requiring as it does a *pledge* to support the present administration."

[1] From Stratford Canning's account of his interview with Bentinck, in Stanley Lane Poole, *The life of the Right Honourable Stratford Canning, Viscount Stratford de Redcliffe* (London, 1888), II, 36.

[2] *Greville memoirs*, III, 127.

[3] Graham to Richmond, January 12, 1835. Goodwood Mss. 688/66.

[4] For Canning's unhappy career in the Commons, see Lane Poole's *Life*, II, 1-52.

[5] Goodwood Mss. G2/127. Richmond noted his reply of February 4 on the back of Lord George's letter.

[6] Lord Arthur Lennox to Richmond, February 5, 1835. Goodwood Mss. G2/148.

His hopes for a place now gone, Lord Arthur regretted as well that bad weather and the illness of his host made it impossible for him to reach London in time to vote for Manners Sutton, " as you appear to be so anxious on the subject."[1]

Manners Sutton was defeated by ten votes on February 18. A week later, with Lord Arthur Lennox absent from the House, the Whigs defeated the government, still supported by Stanley, Graham and his friends, by seven votes on the debate on the address. Bentinck had once talked of rallying up to ninety prospective Stanleyites in the new Commons,[2] but for the Lennoxes themselves to show faint heart cannot have offered encouragement to others that these estimates could be fulfilled. Richmond considered replacing Lord Arthur with someone more reliable. Already he had heard from Sussex: ' Lord Arthur's absence in Scotland at this period of excitement has, as your Grace will probably have anticipated, been the subject of much and strong observation among his constituents . . . It will assuredly . . . cause . . . much difficulty if, as is surmised by some, we are to have at no very distant day another dissolution.'[3] Lord Arthur's absenteeism threatened to stretch the limits of what even Chichester would accept without complaint at the hands of a Lennox.

If Lord Arthur, either of his own volition or at Richmond's insistence, retired from the Commons, who would take his seat? On Richmond's behalf Lord George Bentinck turned again to the Cannings. To young Charles Canning, son of the late Prime Minister, Bentinck suggested the likelihood of a forthcoming vacancy in the representation of Chichester. But Canning declined to promise Richmond that " were I in Parliament, I should range myself as a follower of that party of which Your Grace and Lord Stanley are the acknowledged heads."[4] This reply indicated no improvement in the political stock of the Dilly. With no likely candidate to fill it, the vacancy at Chichester failed to appear, and Lord Arthur Lennox continued a Member of Parliament.

At length Lord Arthur journeyed to Westminster from Scotland. In spite of this reinforcement, however, the position of the government deteriorated. The Whigs carried three successive motions embodying their proposals for reforming the Irish Church. On April 7 the division on the last of these, declaring the secular appropriation of the Church's " surplus " revenues essential to a solution of the tithe problem, found the government in a minority of twenty-seven. Finally Sir Robert Peel and his colleagues resigned, and the victorious Whigs returned to office owing the passengers of the Dilly nothing.

The Dilly now broke up, itself a victim of the trend toward two-party politics. Appealing to moderates of all parties, it ended in attracting the support of no one of significance not already attached to it. The first chapter in Richmond's essay in nonpartisanship thus came to an end. The four original passengers of the Dilly, though they retained for a time their practice of holding " Cabinets " for mutual consultation, increasingly diverged in their political attitudes. Graham moved more and more toward Peel's orbit; Ripon, on the other hand, showed little

[1] Ibid., February 18, 1835. Goodwood Mss. G2/200.

[2] D. W. J. Johnson, " Sir James Graham and the ' Derby Dilly ',' " *University of Birmingham Historical Journal*, Vol. 4 (1953), p. 73. The entire article (pp. 66-80), which makes extensive use of Graham's papers, is a most illuminating one.

[3] J. B. Freeland to Richmond, March 1, 1835. Goodwood Mss. G3/4.

[4] Charles Canning to Richmond, April 23, 1835. Goodwood Mss. G4/358. Canning subsequently entered the Commons for Warwick, as a Conservative, in 1836. A Peelite from 1846, he is best remembered as the " Clemency " Canning who governed India at the time of the mutiny in 1857.

enthusiasm for politics at all. Stanley, less willing than Graham to subordinate himself to Peel's leadership, nevertheless showed himself an active opponent of the Whig government. Alone of the four, Richmond emerged as something of a friend to the administration of Lord Melbourne.[1]

Melbourne wasted no time in courting Richmond. Before the end of April he offered Richmond the Governor-Generalship of India, now vacant upon the resignation of Lord William Bentinck.[2] Richmond declined the appointment, but in June he did accept from Melbourne the Lord-Lieutenancy of Sussex. Melbourne invited Richmond to accept the position " without any reference to your past political & parliamentary conduct & without any expectation " of his support in the future.[3] Richmond entered " the office in the spirit in which it is proposed for I feel confident that we agree in the principle that L^d L^{ts} should not be considered as political appointments."[4] Stanley, while agreeing that Richmond was right in accepting, rather tactlessly told him that " Melbourne could not have offered the Lieutenancy to anyone else."[5]

It was left to Lord John Russell, the new Home Secretary and the leader of the Commons, to remind Richmond of the political facts of the Lord-Lieutenant's life. Two days after Richmond received the office he received from Russell a letter reminding him of " that strong Tory bias which has been hitherto perceptible " in the Sussex magistracy.[6] Russell expressed his confidence that Richmond would act " with entire impartiality," but made it clear that in this connection impartiality meant the appointment of enough Whigs to redress the balance. As if Russell's letter might not suffice, H. B. Curteis and George Cavendish, both Liberal M.P.s for Sussex boroughs, presented Richmond with a " list of names of persons that were thought desirable to have put into the new commission."[7] The new, " non-political " Lord Lieutenant found himself immersed in politics from his first week in office.

Old political friendships, reinforced by family connections, reasserted themselves with the Whigs back in office. Richmond's wife was a Paget; his sister was married to Admiral Berkeley, chief of the Gloucestershire Whigs. If ministers and M.P.s expected Richmond to patronise Whiggery in Sussex, they themselves asked his advice about the distribution of favours there and elsewhere. Melbourne, for example, wondered to Richmond whether the Earl of Chichester, Richmond's neighbour and an eminently steady Whig, would like a place in the Bedchamber, or perhaps even simply the compliment of being offered the place.[8] Lord Morpeth, the Irish Secretary, asked Richmond to further the cause of two Ulster Liberals anxious to become J.P.s in County Antrim.[9] Lord Glenelg, the Colonial Secretary, delighted the Fitzroys by looking favourably upon Richmond's recommendation that Colonel Charles, much later Sir

[1] On the break-up of the " Dilly," see Johnson's article cited above.
[2] Melbourne to Richmond, April 30, 1835. Goodwood Mss. G4/400.
[3] Melbourne to Richmond, June 7, 1835. Goodwood Mss. G6/46.
[4] Richmond to Melbourne, June 7, 1835. Goodwood Mss. G6/47.
[5] Stanley to Richmond, June 8, 1835. Goodwood Mss. G6/51. The old Duke of Norfolk, a sound Whig, would have qualified for the Lord Lieutenancy had it not been for his Roman Catholicism, a political if not a legal barrier to his holding the position.
[6] Russell to Richmond, June 9, 1835. Goodwood Mss. G6/56.
[7] Curteis to Richmond, June 16, 1835. Goodwood Mss. G6/105.
[8] Melbourne to Richmond, August 28, 1835. Goodwood Mss. G9/181.
[9] Morpeth to Richmond, November 10, 1835. Goodwood Mss. G11/476.

Charles, Fitzroy be made Secretary at the Cape.[1] In short, Richmond seemed to be a helpful counsel for the Whigs, at least when the Whigs concerned themselves with the loaves and the fishes.

Though Richmond remained opposed to the ecclesiastical policies of his former colleagues, the 1835 session did find him supporting their Municipal Corporations Bill. On August 15 Greville noted:

> Richmond himself goes entirely with Government in this measure, and I was rather surprised to hear him say that 'it had been urged that Lord Stanley was opposed to this part of the Bill [the qualification clause], but that if this were so a man must judge for himself in so important a matter,' which looks a little as if he meant to back out of the Dilly, and I should not be very much surprised if he came into office again with these people, if they stay in . . .[2]

The Lords' debates on the Municipal Corporations Bill saw several heated exchanges between Richmond and Lord Lyndhurst. The two were old enemies: Lyndhurst had been Lord Chancellor when Wellington yielded to the demand for Catholic Emancipation. Lyndhurst had set himself at the head of the unreconciled Tories in the House of Lords and now took the lead in denouncing reform of any description. To Richmond, Lyndhurst's politics were as undisciplined and irresponsible as ever. With the established order under attack from reckless Radicals on the one hand and reckless ultras on the other, support of the government seemed the only course a prudent and moderate statesman should follow.

Greville now opined that Richmond "has wriggled himself almost back among the Whigs; . . . he may be considered as having dropt off the Dilly with many others."[3] "The Whigs," Greville went on, "are dying to have him back among them." At the end of the session Melbourne took time to express to the Duchess of Richmond "the obligation, which I feel to Richmond for his conduct during the session. He has behaved most handsomely . . ."[4] Early in the new year, Lord George Bentinck, who knew Richmond's mind even better than did Greville, took the same view in a letter to Graham: "Richmond's heart is with Melbourne and Lord Spencer. I think he half doubts the sound policy of the line he, you, and Stanley have taken upon the Church question, but having taken it will stick by it."[5] Richmond would refuse, Bentinck went on, to accept office under Peel with the other Stanleyites in the event the Whigs should be beaten.

Richmond had given Peel a fair trial in 1834 and 1835; he now did the same for Melbourne. Greville erred if he believed that Richmond was anxious to be back among the Whigs as a partisan figure, and the Whigs' desire to have him again as a colleague was never fulfilled. Richmond sedulously guarded his detachment from them, though the assistance he gave Melbourne's government as a disinterested independent may have been as valuable as any he could have provided as a member of the party's inner circle. While Stanley remained Richmond's most frequent correspondent on political matters, Richmond preferred to support, when possible, Melbourne in his difficulties rather than lend encouragement to a Conservative opposition which had already proved itself unequal to the task of government. The eventual success of Melbourne's experiment in moderate government on a Whig-Radical-O'Connellite base was always in doubt, but the Conservative failure was a matter of record.

[1] Charles Fitzroy to Richmond, July 5, 1835. Goodwood Mss. G7/313; Duke of Grafton to Richmond, November 20, 1835. Goodwood Mss. G11/515.

[2] *Greville memoirs*, III, 234.

[3] Ibid., 237.

[4] Melbourne to the Duchess of Richmond, September 10, 1835. Goodwood Mss. G9/243.

[5] Bentinck to Graham, January 24, 1836. C. S. Parker, *Life and letters of Sir James Graham, second Baronet of Netherby, P.C., G.C.B., 1792-1861* (London, 1907), I, 242-243.

Though less active in the Lords in 1836 than in the previous year, Richmond continued to defend the Cabinet against the wrecking tactics of the Tory peers. The government eventually went further than many of its Irish and Radical supporters wished in accepting amendments from the Lords to the Irish Corporations Bill. Lyndhurst and his followers nevertheless proposed to reject the bill as amended. Richmond, on June 27, pointed to the dangers which such a course involved:

> . . . The Commons had gone farther than their Lordships were now called on to concede; and he asked them seriously to consider whether they did think collisions between the two Houses of Parliament were very safe and altogether expedient measures? . . .[1]

Lord Grey himself stirred from retirement to speak in the same vein in this debate; that one member of the House attributed Grey's appearance to Richmond's influence with his old colleague attests to Richmond's stature among the political elite.

A long letter written by Stanley to Richmond in the closing months of William IV's reign reveals how Richmond sought to act as an intermediary between Melbourne on the one hand and the leaders of the Opposition on the other. It suggests also the degree to which the party leaders attempted privately to resolve the conflicts which threatened to bring the orderly business of government to a standstill—conflicts encouraged and intensified by the interconnectedness of the issues which constituted the stuff of party politics. In May, 1837, Richmond had undertaken for Melbourne to ascertain from Stanley if Stanley no longer thought it possible amicably to settle the question of Irish Municipal Reform. Stanley replied:

> I have this moment, on my return home, received your letter of yesterday—but unfortunately Sir Robert Peel is out of Town till Tuesday or Wednesday, and I am going out on Monday for a week. I cannot therefore communicate with him; and not being able to do so, I cannot write to you with the entire unreserve, which you know I should use, if I were only telling you my own views and opinions. But I think I may answer your specific question by saying that I by no means ' consider the question of compromise at an end ' —and that any difference of tone, which Melbourne might think he remarked in the House of Lords the other night, was not an unnatural consequence of John Russell's step in fixing the 2nd Reading of the Tithe Bill for the very day to which the Lords had postponed the Municipal Bill . . . I repeat that I am persuaded the majority of the House of Lords will pass an efficient Corporation Bill for Ireland provided they first see an unobjectionable Church measure secured—without that preliminary, I can hold out no hopes of any arrangement . . . I think I see a mode in which, with the cooperation of the government, these difficulties might be met: and if I had *pleins pouvoirs* to treat with you, or with Melbourne (and he had the same to act for himself) with my knowledge of the views of one side, and my conviction of the wishes of the other, I cannot think that a settlement would be very difficult . . .[2]

As long as " questions of compromise " remained open, Richmond would not deny Melbourne his good will and his good offices in attempts to resolve them.

Lords George and Arthur Lennox

In the House of Commons, Lord George and Lord Arthur Lennox mirrored with their votes their brother's political countenance. Donald Southgate has noted in *The passing of the Whigs* that Richmond's resignation from the Cabinet in 1834 cost the Whigs " the Lennox influence in Sussex " and that the two M.P.s " went Con[servative] after 1834."[3] These assertions need modification. The Lennox brothers, following Richmond's lead, gave the Peel government a guarded and conditional support in 1834 and 1835. But when the Whigs

[1] *Parliamentary Debates*, Third Series, XXXIV, 956-7.
[2] Stanley to Richmond, May 13, 1837. Goodwood Mss. G15/1405.
[3] *The passing of the Whigs* (London, 1962), pp. 79, 444.

regained office in 1835, the Lennoxes gave that same support to the Melbourne ministry. In the 1836 session Lord Arthur and Lord George voted with the ministers in every major division in which they participated, save two: that on the final reading of the Irish Corporation Bill, on March 28, and that, as one might expect, on the Appropriation Clause, on July 4. This pattern prevailed in the next session as well, with Church Rates and Church Leases providing the occasions on which the Lennoxes entered the opposition lobby. These were not the voting patterns of M.P.s who had " gone Conservative."

If the Lennoxes were not Conservatives, does it follow that they were therefore Liberals? To argue so, of course, assumes that party had become all-prevasive by the mid-1830s, a contention which Richmond would not have accepted and which recent students of early Victorian politics do not explicitly contend. Nevertheless, the effect of their scholarship tends to require that M.P.s be labelled by party if it seems at all possible to do so. Beales, for example, offers a number of criteria which one may employ in order to distinguish Liberals from Conservatives. First, following W. A. Aydelotte, he points out that " on the question of the disposal of the surplus revenues of the Irish Church, voting was on strict party lines." Second, he notes that party leaders " did not expect support from the rank and file of their party on every issue of policy, only ' general ' or ' regular ' support." Finally, he states that the " touchstone of party allegiance was not voting on issues of policy, but voting on issues devoid of policy content," such as Speakership elections.[1] The application of any one of these tests to the votes given by the Lennoxes certainly provides an answer to the question whether they were Liberal or Conservative; but a problem arises after one has applied all three of them. The picture is as muddled as ever: the Lennoxes voted against the Appropriation Clause, and thus are to be identified as Conservatives; they nevertheless left a pattern of general support for the Melbourne government, and therefore are to be called Liberals; and, finally, they voted for a Conservative for speaker in 1835 and a Liberal in 1837. Clearly, the label one applies depends upon which touchstone he uses, and a variety of touchstones from which to choose means that at least two M.P.s can bear both labels.

Perhaps the most obvious method of determining the party allegiance of a Member of Parliament would be to ascertain how the M.P. defined or described himself in terms of party. Though Beales warns against the dangers of too uncritical an acceptance of a politician's self-description, whether a man called himself a Conservative or a Liberal is certainly evidence toward an answer to the question even if this evidence " must be tested against the evidence of his political behaviour." The correspondence of Lord George and Lord Arthur with their elder brother is conspicuously devoid of the language of party as it might apply to them. To argue from the absence of evidence is admittedly risky, but what might be called the " cumulative silence " of the Lennoxes as to a party identification is surely significant. At minimum it suggests that they rarely thought of themselves as party men.

How did their contemporaries view the Lennoxes in relation to party politics? " Ben " Stanley, the government's Chief Whip in 1838, drew up near the end of the session a list of the government's supporters whom he expected to be absent from a forthcoming division. He included the Lennoxes on this list, but he set their names apart from the others, as if to remind

[1] *Ideas and institutions of Victorian Britain*, p. 12. Beales also speaks of motions to amend the address and explicit votes of no-confidence as motions devoid of policy content. But such motions were just the reverse: they required a member to vote on all the partisan issues of the day in a single division. No policies were at issue in a Speakership election; all were in a vote of no confidence. This is surely a distinction worth making.

anyone who used the list that the Lennoxes stood toward the government in a position somewhat different from that of ordinary ministerialists.[1] *The Times* attempted to divide all M.P.s elected to the Commons in 1837 between " ministerialists " and " opposition ": this attempt itself shows the degree to which politics was assuming a two-party character among those who both reflected and shaped public opinion. After shifting the Lennoxes back and forth from one list to another (the lists were enlarged and revised as fresh returns were reported), *The Times* decided to leave them among the " ministerialists." Several vigilant readers of *The Times* took marked exception to this decision, and they pointed to votes such as those which the Lennoxes gave against the appropriation clause, as evidence that the brothers were no ministerialists at all. Like twentieth-century scholars, they too had touchstones to prove their case.[2]

To describe the Lennoxes as ministerialists makes good sense, however, as long as one speaks of them as ministerialists during the brief Peel ministry as well. The Lennoxes were ministerialists in the sense that since the autumn of 1834 they had given general support to the ministers of the Crown, whether Conservative or Liberal. And if support of the Conservatives had not made the Lennoxes themselves Conservatives, neither had support of the Liberals made them Liberals. In Richmond's mind an even-handed endorsement of moderate government from either set of competing politicians was possible if one made it clear that he would accept favours or promises from neither: nonpartisanship required disinterestedness both in form and substance. He himself accepted the Lord-Lieutenancy of Sussex only after making it clear that he considered the appointment a non-political one; his brothers could not accept political appointments of the kind to which partisan M.P.s might aspire. Just as Lord Arthur had failed to obtain a place in the Queen's Household while the Conservatives were in office, so Lady Arthur's hopes for entering the royal bedchamber under Whig auspices received no encouragement.[3] In the Commons the Lennoxes had to play the part of the disinterested independent member, and the part was one to which both were quite ill-fitted. These courtiers *manqués* voted in division after division without, to use Lord Arthur's language, " getting anything by it." Richmond's nonpartisanship may have served the interests of the nation; it did little to advance his brothers'.

The change of course

The death of William IV and the accession of Queen Victoria in June, 1837, diverted the attentions and energies of the politicians from Westminster to the constituencies. Party feeling ran high, and the elections for West Sussex and for Chichester revealed that neither of these constituencies was immune from the trends which manifested themselves in other parts of the nation. In 1832 and 1835 Lord George Lennox and his Liberal colleague, the Earl of Surrey, had been returned unopposed for West Sussex: the combination of Richmond's brother and Norfolk's heir discouraged any opposition. But the Conservative current which moved through the country divisions in other parts of the country in 1837 ruffled the hitherto placid waters of West Sussex as well. Petworth produced, in the person of General Henry Wyndham,

[1] Russell Papers, Public Record Office 30/22/3B/51.

[2] On attempts to distinguish M.P.s by party, see also the *Westminster Review*, Vol. 28 (October, 1837), pp. 8-9; and Gash, *Reaction and Reconstruction*, pp. 167-169.

[3] " Arthur wrote to me that you kindly promised to speak to Lord Melbourne about my wishes to be made a woman of the Bed Chamber so will you excuse my expressing the hope that you will not forget as I am sure *your* seconding our request would greatly influence him in our favour . . . " This aspiration of Lady Arthur's, most likely expressed to Richmond in the spring or summer of 1837, remained unrealised. Goodwood Mss. G15/688.

one who challenged in defence of the Church and the landed interest the ascendancy of Goodwood and Arundel. While the representatives of the two ducal houses successfully resisted Wyndham's candidacy,[1] so keen a churchman and agriculturalist as Richmond cannot have enjoyed a contest in which his own brother could be portrayed as being insufficiently friendly to the interests of parson, landlord and farmer. Yet such was the consequence in the later 1830s of allowing one's candidate to stand too closely identified with a Liberal government.

The electoral situation in Chichester was different. Before the Reform Act was passed, the " Richmond interest " had selected one Member of Parliament; the " Blue " interest, of recent years in the possession of John Smith, the London banker, chose the other.[2] The Reform Act brought no change in this arrangement: two-party politics still lay in Chichester's future. No Conservative candidate, for example, presented himself in either 1832, 1835 or 1837. John Smith's son, John Abel Smith, returned in the Blue interest in 1832 and 1835, was a decided Whig; Lord Arthur Lennox was known as a moderate reformer in 1832 and 1835. But Chichester Radicals would have nothing to do at either election with these two reformers: on both occasions a Radical candidate stood, not only in support of the usual Radical causes, but also against the domination of the two commanding interests. In other words, the Chichester electorate was divided not between Liberals and Conservatives, but between the forces of the interests on the one hand and their opponents on the other. Not until 1837 did the first glimmer of a Liberal-Conservative two-party alignment appear in Chichester.

The absorption of the Radicals into the main body of Whigs and Liberals, discerned by observers of the 1837 election throughout the country, began in Chichester as well. Lord Arthur Lennox, having canvassed the voters for several days, reported with some alarm to Richmond: " . . . It appears that the parties [Blue and Radical] have coalesced . . . "[3] Smith had fully supported the government in all its measures at relieving the dissenters, whereas the Lennoxes had voted in the 1837 session against the ministerial scheme for abolishing Church Rates. Now some of the Radicals were prepared to vote for Smith as well as for John Cobbett, the Radical candidate; in turn, many Blues intended to vote for Smith and Cobbett instead of Smith and Lennox. Hostility to the Poor Law ran high in a sizeable section of the Chichester electorate, and Lord Arthur feared that Smith might make a further gesture toward the Radicals by appealing to the anti-Poor Law sentiment:

[1] The result of the poll: Lennox, 1,291; Surrey, 1,247; Wyndham, 1,049.

[2] The " Blue " interest in Chichester dated from 1790. In that year the third Duke of Richmond attempted to nominate both Members from the borough instead of simply the one who had been traditionally his. The independent electors successfully resisted this piece of aggression, and from the organisation which they formed to defend the electoral custom of the borough descended the Blue Interest. The Blues lapsed into venality, however, and by 1820 a new group of independents, embued with a good deal of popular radicalism of the kind expounded by William Cobbett, had formed to oppose the pretensions of the two interests to control the selection of M.P.s. The Richmond Interest, based on the influence of a great landowner just outside the borough and with many clients in the borough, constituted a less objectionable interest to independents than did the Blues. The Blues apparently simply sold themselves to the highest bidder and then purchased just as crassly votes for their patron or his nominee. The Radicals who perpetuated the independent tradition in Chichester in the 1820s and the early 1830s were, it would appear, more interested in eliminating what they saw as " corrupt " politics rather than in eliminating deferential politics. See William Durrant Cooper, *The Parliamentary history of the county of Sussex; and the several Boroughs and Cinque Ports Therein* (Lewes, 1834), pp. 15-16 *et infra.*

[3] Lord Arthur Lennox to Richmond, July 12, 1837. Goodwood Mss. G15/771.

> . . . I am anxious to know what line Smith will take on the Poor L. question —they say he is prepared to change his opinion, seeing the feeling here is so strong, but I trust he will not be so shabby & I cannot easily believe it after his conversation with me in which he said he was determined to fight the question manfully.[1]

Lord Arthur, in fact, could see only difficulties in his way: " [I] have succeeded better than I anticipated [in canvassing], but have met with many refusals on account of the Poor Laws—also some on account of Church Rates—& in 2 or 3 instances because I am not sufficiently Tory . . . "[2]

At the end of the voting Lord Arthur's fears—' We have *no chance* of being at the head of the Poll—the Blues have behaved most disgracefully '[3]—were confirmed. Smith succeeded in grafting onto the Blue interest Radical votes once hostile to him; Lennox, on the other hand, found that Blues who once gave him their second votes now gave them to the Radical. Lord Arthur was too nearly a Tory to satisfy the Radicals and yet too much a Liberal to satisfy voters of the Church-and-Crown stripe. He had, of course, the security of his brother's interest to rest upon, and he came in comfortably ahead of Cobbett. Nevertheless, the indignity of his taking second place in the poll demonstrated that a candidate not clearly identified in the party struggle might suffer and not gain as a consequence.[4]

The next two years saw little change in the voting behaviour of the Lennoxes in the House of Commons. Lord Arthur sailed to Canada with the army in April, 1838, and did not return to the Commons until the next session; before his departure he voted, with one or two minor exceptions, regularly with the government. Lord George showed himself equally sympathetic, and possibly even more so, to the Liberals. In the 1838 session he supported their measures dealing with Church leases and with those two hardy perennials, Irish tithes and Irish Corporations. In what may have represented a sign of greater warmth toward the government, he did not vote in the division of the Appropriation Clause.

The first half of the 1839 session, so taxing a one for the government, found Lord Arthur and Lord George dividing with the Liberals on three critical occasions. On April 19 the opposition pressed a division on a motion censuring the government's Irish policy. That the Lennoxes should support the Cabinet on this occasion accorded with Richmond's advocacy of conciliation in Ireland. Though he remained an uncompromising Protestant, Richmond was no Orangeman, and Stanley had thought his opinions sufficiently compatible with those of the Cabinet to make him, in November, 1838, a plausible candidate to succeed Lord Normanby as Lord-Lieutenant.[5] The Whigs survived the vote of censure on their Irish policy only to face a severer test over the government of Jamaica. Again, the Lennoxes stuck by the Cabinet; but on May 6, with a handful of Radicals defecting, the Whigs were left in a minority of five, and they resigned.

[1] Ibid.

[2] Lord Arthur Lennox to Richmond, July 11, 1837. Goodwood Mss. G15/770.

[3] Lord Arthur Lennox to Richmond, July 25, 1837. Goodwood Mss. G15/685. The poll ended as follows: Smith, 490; Lennox, 387; Cobbett (William Cobbett's son), 252. In 1835 the result had been Lennox, 486; Smith, 481; Cobbett, 121. A comparison of the figures suggests that Lord Arthur's poorer showing in 1837 ought to be attributed mainly to his losing the second votes of around a hundred Blues to Cobbett. Such a reading of the return accords with Lord Arthur's own anger at the Blues' " disgraceful " behaviour.

[4] Close, " Two party alignment," *English Historical Review*, Vol. 84 (1969), p. 276.

[5] But " I do not think it would suit . . . you," Stanley told Richmond. Stanley to Richmond, December 15, 1838. Goodwood Mss. G17/1443a.

The Whigs' resignation precipitated the Bedchamber Crisis. However lightly some contemporaries may have taken this episode, it concerned an aspect of politics close to the Lennoxes' hearts. The Queen chose to stand upon her right to have about her ladies of her choice, and Sir Robert Peel would not accept office unless the Queen substituted Tory for Whig ladies. Peel discreetly yielded to the Queen and Melbourne returned to the Treasury. This evidence of the Queen's partiality to the Whigs and her aversion to the Tories could only confirm the Lennoxes' preference for the ministerial party: if Lord George and Lord Arthur were ever to obtain places themselves, they must provide neither aid nor comfort for the Queen's enemies. They continued to demonstrate their good will toward the government. On May 7, Lord George and Lord Arthur supported the Whig Shaw Lefevre to succeed Abercromby as Speaker. With no issues at stake, the Richmond interest stood by the Court.

But issues quickly reasserted themselves, as they were wont to do in the 1830s, and the effect thereof was further to weaken the links between the Richmond interest and the Liberals. On June 20, Lord Arthur voted with the opposition when Lord Stanley divided the house against the Cabinet's new scheme for national education. The ministerial proposals had produced a storm of hostile petitions from defenders of the Church, and Stanley's motion failed by only five votes. The next day Stanley applied to Richmond:

> You will see that we were beaten last night by 5 on the rescinding the Order in Council. It now becomes a question of very nice discretion whether to take a vote in Committee against the Grant, or not. Every vote is of consequence, and as Arthur Lennox voted with us last night, I should be very glad to know through you whether if we divide again . . . we may rely on a repetition of his vote in any form.[1]

Stanley attained his object: on the 24th Lord Arthur assisted in driving the government's majority down to only two.

Lord Arthur's votes heralded the adoption of a new political role by the Richmond interest: Richmond now prepared to throw his weight behind the Conservatives, as Stanley learned at the beginning of the new year. The Tories planned to open the 1840 session with a motion of no confidence in the government, and Stanley inquired of Richmond:

> I understand your Brother Arthur is inclined to vote *against* Govt. on the Debate next week, but is doubtful how far it may be agreeable to you that he should do so. Not having had an opportunity of speaking to you, I wish you wd. let me know what you think, & let him hear from you.[2]

A few days earlier Lord Arthur had written to Richmond in the same vein. He received Richmond's advice on January 25. To it Lord Arthur responded:

> I . . . hasten by return of Post to assure you of my readiness to take your advice. I shall be, in my place, in the House of Commons on [Sir John Yarde] Buller's Motion & disagreeing with the Government on the Corn Law Question, the Ballot, Church Rates, National Education, etc., etc. I shall vote against them . . .[3]

" Lord Arthur Lennox has rallied to the Tories," Disraeli exulted,[4] and the historian who is dating precisely when Lord Arthur " went conservative " might satisfy himself with January 25, 1840. Yet Lord Arthur himself was none too certain of the wisdom of the course into

1 Stanley to Richmond, June 21, 1839. Goodwood Mss. G17/1896.
2 Stanley to Richmond, January 24, 1840. Goodwood Mss. G18/—.
3 Lord Arthur Lennox to Richmond, January 26, 1840. Goodwood Mss. G18/—.
4 Disraeli to Sarah Disraeli, January 31, 1840. William Flavelle Monypenny, *The life of Benjamin Disraeli, Earl of Beaconsfield*, II (1912), 87.

which Richmond had directed him: his rally was a rather faint-hearted one. Four days later he revealed his doubts to Richmond:

> . . . Differing as I have done from Ministers upon many very important Questions it is out of my Power consistantly [sic] to say that they possess my confidence, but it strikes me as a very different thing voting them out of office, for in the first place, I think one is bound to consider who are to be their successors & it does appear to me that the Tories are further from Office than they hitherto have been from the [distress] which their conduct on Prince Albert's Naturalization Bill & his Allowance must have given the Queen . . .[1]

Lord Arthur was considering resignation from the Army, and he anticipated that his financial affairs would need rearrangement as a consequence. Seven years in Parliament had brought neither him nor his wife nearer to place or pension, but his hopes were not extinguished: it would do him no good to antagonise a set of men whose departure from office could by no means be regarded as certain. Reflection thus sapped his resolve, but in the end he did as he had promised: " . . . I only hope you will without hesitation tell me your wishes which I shall attend to whatever they are."[2] On January 31 he divided with the opposition on Buller's motion of no confidence.

Thus Richmond adhered to the opposition and abandoned his posture as a disinterested friend of the government. The last occasion on which Lord Arthur gave his vote to the Liberals—the election of the Speaker—had been one on which no political issue was at stake. The occasion for his " rally " to the Conservatives was a division with reference to all the political issues. If one disagreed with the Government " on the Corn Law Question, the Ballot, Church Rate, National Education, etc., etc.," the time had come to abandon the illusion that these constituted merely a group of isolated and unconnected points of disagreement with men whom one could support in the interests of stable government. The " etc., etc." in Lord Arthur's list of grievances against the Whigs may be taken as symbolising Richmond's own acknowledgment that a pattern which he could not support had emerged in their political behaviour. Now political independence weakened rather than strengthened the contribution which he could make in the defence of his political principles and interests. " I do not think you have much more ' confidence ' in the present Government than I have," Stanley remarked to Richmond on February 29.[3] Such being the case, adherence to the opposition as an alternative to the Liberals was the logical and sensible course for Richmond to adopt.

Richmond's change of course was accomplished at a cost. Though his hold on Lord Arthur proved as strong as ever in 1839 and 1840, Lord George slipped his older brother's leash entirely. When the vote was taken on Buller's motion on January 31, Lord George entered the ministerial lobby. The Richmond interest in the House of Commons was now divided against itself.

Why had this happened? That Lord George simply refused to " go " Conservative with his older brother is certainly possible. He had chafed under Richmond's yoke occasionally in the past.[4] Only two years younger than the Duke, he may have always submitted to his brother's orders more reluctantly than did Lord Arthur. But while Richmond and Lord George may have had occasional disagreements throughout the 1830s and while Richmond's

[1] Lord Arthur Lennox to Richmond, January 29, 1840. Goodwood Mss. G18/—.

[2] Ibid.

[3] Stanley to Richmond, February 29, 1840. Goodwood Mss. G18/—.

[4] For example, on or around March 8, 1837, Lord George wrote to Richmond: " I have just received your letter. I should of course vote the way you wish although it will be with sincere regret." (Goodwood Mss. G15/716). The vote in question was, almost without doubt, that which was taken on Church Rates on March 15. Richmond corresponded with Lord Arthur at length about this question (see above, p. 2-3). Both Lennoxes divided against the government.

new-found Conservatism may have presented an occasion for a new one, the parting of the brothers' ways owed a great deal to an unusual conjunction of two other events in 1839. These, a coming-of-age and a betrothal, encouraged and facilitated the political rupture.

Richmond's elder son, the Earl of March, attained his majority in 1839. March was all but born to a seat in the House of Commons: in his case the question was neither whether nor how he would be elected, but when. Should a vacancy appear for Chichester or West Sussex, Richmond had a willing and eager prospect to fill it. And in 1839 it appeared to some that March's entry into the Commons was imminent: " Is March coming into Parlt before a dissolution? " Lady Stanley asked Richmond in her New Year's greeting.[1]

The coming of age was that of a Lennox, the betrothal that of a member of an even greater family. Late in 1839 Queen Victoria became engaged to marry Prince Albert. A married Queen meant an enlarged court, a second household, in fact, with a complement of new places for a sagging Whig government to distribute among its actual or potential supporters. The Queen and Prince Albert were married on February 10, 1840, and on February 25 the appointment of Lord George Lennox as a Gentleman of the Prince's Bedchamber appeared in the *Gazette*. In the search for place, Lord George had succeeded where Lord Arthur had failed.

Which came first, the decision that March would replace Lord George in the representation of West Sussex, or Lord George's acceptance of Whig patronage and the Whig discipline it implied? The evidence is not clear; what is certain is that Lord George's receipt of a place from the Liberal government foreclosed any likelihood that he would stand for re-election. He had become beholden, no longer to Richmond, but to Whigs whose politics Richmond now opposed. As it happened, Richmond declined immediately to demand Lord George's seat and Lord March did wait until the dissolution to claim it. The cost to the Richmond interest of this amicable arrangement came in the form of an unblemished string of Liberal votes from Lord George in 1840 and 1841. Lord Melbourne had no steadier supporter in the last two sessions of Queen Victoria's first Parliament. Lord Arthur and Lord George regularly cancelled each other's votes for eighteen months, as Richmond's advice to Arthur always told against the government while George listened to voices other than that which spoke from Goodwood. The penultimate division of this Parliament, on May 18, 1841, revealed just how far from Richmond's politics Lord George had moved. Until then he had voted consistently against any alteration of the protectionist system, but he now divided in favour of the downward revision of the Sugar Duties. Two and a half weeks later the opposition carried a vote of no confidence against the government by a majority of one. The Cabinet decided on a dissolution, and Lord George, having served the Whig ministry unstintingly at the end of its life, turned now to serve his royal master without the distraction of Parliamentary obligations.

The Richmond interest became an unambiguously Conservative one. Lord George informed his constituents of his decision not to stand for re-election on May 29, and on the same day the Earl of March announced his willingness to fill his uncle's place. He began his address by stating " without hesitation or reserve, that I can repose no confidence in Her

[1] Lady Stanley to Richmond, January 7, 1840.
Goodwood Mss. G18/—.

Majesty's present Government . . . "[1] March showed himself quite at home in the world of party politics. Soon he delightedly reported to his mother that his address was " very highly spoken of by all the Conservatives. Colonel Wyndham told me yesterday that he had read it and it had given him the greatest possible pleasure. Sir James Graham said it was a most capital address and could not be better . . . "[2] The Colonel Wyndham to whom March referred was Colonel Charles Wyndham, the younger brother of the unsuccessful Conservative candidate of 1837. Now, in 1841, March and Charles Wyndham stood together as Conservatives for the representation of West Sussex. The Earl of Surrey, Lord George Lennox's Liberal colleague, declined to offer himself for re-election. With the tide of Conservatism running so strongly, March and Wyndham would undoubtedly have won even if Surrey had gone to the poll. The Conservatives took West Sussex in 1841 without opposition; six years earlier no Conservative had stood.

If the appearance, in 1837, of a Conservative candidate in West Sussex now proved to have been a sign of things to come, the same portents of change then manifest in Chichester also took clearer shape four years later. The Chichester Radicals, whose coalition with the Blues had so angered Lord Arthur Lennox in 1837, became so far identified with the Blues that they fielded no independent candidate in 1841. The Richmond interest returned Lord Arthur, now thoroughly identified as a Conservative; the Blues and Radicals returned John Abel Smith, the Liberal. In this way the national pattern of two-party politics superimposed itself on Chichester.

The general election of 1841 thus completed the transformation of the Richmond interest. Richmond had accepted the role of a partisan in Westminster politics by the beginning of 1840; Lord Arthur Lennox and the Earl of March stood for election in 1841 as partisan candidates for Chichester and West Sussex. Further proof of Richmond's new willingness to play two-party politics came soon after the election was over. In the middle and late 1830s Richmond had signalised his distance from the parties by refusing to allow his brothers to accept either party's patronage, and in 1840 Lord George Lennox could scarcely have chosen a more telling way to proclaim his breach with Richmond than by accepting a place from Melbourne. But in 1841 Richmond himself solicited a place for Lord Arthur from the new Conservative ministers.[3] After a brief wait Lord Arthur received a clerkship in the Ordnance. The Richmond interest, having become a Conservative one, broached no delay in laying claim to the rewards of its conversion.

Richmond declined to join the new administration, but his relations with the new Conservative cabinet were quite different from those which he enjoyed with Melbourne, even at their closest. Not only did Richmond permit his son and brother to accept places in the government, but he himself came to embody the inflexible Toryism which the bitter struggles of the late '30s and early '40s produced. Having lost confidence in the politics of " moderation "

[1] *A* [British Museum folio] *Collection of addresses and placards relating to Parliamentary elections for the City of Chichester and the County of Sussex, and Municipal elections for Chichester, 1784-1859.*

[2] The Earl of March to the Duchess of Richmond, June 2, 1841. Goodwood Mss. G18/—.

[3] Sir James Graham to Richmond, September 5, 1841. Goodwood Mss. G18/—.

and " compromise," Richmond propounded his new Conservatism with an ardour which waxed with the 1840s. Peel and Graham, much less rigid than Richmond in their understanding of the objectives of the Conservative party, were to find his adhesion to their " leadership " a mixed blessing from the very beginning of their ministry. Even before they took office, in fact, Richmond defined the terms upon which they could hold it. At the opening of the new Parliament he excoriated the " free-trade budget " of the moribund Whig government, and then turned to the Conservative front bench, now on the threshold of power:

> It had been said tonight, that the men who were to succeed the present Government in office would themselves soon turn round upon the landed interest and refuse it protection. If they did, he knew what course the landed interest would take. They would turn out the new Government as they had turned out the present one . . .[1]

Richmond superbly symbolised the problem which the Conservative party of the 1840s represented for its leadership. Though Sir Robert Peel may have " claimed a free hand " to carry on the Queen's government, Conservatives like Richmond would never acknowledge the validity of such a claim. He, it must be emphasised, did not turn to Peel simply for the strong leadership which Melbourne had failed to provide. Peel's kind of leadership, as it had once before manifested itself in the " betrayal " of 1829, carried with it dangers as well as strengths. In any case, Richmond's ultimate political regard had always been for measures, not men. He became a Conservative, not to give Peel a free hand, but to defend the landed interest and the Church; and when Peel, in 1845, moved to suspend the operation of the Corn Laws, Richmond made good the threat which he had pronounced four years earlier in the name of the landed interest.

In company once again with Lord Stanley and Lord George Bentinck, Richmond led the Conservative attack on Sir Robert Peel. They failed to secure protection for the landed interest, but they did succeed finally in driving Peel from office and from the leadership of the Conservative party. And it was they and those who shared their beliefs who constituted and perpetuated the Conservative party as a political instrument. The Richmond interest became so thoroughly identified with organised Conservatism that no questions of the kind which had disturbed the official careers of Lord George and Lord Arthur Lennox troubled the next generation of Lennoxes in politics. Lord March was returned to the Commons, without opposition, as a Conservative until he went to the Lords on Richmond's death in 1860; thereafter his own son held the West Sussex seat. March eventually pursued an official career which ended in his becoming, when sixth Duke of Richmond, Lord Privy Seal and leader of the Conservative peers in the House of Lords. His younger brother, Lord Henry Lennox, sat for Chichester between 1846 and 1885; he too had an official career of sorts, though it was to owe much more to his friendship with Disraeli than to any great merits of his own.[2]

1 *Parliamentary Debates*, Third Series, LIX (August 24, 1841), 84.

2 For Lord Henry's connection with Disraeli, see Robert Blake, *Disraeli* (London, 1966), pp. 325-327. Lord Henry entered the Commons in circumstances which brought the political career of his uncle, Lord Arthur, to a rather pathetic close. Lord Arthur, having finally received a place from the Crown, would not resign it in 1845 at the time of the Corn Law Crisis. Richmond required him to yield his seat in the Commons to Lord Henry. When Peel was forced to resign in the summer of 1846, Lord Arthur lost his place as well. Lord Henry Lennox's only contested election came in 1868, when the electors of Chichester were obliged by the Second Reform Act to return only one member instead of two. The long standing electoral agreement between the Richmond Interest and the Blues ended; Lord Henry defeated John Abel Smith by 603 votes to 433.

Conclusion

" While family ties, ties between patron and client, and even ties of personal friendship were of recognised political importance at this period, they were normally put, and were expected to be put, at the service of party." The quotation, however accurate a statement it is of the relation between those ties and party politics in the age of Peel, in fact comes from Geoffrey Holmes' magisterial treatment of *British Politics in the Age of Anne*. These two periods in British political history share some remarkable characteristics. Holmes has described early-eighteenth-century Britain as a " divided society, with two great nation-wide parties, whose rivalry increasingly permeated the life, the work, and even the leisure of the politically conscious classes." Early Victorian Britain experienced the same development. In the early eighteenth century Whig and Tory fought bitterly over the place in English life of the Church by law established and over the respective claims of the moneyed and the landed interests. When the fifth Duke of Richmond, at the end of the 1830s, became a Conservative in order better to defend the Church and the landed interest, he echoed sentiments which had made men Tories over a century earlier. Richmond, his brothers, and his sons, like their Augustan counterparts, came " to terms with the two parties which . . . made overriding demands on the allegiance of the vast majority of politicians and dwarfed all other political groups and associations."[1]

As in the early eighteenth century, issues in the 1830s and 1840s divided a nation whose politics rested to a significant degree upon a deferential and hierarchical social foundation with deep-rooted local loyalties and local rivalries. In both periods those local loyalties and rivalries came to harmonise with, to strengthen and to reflect the division between the two great national parties. Nevertheless, with respect to their futures, Augustan two-party politics and early Victorian two-party politics were quite different. The two-party politics of Queen Anne's day yielded to the groups and factions of the mid-eighteenth century when the nation resolved the issues which divided it and as a narrowing circle of oligarchs increasingly took control of politics in the constituencies.[2] It is not without significance that the Richmond interest itself was established early in the 1720s, when the first Duke of Richmond purchased the Goodwood estate and sent for the first time to Parliament an Earl of March as Member for Chichester. Their descendants, the fifth Duke and his brothers, received their values and assumptions from that Georgian political society which Sir Lewis Namier analysed in such detail: he who wishes to understand what shaped the aims and purposes of Lord George and Lord Arthur Lennox should begin by reading the first chapter of *The Structure of Politics at the Accession of George III:* " Why Men Went to Parliament."[3]

The trend was towards oligarchy in the early eighteenth century; it led away from oligarchy in the mid-nineteenth. Whereas Augustan politics shivered apart into the politics of groups and factions, early Victorian two-party politics went on to become a " system " and a seemingly essential part of the constitution itself. But in Chichester, West Sussex and areas of rural and market-town Britain like them, modern party politics did not uproot the politics of local interests to send down new and different roots. Instead, modern party was grafted onto those old and deep roots and drew sustenance from them. What one sees in Chichester and West Sussex in the 1830s and the 1840s is the way in which this grafting and the subsequent growth

[1] *British politics in the age of Anne* (London, 1967), pp. 414, 418.

[2] See J. H. Plumb, *The growth of political stability in England, 1675-1725* (London, 1967), pp. 75-104.

[3] Namier, *Structure* (2nd ed., London, 1960), especially pp. 2-4 and 16-28.

occurred. Just as Conservatism in Chichester drew upon the resources of the Richmond Interest, Chichester Liberalism owed much of its strength to the old Blue organisation. Those old stocks resisted adjustment to their new functions at times, as the vicissitudes of Lord George's and Lord Arthur's careers attest; but once the trauma was past, they give vigorous nourishment to the new growth.

Because the fifth Duke of Richmond and then his children accepted and exploited the potential of party politics, they secured for two more generations the existence of the political interest which they led. As early as 1837 the interest as an electoral force standing apart from the two parties found itself in travail and, had Richmond persisted in his independent course, it is hardly likely that his electoral proprietorship could have survived two further extensions of the franchise and the Ballot Act. Richmond's identification with one of the two competing parties at the end of the 1830s represented a decision to go with the grain of national politics rather than against it. And his identification with the Conservatives in particular meant that he rode the tide of electoral sentiment in the counties. The decision preserved the West Sussex for Richmond: West Sussex would almost certainly have returned two Conservatives in 1841 even had Richmond opposed such a return. In declaring for the Conservatives, Richmond mirrored the sentiments of his neighbours less exalted in their rank than he, but no less clear than he in their sense of what was at stake. In Chichester as well, the newly Conservative Richmond interest tapped and refreshed itself from the springs of party feeling. The absence of any electoral organisation associated with the Conservative party constituted a remarkable anomaly for a cathedral city, even one with a Whig bishop. Conservative sentiment in Chichester, as Lord Arthur discovered in 1837, had been waiting for an instrument for its expression. Here, too, the move to outright Conservatism gave new life to the Richmond interest.

As the transition to democracy proceeded in Victorian Britain, the number of proprietorships slowly diminished: H. J. Hanham cites an even dozen still identifiable in the last decade of the nineteenth century.[1] Among the twelve was the Richmond interest, returning after 1884 the member for the new South-west (Chichester) division of Sussex. Having recovered from its hesitancies in the late 1830s, the Richmond interest lived to see the century out: the old roots did indeed run deep. Their endurance attests not simply to the tenacity of deferential habits of thought and patterns of behaviour in one corner of rural England, but also to the contribution which such habits and patterns made to the strength of the two great parties in the classical age of the two-party system.

ACKNOWLEDGEMENTS

I must express to the staff of the West Sussex Record Office my thanks for the courtesy and generous assistance which they afforded me in my examination of the Goodwood Manuscripts. The papers of the fifth Duke of Richmond are currently being re-catalogued, and new numbers remain to be assigned to those documents which will constitute volume eighteen and its successors.

[1] *Elections and party management* (London, 1959), p. 405.

SHORTER NOTICES

This section of the *Collections* is devoted to short notes on recent archaeological discoveries, reports on small finds, definitive reports on small-scale excavations, etc., and also to similar short notes on aspects of local history. Material for inclusion should be sent to Mr. Alec Barr-Hamilton, 226, Hangleton Road, Hove. Those without previous experience in writing up such material for publication should not be deterred from contributing for Mr. Barr-Hamilton will be happy to assist in the preparation of reports and illustrations.

ANCIENT MONUMENTS IN SUSSEX—The following have been Scheduled since publication of the last list in *Sussex Archaeological Collections* vol. 116 (1977-8), 393. The numerals on the left are the county numbers allotted to the monuments.

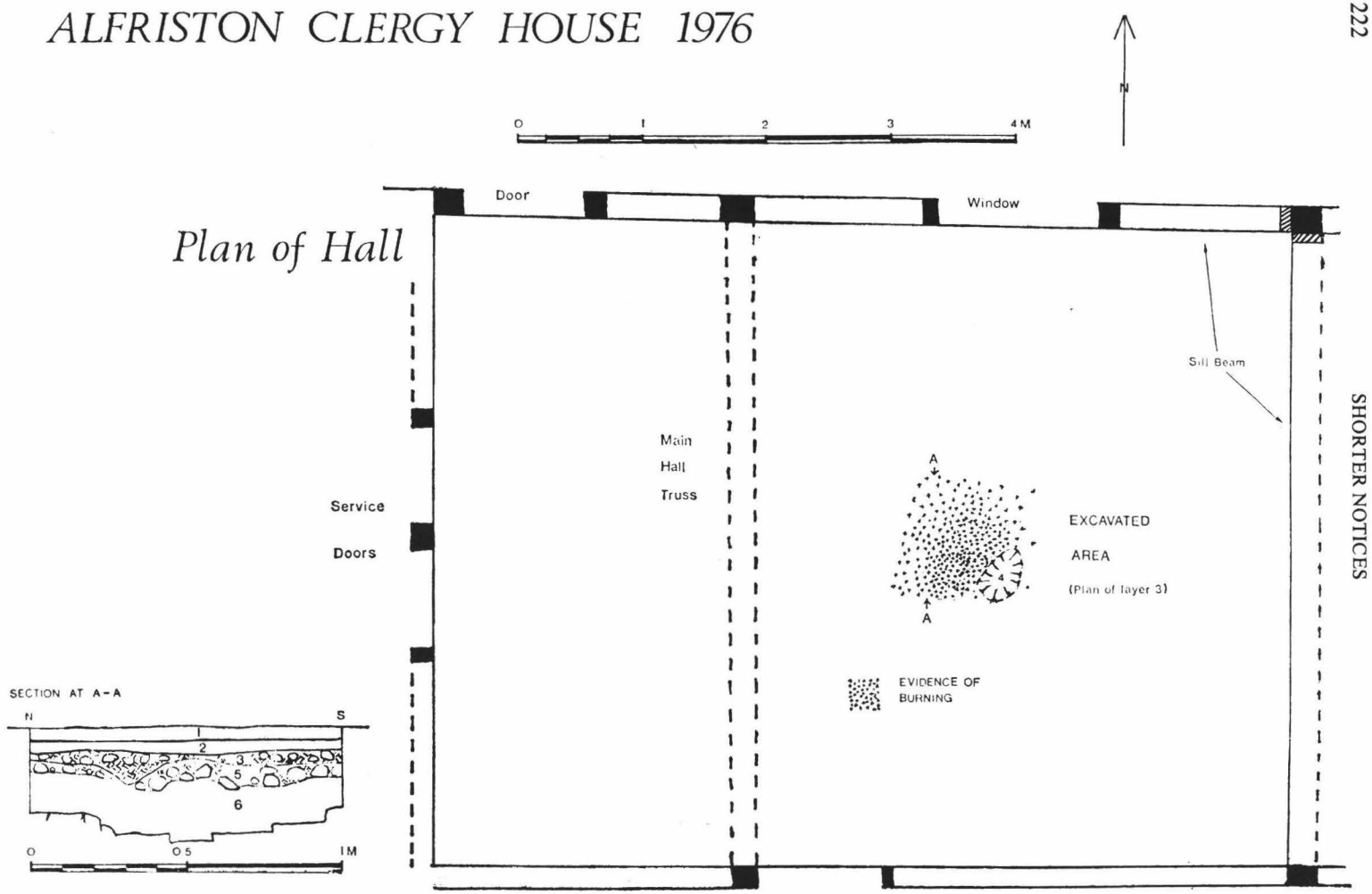
		East Sussex
4	Hastings	Hastings Castle: additional area NE of outer ward (part of Recreation Ground on West Hill).
54	Falmer	Earthworks and lynchets on Buckland Bank and Buckland Hole: additional area to SW of Buckland Hole.
144	Hastings	Earthwork on East Hill: additional area.
395	Buxted	Little Forge, post-medieval ironworks.
432	Seaford	Martello Tower no. 74.
434	Westdean	Barrow in Seven Sisters Country Park.
435	Westdean	Early 19th-century site of barracks.
443	Maresfield	Stumbletts Furnace.
444	Isfield	Cattle Pound.
451	Icklesham	Moated site at Old Place.
455	Withyham	Moated site near Blackham Court.
461	Hastings	Site of St. George's church, East Hill
		West Sussex
377	Sullington	Group of four barrows additional to five already Scheduled on Sullington Warren.
438	Singleton	Court Hill Iron Age enclosure.
439	Patching	Cock Hill Bronze Age enclosure.
441	Pulborough	Borough Farm Roman Villa.
444	West Dean	Roman Villa, Warren Down (Chilgrove II).
446	Littlehampton	1854 fort.
447	Rogate	Land at Durford Abbey, farm buildings, barn and water-wheel (excluding *Listed* house).
452	West Dean	Deserted medieval farmstead, remains of later farmhouse and associated land at Monkton Farm, Chilgrove.
453	Kirdford	Site of Wephurst glasshouse.
454	Duncton	Romano-British settlement at Church Farm.
456	West Dean	Site of Chilgrove Chapel.
457	Pulborough	Site of Roman building (?mausoleum) at Broomershill.

E. W. HOLDEN (Honorary Correspondent for Sussex, Ancient Monuments Inspectorate, Department of the Environment)

SUSSEX BARROWS—Three more barrows have been recognised by Mrs. H. G. Holden and the writer whilst walking in the Graffham area, though all are actually in East Lavington parish.

ALFRISTON CLERGY HOUSE 1976

Plan of Hall



Description of features in Fig. 1

1. Rammed chalk, with a little tile and coal ash. Modern.
2. Dirty chalk, surfaced trampled, very few tile fragments.
3. Crumbly chalk with fire-reddened, crumbly clay, a little brick and stone, no surface.
4. Pit.
5. Very red, discoloured chalky clay.
6. Chalk with grey-brown clay seams.

N.G.R.	Type of barrow	Diam. in m.	Height in m.	Remarks
SU 94741862	Bowl	25	1+	Partly destroyed by later banks and ditches on N. and S. sides. No sign of surrounding ditch. Planted with conifers.
SU 94221895	Bowl	20	1	Revealed by recent tree-felling over and around the barrows. No trace of ditch.
SU 94171896	Bowl	20	1	Ditto as last. Ploughed down on E. side.

E. W. HOLDEN

THE OLD CLERGY HOUSE, ALFRISTON, 1976

The National Trust invited the Sussex Archaeological Field Unit to check the existence of the medieval floor and hearth in the Hall of the 'Wealden' Clergy House, Alfriston, prior to consolidation work. Accordingly, a limited excavation was carried out on September 4th, 1976, in which the author was assisted by Mr. Ian Blair. In February, 1977, service trenches were dug by contractors outside the north wall and across the green west of the church; these were watched by Miss Peggy Norman.

The excavation showed that the floor has, at some time, been lowered below the medieval occupation level. The hearth area was identified by heat-reddened clay and crushed chalk, no more than 20cms. thick (Fig. 1, layers 3 and 5). This was covered by about 8cms. of post-eighteenth century material (layers 1 and 2), but the hearth itself had been removed before these later deposits were applied. There was no charcoal in any of the layers. The natural chalk lay 15-20cms. below the present floor level (layer 6).

A small scoop (feature 4) cut into the discoloured layers produced a few fragments of eighteenth-century tin-glazed earthware. There were no other datable finds from any of the layers, but there were fragments of Horsham stone. These may be stray fragments brought in from elsewhere to make up the floor, because the service trench near the north wall did not produce any more fragments.

The service trench across the green produced no evidence of occupation.

Acknowledgements

I should like to thank the National Trust, Corinne Wilson, B.A.(Arch.), A.R.I.B.A., Kenneth Garrett, Peggy Norman, and Ian Blair for their advice, consultation and practical help.

D. J. FREKE.

STOUGHTON RING DITCHES—It would seem likely that the five or six ring ditches at Stoughton, referred to by Bradley[1] include four recorded by Curwen in 1937.[2] Curwen described four 'dark rings' in a crop of barley, with diameters of approximately 40ft. (12m.: compare Bradley's estimates of between 20 and 30m.), completing his description with a sketch plan and a photograph (taken from the ground). The difference between the diameters given by the two notes suggests the possibility that different crop-marks are being described, despite the fact that the location is the same. It is, perhaps, best to await the evidence of further observation.

As Curwen noted at the time[3] the Stoughton ring ditches were the first archaeological crop-marks to be described in Sussex. Examination of vertical aerial photographs in County Hall, Chichester, taken in 1949 and 1971, has shown the latter to reveal nothing regarding these marks.The whole of the Bow Hill area would seem to be a candidate for systematic observation and photography from the air.

MIKE PITTS

[1] R. Bradley, "Ring Ditches at Stoughton," *S.A.C.* Vol. 112 (1974), p.158.
[2] E. C. Curwen, "Crop-marks on Stoughton Down," *S.N.Q.* Vol. 6 (1937), pp.139-140.
[3] Op. Cit.

EARTHWORKS AT HALNAKER HILL—The presence (or absence) of Roman or pre-Roman fields in Sussex west of the Arun has long been a subject of interest and several 'Field Systems' appear on Ordnance Survey maps of this area, both on the Downs and on the coastal plain. Work by the writer has suggested that greater study is needed before a prehistoric date can safely be postulated for many of these. One case where this does seem to be a reasonable inference, however, is the 'System' south of the enclosure on Halnaker Hill (SU 921 097).

Halnaker Hill is a southward-projecting spur on the southern edge of the Downs, about 4.5km. east-south-east of the Trundle and 7.5km. north-east of Chichester. Its highest point lies at about 128m. above O.D. In historical times, the hill appears to have remained unenclosed pasture until the beginning of this century. The earliest map with field divisions that the writer has seen is the Ordnance Survey 6in. sheet 49SW, revised in 1910; this shows the three main boundaries, which meet just inside the prehistoric enclosure and which form the basis of the contemporary field pattern. There are a number of earthworks, all ploughed but most still clearly visible on the ground, that appear to bear no logical relationship to this pattern. There are suggestions of an extinct field system aligned on a north-north-east—south-south-west axis. It may be significant that similar features are generally absent outside the area only recently brought under cultivation. The northern limit of the area covered by these earthworks is roughly coincident with the southern edge of a clay-with-flints deposit[1] which extends up the hill as far as the north side of the hill-top enclosure.

When visited by the writer in December, 1975, the fields south of the enclosure were under pasture. The northern half of the enclosure itself is in the corner of an arable field and the earthworks here are ploughed completely flat. A negative lynchet, which appears to have removed the ditch is developing against the enclosure on the west side.

No dating evidence exists for the Halnaker enclosure. Earthworks of similar shape and size are present at Barkhale (SU 976 126) and Court Hill (SU 897 137). Dating evidence for the former has not been published. Although Curwen described it as possessing "the characteristic peculiarities of Neolithic fortification,"[2] it could be argued that it is equally similar to an unfinished hill-fort. Court Hill is also undated. Holden[3] has described evidence for Late Bronze Age occupation behind a crescentic dyke on the spur north of this enclosure and, on morphological grounds at least, it would seem that an early date is likely for both Court Hill and Halnaker—Late Bronze Age or early Iron Age (if the latter, perhaps contemporary with the earliest Iron Age settlement at the Trundle). The fields around Halnaker do not appear to have been systematically walked. Ordnance Survey records note the finding of Roman pottery on the south slope (SU 9206 0926). The trackway which descends this side of the hill has cut down through one of the lynchets. At this point, a waste flint flake and a small, soft flint-gritted potsherd, fired black inside and brown on its outer surfaces (both placed in Chichester Museum) were recovered from the bank.

The marks visible inside the Halnaker enclosure, at first thought to indicate a possible earlier settlement on the same site are, perhaps, more likely to be a product of the considerable, relatively-recent disturbance, beginning at least in the mid-18th century, when the still extant windmill was erected. Ordnance Survey records refer to three possible entrances, on the south, west and north sides. Only one entrance of probable antiquity appears on the air photographs, on the north-west side. The other three are probably recent breaks associated with tracks serving the windmill and a 19th-century cottage, whose occupant owned fields at the bottom of the hill to the south.

It is, perhaps, worth noting in conclusion that, if we accept Bradley's interpretation of the aerial photograph of the Trundle in Barbican House[4] (that the Neolithic settlement extends considerably outside the Iron Age defences), then all of the four settlement centres referred to in this note are partially under plough; Barkhale, Court Hill and Halnaker, in particular, are suffering serious damage.

I would like to acknowledge the help of Mr. B. Wedmore, who assisted the writer in surveying the profiles and that of Mr. F. Aldsworth, who made available aerial photographs in County Hall, Chichester.

MIKE PITTS

[1] As mapped by J. M. Hodgson. *Soils of the West Sussex Coastal Plain*, Soil Survey of Great Britain, England and Wales, Bulletin No. 3 (1967).

[2] E. C. Curwen, *The Archaeology of Sussex*, 2nd ed., Methuen (1954), p.70.

[3] E. W. Holden, "Earthworks on Court Hill," *S.N.Q.* vol. 13, pp.183-185.

[4] R. Bradley, "The Trundle Revisited," *S.N.Q.* 17 (1969), pp.133-134.

FLINT ARTIFACTS FROM SEAFORD (Fig. 2)—A small collection of worked flints has been given to the Seven Sisters Country Park, Exceat, by Mr. W. Price-Jones of Seaford. With one exception, all are the result of surface collection by him over many years from a ½ mile x ¼ mile stretch of ploughsoil south of South Hill Barn and west of Hope Bottom, an area of Clay-with-Flints, in the parish of Seaford. The approximate centre of the area is at TV 503 978. By courtesy of Mr. J. Gascoigne, the Warden of the Country Park, the flints are the subject of this note.

The exception is the artifact shown in Fig. 2, 1, which was found in the topsoil of the grounds of St. Peter's School, Seaford, at about TV 495 996 and given to Mr. Price-Jones some years ago. This is separately described by Dr. D. A. Roe. A flint handaxe (Fig. 2, 2) was found in 1975 by Mr. Gascoigne near the foot of the cliff at Hope Gap at TV 511 974. It was wedged in a crack in the wave-cut platform on the foreshore and appears to have fallen from the soil overlying the chalk at this point. This handaxe, likewise, is described below by Dr. D. A. Roe, to whom I am indebted for his continued interest and advice in matters affecting the very early periods in Sussex.

The arable area between Seaford Head Camp and Hope Bottom has yielded large numbers of humanly modified flints ranging from the Mesolithic to the Neolithic and later periods. Many were found by W. J. Mortimore, the Rev. E. D. Arundell, and H. G. Hurrell.[1] Our member, Martin Bell, has also found Mesolithic and Neolithic flints over the same area,[2] and he draws attention to the fact that an association between Mesolithic industries and areas of Clay-with-Flints has been noted by Cunliffe at Chalton[3] in addition to his own discovery of a similar association on the Downs in the parish of Elsted, W. Sussex.[4]

Description of Fig. 2, nos. 1 and 2, by D. A. Roe.

The flint artifact shown in Fig. 2, 1 is a somewhat enigmatic object. Some of those who have seen it were inclined to regard it as a Lower Palaeolithic cleaver, and it was for this reason that it was sent to the writer to describe. He is, however, inclined to take a different view, for reasons which will emerge. The dimensions of the artifact, aligned as drawn, are: maximum length 119mm., maximum breadth 78mm., maximum thickness 40mm.

Cleavers are certainly found in Britain, though they are much less common here than in certain other parts of the world, notably Africa and India. The characteristic feature of a cleaver is the rather axe-like working edge at the tip end, set transversely (or sometimes obliquely) to the long axis of the implement. African-style cleavers are very distinctive objects, being made from large flakes, usually of hard quartzite or some volcanic rock; such flakes are often side-struck, and the cleaver is made by a particular technique which establishes its basic shape before the big flake is removed from its parent block. Only the barest trace of this technique of cleaver manufacture is known in Britain, however, British cleavers typically being made of flint and worked very much in the manner of bifacial Acheulian handaxes; indeed, some workers would regard them merely as a special handaxe type—as square-ended handaxes, in fact. They occur in certain British Middle Acheulian industries, such as those of Furze Platt and Baker's Farm in the Middle Thames valley, or Cuxton, near Rochester, in the Medway valley.[5] The only Sussex example known to the writer comes from Bishopstone, not far from Seaford, and is in the British Museum (accession no. 1945, 7-4, 2).

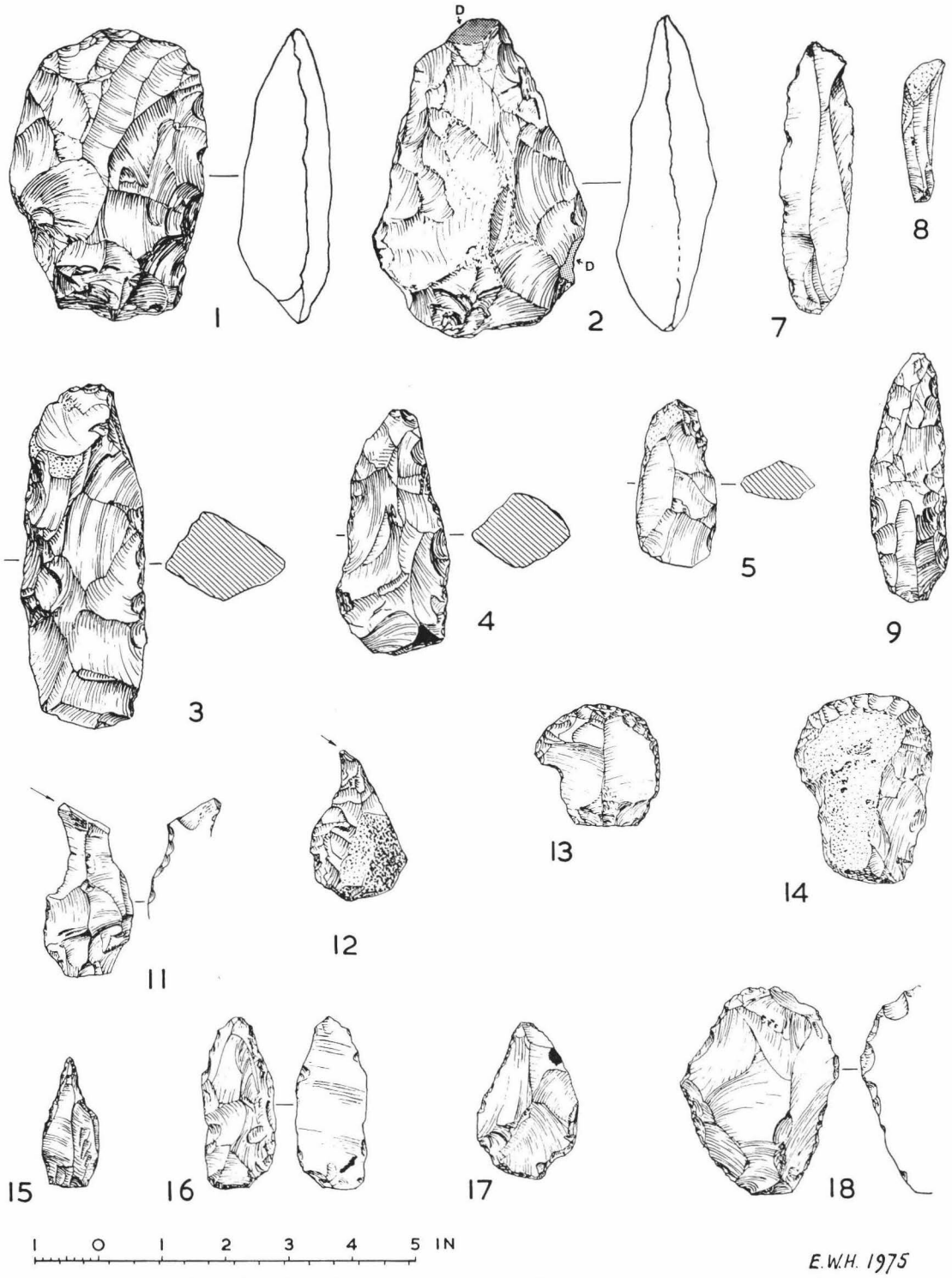


Fig. 2. Flint Artifacts from Seaford. 1. St. Peter's School. 2. Hope Gap. 3-18. From near South Hill Barn.

To such pieces the artifact shown in the drawing does bear a superficial resemblance. However, there are important differences of detail. First, the working edges of British cleavers are typically made in a rather different manner. Sometimes a true "tranchet finish" technique is used—the removal, in the final stages of manufacture, of a long flat flake running transversely right across the top, providing a sharp bevelled cutting edge. Such a tranchet flake may even be removed from both faces of the cleaver, so that the working edge is a double-bevelled one formed by the intersection of the two tranchet scars. Mesolithic axes were often finished or re-sharpened in a closely similar way. When a true tranchet technique is not employed, the cleaver working edges still show only a few large flake scars, which tend to run more or less transversely to the long axis. In Fig. 2, 1, however, the working edge on the face illustrated (at the top of the drawing) shows numerous rather small trimming scars, which tend to run in much the same direction as the long axis, and the same is to be seen on the face not shown.

If attention is next turned to the butt, the latter appears to have been squared off and slightly tapered, not very symmetrically, partly by crude flaking, but mainly by battering of the edges. The view could be taken that the battering is the result of natural processes during the implement's post-depositional history, but if this were so it is curious that the rest of its surface and some potentially vulnerable parts of the side edges should be so little scathed. It seems to the writer therefore that this is an original feature, which represents deliberate modification of the butt end for purposes of hafting the implement. Palaeolithic cleavers may well have been hafted on occasion, but there is not a shred of evidence to demonstrate this in Britain, and British cleavers not uncommonly have butts consisting of cortex, or else are roughly shaped as if to provide a hand-hold, though occasionally they seem to incorporate a second and narrower cleaver edge at the butt end. A battered finish, like that of the artifact under discussion, would not be at all typical.

The condition of the implement—unpatinated, with small spots and streaks of iron-stain and with the ridges only slightly dulled—does not suggest long incorporation in a Pleistocene deposit, and the object seems in fact to have been found in disturbed topsoil (see above). This, however, is no more than circumstantial evidence so far as age is concerned. Any conclusion must be guesswork, but the writer is not averse to making an honest guess, and he therefore rejects the artifact as a cleaver of Palaeolithic age, finds it out of line with the general morphological and technical run of Mesolithic axes, and suggests that it is a not very beautiful Neolithic unpolished axe, which was at one time hafted. To give it the benefit of the doubt, it is not inconceivable that it was once a much longer and therefore more elegant object, which broke during use somewhere just below the middle, so that the rather curious battered and squared butt is actually the result of rough reshaping of the broken object so that it could continue to be used. The working edge certainly has an appearance of heavy use, though the implement's condition is not quite fresh enough for useful microwear study. This idea of reshaping is pure speculation, however, and if a more detailed analysis is required it would need to be supplied by someone with more knowledge than the writer of Neolithic flintwork.

The artifact shown in Fig. 2, 2 presents no such problems of identification, although it has been reduced to a sad state by a combination of almost every kind of damage that could occur: it is the remains of a distinctly well-made Lower Palaeolithic (Acheulian) handaxe. It appears to have been of pointed pyriform shape, and fairly flat: the original length must have been about 14cm., the maximum breadth (aligned as drawn) is 90mm., and the maximum thickness 39mm. The implement is made of pale grey flint, now patinated and deeply stained ochreous yellow-brown. There are several damage scars of various ages, including the recent break which has removed the tip (modern damage marked *D* on drawing). The ridges between the flake scars are heavily abraded and there are small areas of battering, notably at the points of maximum convexity on each face; on the face illustrated, this battering looks very much like beach-rolling, and the provenance of the implement (see above) of course makes this likely. As if these detrimental processes were not enough, there are two further items of evidence for the implement's having experienced more than a fair share of Pleistocene rigours: white pencil-like markings here and there on its surface are the result of some kind of soil movement, most probably solifluxion or cryoturbation during a periglacial phase, while on the face not illustrated there are various ancient frost-cracks, one of which runs the whole way from the butt to the broken tip. Indeed, the mechanical fracture scars left by the breaking off of the tip run quickly into frost-shattering associated with this crack, which certainly contributed to the break.

As the writer has observed before in notes on isolated Sussex handaxes, it is not really possible to be definite about assigning a stray find of this nature to a precise period or cultural stage within the vast length of the Lower Palaeolithic. Implements of this shape and style are probably commonest in the Middle Acheulian, and this one would not look out of place typologically in, for example, the Middle Gravels of Barnfield Pit, Swanscombe, source of the famous Swanscombe hominid find. However, it could just as well be somewhat younger. It thus probably belongs to the later part of the Hoxnian interglacial or to some part of the succeeding Wolstonian cold complex, and in round terms is unlikely to be younger as an artifact than 130,000 years or older than 250,000 years, as our present rather shaky chronometric estimates go.

Lower Palaeolithic material is not particularly common in the Seaford area. In compiling his Palaeolithic *Gazetteer*,[6] the present writer recorded a rather crude handaxe and a retouched flake from Seaford Hill, now in the Museum of Archaeology and Ethnology at Cambridge; no details of the exact provenance of either appear to be known, the handaxe being described as a surface find. He also recorded a good white-patinated Levalloisian flake from Seaford (again, no further details), now in the British Museum (Wellcome Collection), and noted L. V. Grinsell's report[7] that Seaford was one of the places in Sussex where ovates had been found. The *Gazetteer* also lists a few isolated finds in adjacent parishes (pp. 295-305), but no major site is known. Following the publication of the *Gazetteer,* Mr. A. V. Sheppard, then of Brighton Museum, kindly sent the information that a handaxe had been found on Seaford Head near the barn (TQ 494 979) by John Gould, then of Ardingly College, in whose possession it remained at the time (November 1968). The drawing sent with this information shows a rather damaged pointed ovate, and Mr. Sheppard compared its somewhat twisted edge to that of another ovate from Seaford, in the Brighton Museum collection (R 3920/1), which the writer has not himself seen and did not record in the *Gazetteer*. With the implement described in the present note, it seems therefore that the Palaeolithic finds from Seaford itself now amount to at least four handaxes and two flakes.

DESCRIPTION of Fig. 2, nos. 3-18, by E. W. Holden.

Flints marked * are not illustrated. A distinctive numeral has been given to each flint, which agrees with the drawing and a register kept at the Seven Sisters Country Park. Each one is prefixed by a letter and a pair of numerals, the letter representing the parish, e.g. *S* equals Seaford, and the numerals the year of accession, e.g., *75* equals 1975. Most flints are grey or a creamy-grey with touches of iron staining on the flake ridges; some have a natural lustre.

Mesolithic

3. "Tranchet" axe, quadrangular section, possessing traces of cortex on the butt and one face.

Probably Mesolithic

4. Small axe, quadrangular, pointed butt, traces of hafting gloss. There is a small area near the cutting edge (solid black in the drawing) which appears to have been ground smooth, and another on the reverse face.

5. Very small axe, triangular in section, made from a thick flake, with cortex near the butt. Obliquely struck sharpening flake scars on both faces at tip (broken in recent times and now stuck together).

7. and 8. Two utilized blades. Edges show wear through use, without definite retouch.

Mesolithic or Neolithic or later

9. Fabricator, quadrangular in section, edges battered, but ends not unduly so.

*10. Possibly part of a fabricator, broken in antiquity.

11. Burin or graver, made on a flake (bulb at bottom as drawn), with inverse retouch.

12. Possibly a burin, made on a flake (ditto as last), partly cortical. The top is damaged by wear.[8]

13. Convex scraper with inversely retouched notch on one side. The bulb has been partially removed.

14. Large convex sea-pebble scraper retaining some cortex on one face; bulb removed.

* 6. Core, struck from two directions, later used as a hammerstone.

15. Awl or borer, with cortex on butt at bulbar end.

*24. Fire-crackled flint (so-called "potboiler").

Neolithic or later

16. Retouched flake with slight trace of gloss near distal end on the bulbar face (solid black in drawing). Possibly a reaping knife. It resembles in shape and size a sickle flint or reaping knife found in the same area by Mortimore.[9]

17. Blunt pointed flake with slight retouch and signs of utilization. There is one small area of high gloss near the tip (shown solid black in drawing).

18. Large flake with coarse retouch including inverse retouch and blunting.

Nos. 16-18 are all flakes that fit the hand for use as reaping knives, but there is no guarantee that they were utilized for that purpose. High gloss, while common on sickle flints or reaping knives (caused by silica in corn stalks), is not always present and it must be remembered that the cutting of other materials with flint artifacts may sometimes produce gloss.

*19-23. Miscellaneous retouched flakes of unknown use.

E.W. HOLDEN

[1] *Sussex Notes and Queries*, vol. 13 (1950-3), 193-7. Flints from the collection of W. J. Mortimore are in Barbican House Museum, Lewes, but those of the Rev. E. D. Arundell have not been traced. Hurrell's collection was stated in the *S.N.Q.* reference to be at the offices of the (then) Seaford Borough Council.

[2] Bishopstone Leaflet, 10 (1974).

[3] B. W. Cunliffe, "Chalton, Hants, the evolution of a landscape," *Antiquaries Journal*, vol. 53 (1973), 176.

[4] University of London, Institute of Archaeology, *Easter Field Course Notes* (1975), 9.

[5] A. D. Lacaille, "On Palaeolithic choppers and cleavers, (Notes suggested by some Buckinghamshire examples)," *Records of Bucks.*, vol. 16 (1960), 330-41; P. J. Tester, "An Acheulian site at Cuxton," *Arch. Cantiana*, vol. 80 (1965), 30-60; J. J. Wymer, "Lower Palaeolithic Archaeology in Britain as represented in the Thames Valley," (1968); D. A. Roe, "British Lower and Middle Palaeolithic handaxe groups," *Proc. Prehistoric Soc.*, vol. 34 (1968), 1-82.

[6] D. A. Roe, "A Gazetteer of British Lower and Middle Palaeolithic sites," Council for British Archaeology, Research Report No. 8 (1968).

[7] L. V. Grinsell, "The Lower and Middle Palaeolithic periods in Sussex," *S.A.C.*, vol. 70 (1929), 173-82, see 179.

[8] For Late Neolithic burins on flakes at Rackham, Sussex, see *S.A.C.*, vol. 113 (1975), 85-103, Fig. 10, nos. 36-7.

[9] *S.N.Q.*, vol. 13 (1950-3), 196-7, Fig. 2; *P.P.S.*, vol. 4 (1938), 34; *Antiq. Journal*, vol. 29 (1949), 192-5.

A BRONZE AGE LOOM WEIGHT FROM CROSS-IN-HAND (TQ 552 205)—Mr. S. Bayliss Smith of Selwyn's Wood, Cross-in-Hand, in the parish of Waldron, found in his garden the object illustrated in Fig. 3 and which he has kindly presented to the Society. It is made of fired clay, is almost cylindrical with an average diameter of 58mm., has a length of 82mm., both ends being rounded, and is perforated with an oval hole, 9 by 7mm., made before firing. The outer face is smooth in places but has suffered flaking damage all round and at both ends. The damage reveals that a coarse filler (up to 4mm. diameter) of crushed flint had been added to the clay. In colour it is brown to buff in patches, with other areas of dark grey caused by reduction of firing. The colouring suggests burning in a clamp, i.e. a fire possibly in a shallow pit or trench with as much oxygen excluded as possible during burning by means of covering with turves. The object weighs 237 grams ($8\frac{1}{4}$oz.).

With an isolated find such as this there is always the possibility that the object is a curio brought from elsewhere and thrown away when no longer wanted. If, however, it is prehistoric, there is no reason why it should not have been used at Cross-in-Hand (with other weights), for the Weald was not so depopulated in early times as was thought until comparatively recently[1] and there are records of worked flints being found in the area.[2]

The object could be a net-sinker, but it seems unlikely, and it bears resemblance in form, composition, and mode of firing to loom weights as used in the middle and latter part of the Bronze Age. Many have been found at excavated Bronze Age sites in Sussex such as Itford Hill, Park Brow, Cock Hill, and Kingston Buci,[3] while specimens in Brighton Museum have been found at Saddlescombe, also from Kitchener's Furlong, near Eastbourne (Barbican House Museum).[4] The majority of weights tend to be heavier than the Cross-in-Hand specimen, having greater diameters, though not necessarily much taller. One from Itford Hill is only 2mm. higher then the weight from Selwyn's Wood, but is 68mm. in diameter as opposed to 58mm. and with a perforation of 12mm.[5] The resemblance, however, is so strong, that I am prepared to accept the object from Selwyn's Wood as a Bronze Age loom weight. Those found at Itford Hill have a date in the region of 1200-1300 BC.[6]

The art of weaving with upright looms appears to have been introduced into England from the continent during the second millennium BC, utilizing weights and a wooden framework. The weights, which were usually of baked clay, but occasionally of chalk (or stone, in stone areas), had groups of warp (upright) threads attached to each one by means of a cord, the upper ends being fastened by means of a starting border to a wooden beam at the top. The sole purpose of the weights is to tension the warp, which they did effectively, for this method of weaving persisted into the 20th century in the remoter areas of the Scandinavian countries. The warp-weighted loom was superseded gradually in western Europe by the introduction of the horizontal treadle-loom during the later 12th and early 13th centuries.[7] The cylindrical baked clay weights of the Bronze Age with central perforation differ from weights used in the Iron Age and the Saxon period. Iron Age weights, also commonly of baked clay, are triangular with perforations across the corners, while Saxon ones are baked clay rings or discs with central holes.

E. W. HOLDEN

[1] *S.A.C.*, vol. 112 (1974), 34-43.
[2] Ibid., p.43.
[3] *Proc. Prehistoric Soc.*, vol. 23 (1957), 200-2. Fig. 25.
[4] *S.A.C.*, vol. 72 (1931), 208-9.
[5] *Proc. Prehistoric Soc.*, vol. 23 (1957), 201, Fig. 25, right.
[6] *S.A.C.*, vol. 110 (1972), 89 and 117.
[7] *Med. Archaeol.*, vol. 13 (1969), 164.

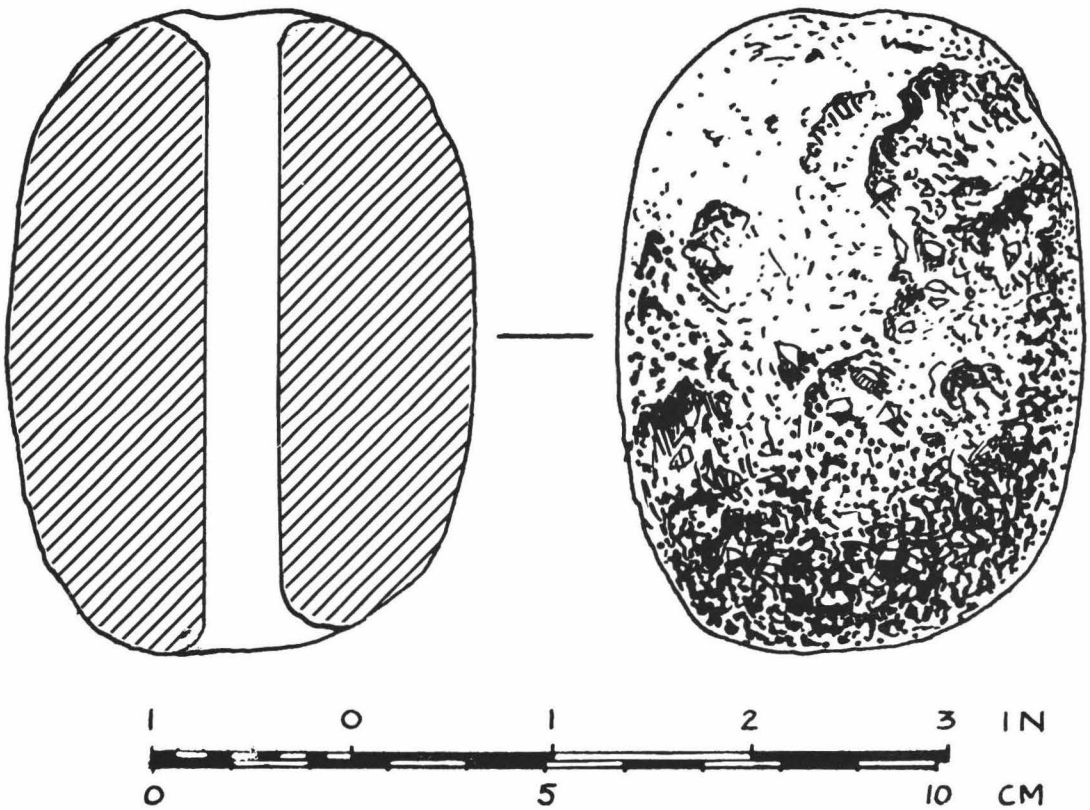


Fig. 3. A Bronze Age loom weight from Cross-in-Hand.

ROMAN PEWTER PLATE FROM GLYNDE (TQ 460 088)—During an exercise in trenching and shoring at Glynde in May, 1974, a Roman pewter plate was dug up by employees of the East Sussex River Authority. It was later sold to Barbican House Museum, Lewes (Accession No. 1974. 27) by Mr. McLachlan, one of the men involved, and he supplied the following details of the circumstances of the find. The trench itself ran north-south in an area to the west of Glynde railway station between the river, Glynde Reach, and the railway line; it was approximately eight yards long and two yards wide and was dug to a depth of about six feet. The plate was found between three and four feet below the ground surface and was resting on a close-packed layer of flints extending over the whole area of the trench at this level. The men involved assumed it to be an old road surface. No other finds were observed in association with the plate.

By the time that it was possible to visit the site, there was little trace of the trench but the spot (TQ 460 088), indicated by Mr. McLachlan, accords well with the south ford crossing on the Lewes to Pevensey Roman road which is marked on I. D. Margary's map as having flint metalling at this point.[1] In the Roman period, the Reach was part of the now largely silted Ouse Estuary and was some 170 yards wide at its narrowest point, where the south ford was constructed. The plate appears to have been found approximately half-way across, near the course of the present river.

The plate was examined by David Brown of the Ashmolean Museum, to whom I am most grateful for the reconstructed section drawing (Fig. 4) and his detailed comment that forms the basis of this report.

In its original form, the plate had the angular profile of standard fourth-century pieces but with a diameter of some twelve inches it is of relatively small size in comparison with the general range of pewter plates, which can exceed two feet in diameter. It is, also, rather thinly cast and this appears to have led to the extensive splitting at base and rim, although a certain weakness in the rim is not unusual. Such plates were cast in a two-piece, stone mould and then trimmed and polished on a primitive form of lathe, the two decorative concentric rings being incised on the base during polishing. The back of the Glynde plate also shows the characteristic traces left in the process of mounting it on the lathe and which have been described in detail by David Brown, with reference to the Appleford hoard.[2] Four arcs, described with compasses and centred at roughly equidistant points round the footring, were drawn to intersect more or less at the plate's centre and, at this point, it was nailed down to the lathe plate. An unpolished area at the back of the plate shows that the lathe plate had a diameter of some four-and-a-half inches in this instance. Three small spikes, equally spaced round the edge of the lathe plate, helped to keep the plate in position during the turning and, afterwards, the resulting holes and the central perforation were plugged with metal; a fifth patch of solder indicates either an accidental spill or the plugging of a hole left in casting.

Pewter appears to have been an indigenous development in Roman Britain, stemming from the use of tin as a less costly alternative to silver tableware. Its use, however, is associated with villas and wealthy establishments and it was evidently of sufficient value to warrant burial in hoards, when danger threatened. Its production and distribution were centred largely on the Mendip and Cambridge areas although hoards and single pieces are not uncommon in the London area, in Berkshire, Hampshire and Wiltshire. In the extreme south-east, on the other hand, pewter pieces are relatively scarce, with only three pieces from Richborough in Kent and Selsey in Sussex being listed by Wedlake in his original survey[3] and, of

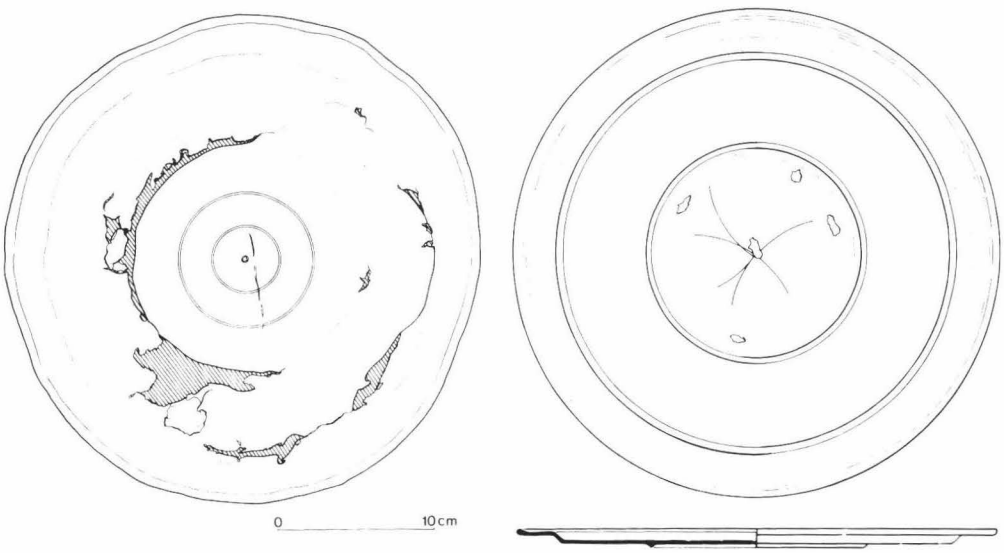


Fig. 4. Roman pewter plate from Glynde, with upper surface as damaged on left, and reconstructed back and section on right

these, the actual Sussex provenance of one of the "Selsey" flagons is scarcely satisfactory. [4]In Kent, more recent finds of an unpublished hoard from Richborough and a small cup and ornamental leaf from Springhead,[5] begin to indicate a more widespread distribution eastwards along the Thames from London but the position in Sussex and Surrey has remained unaltered. Against this background, the Glynde plate emerges as an isolated piece, of limited value on any distribution map. Its find spot at the crossing point of what was, in Roman times, a muddy estuary, on the road from London, via Lewes, to the port at Pevensey seems, at least until further finds occur in this area, more likely to represent a loss in transit than an extension of the use of pewter table wares among the villas of the Sussex coastal plain.

FIONA MARSDEN

[1] *S.A.C.*, vol. 80 (1939), p. 52.
[2] A note in *Oxoniensia*, vol. 38 (1973), p. 87.
[3] W. J. Wedlake, *Excavations at Camerton, Somerset* (1958).
[4] *Antiquaries Journal*, vol. 6 (1926), p. 321.
[5] *Archaeologia Cantiana*, vols. 83 (1968), p. 172 and 73 (1959), p. 53.

PREHISTORIC FINDS FROM POSSINGWORTH PARK, FRAMFIELD—Recently further evidence of prehistoric occupation of the Weald has come to light in Possingworth Park (most of which is in the parish of Waldron, but part in Framfield) from the grounds of "Plovers Meadow," where the owner, Mr. Guy Mountfort, has developed a garden, and forestry plantations, in what was once part of the park. During the late war the area was occupied by army establishments which laid down roads and hut foundations and dug ditches. Mr. Mountfort's gardener, Mr. Stephen Yandall, who has an eye for archaeological objects that may turn up in the course of his work, has shown me a number of such objects found by him while working in the garden and plantations.

The greatest number of these are struck flints, well over 200, which came up in flower beds near the house or on the surface of the arable field just S.E. of the house, at approximately TQ 537201. I have also picked up a number from the same field which is on a plateau overlooking the valley to the S.E. where Possingworth lake is situated. Mr. Roger Jacobi has looked at the flints and considers them to be a mixture of Mesolithic and Neolithic. They include scrapers, cores, a Mesolithic axe sharpening flake, and a Neolithic leaf-shaped arrowhead.

Two objects attributable to the Bronze Age came from an area just E. of the Western Lodge, at approximately TQ 53832125. They were found at ordinary digging level, about 6 feet apart, in a border that runs E. along the N. side of the army road leading E. from Western Lodge. Since the original discovery I have tested the ground here and found it disturbed to a depth of a foot or more and containing much debris, such as broken concrete, bricks, nails, metal piping, guttering, etc., remnants of the army occupation. I feel confident that the Bronze Age objects were not *in situ* when found but dumped there in soil removed when foundations for the nearby army road or huts were laid down. The objects are:

Bronze Head or Header (Fig. 5). This curiously shaped piece of bronze was submitted to the British Museum and I am greatly indebted to Mr. R. J. Harrison for identifying the object as being the residual metal left in a *casting jet* or *sprue-cup* on completion of the casting operation, which is then discarded. This piece of waste would normally be melted down in a future casting, but which did not occur here. Bronze founders' hoards sometimes contain such waste pieces and Mr. Harrison refers to similar finds in a Late Bronze Age hoard from Minster, Kent, in the B.M. Collection (Reg: 1893, 4-26).

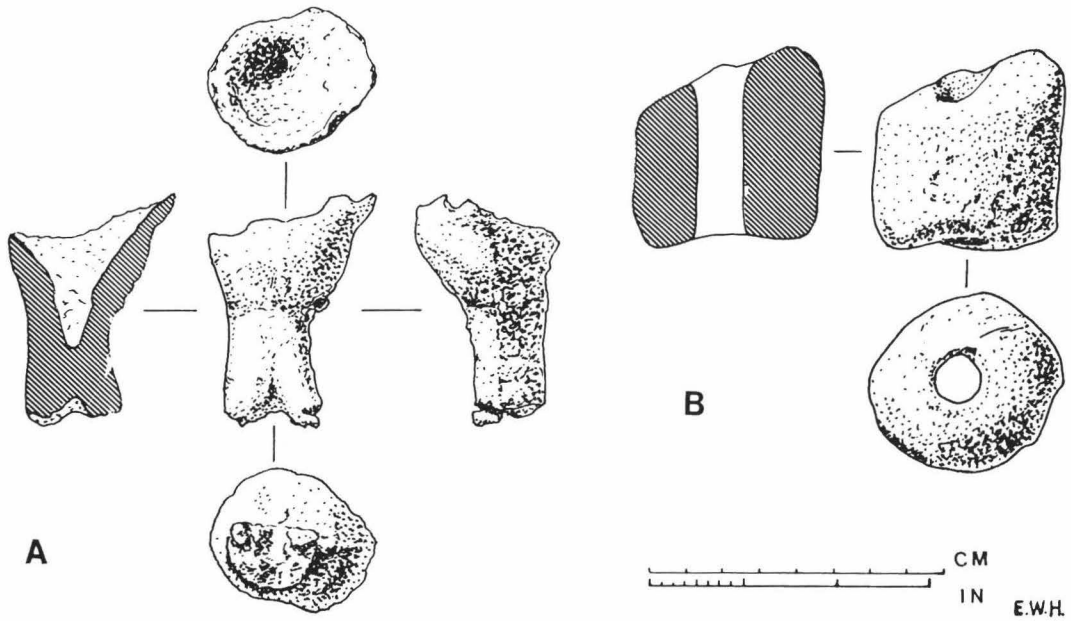


Fig. 5. A. Bronze casting header. B. Sandstone loom weight.

There is a fragment of a bronze two-piece mould for a socketed axe in that hoard. Mr. Harrison noted a casting-seam on one side of the object which shows that it came from a piece mould which, with simple castings, would be a two-piece mould, whereas more complex shapes would require a mould of several pieces. In the lower half of the object are what appear to be two *runners* (through which the liquid metal would flow down to the main part of the mould), rather than *riser* (channels to allow air and gases to escape during pouring and up which the molten metal would ultimately rise and solidify).

The reasons for the excess metal left in the sprue-cup or jet, of a piece mould are clearly explained by H. Hodges:

> "Piece-moulds were generally made rather deeper than the intended casting, the additional height being to hold a small cup, the *sprue-cup, pour* or *gate (jet, get, git),* into which the metal was poured until virtually full. The need for this was due to the phenomenon known as *piping,* in which the molten metal solidifies and contracts almost immediately as it comes in contact with the mould. The interior metal, away from the mould face, remains liquid, and since it cools slowly and contracts it requires an additional quantity of metal to make good this reduction in volume. If the sprue-cup is allowed to become empty, an actual hollow, called a pipe, forms inside the casting. On cooling, the excess metal which filled the cup, the *head* or *header,* was cut away,"[1]

The bronze piece illustrated and described here is such a *head* or *header*. Hodges' Fig. 9, Nos. 4-7, demonstrate how a header and two runners are formed and removed after casting a bronze spearhead.

Stone Loom Weight (Fig. 5). About this Mr. Harrison writes:

> "I have had a look at the perforated sandstone weight found near the bronze object but unfortunately it is hard to say much about it. The very friable sandstone looks local . . . The shape is so simple that it is not really distinctive enough to say if it is Late Bronze Age or later, but I think it is as likely to be a loom weight as anything else, and in view of its proximity to the bronze sprue, of LBA date."

I am indebted to Mr. E. W. Holden for drawing my attention to reported finds of flints at Possingworth in 1864, and, although M. A. Lower casts doubts on their authenticity, some, from the illustrations, look genuine.[2]

It is interesting to note that a few yards to the north of the above described sites runs the Rye-Uckfield ridgeway, considered by the late I. D. Margary to be of pre-Roman origin,[3] and that the Bronze Age loom weight was found at Selwyn's Wood, Cross-in-Hand, only about a mile away.

I am grateful to Mr. Guy Mountfort for giving me every facility to investigate these finds and to Mr. Yandall for collecting them. Also to Mr. E. W. Holden for drawing the finds and for the references to Mr. Hodges' book, and to Mr. D. S. Butler for his assistance on the site. Mr. Mountfort has agreed to give the finds to the Society's Archaeological Museum, Barbican House.

C. F. TEBBUTT

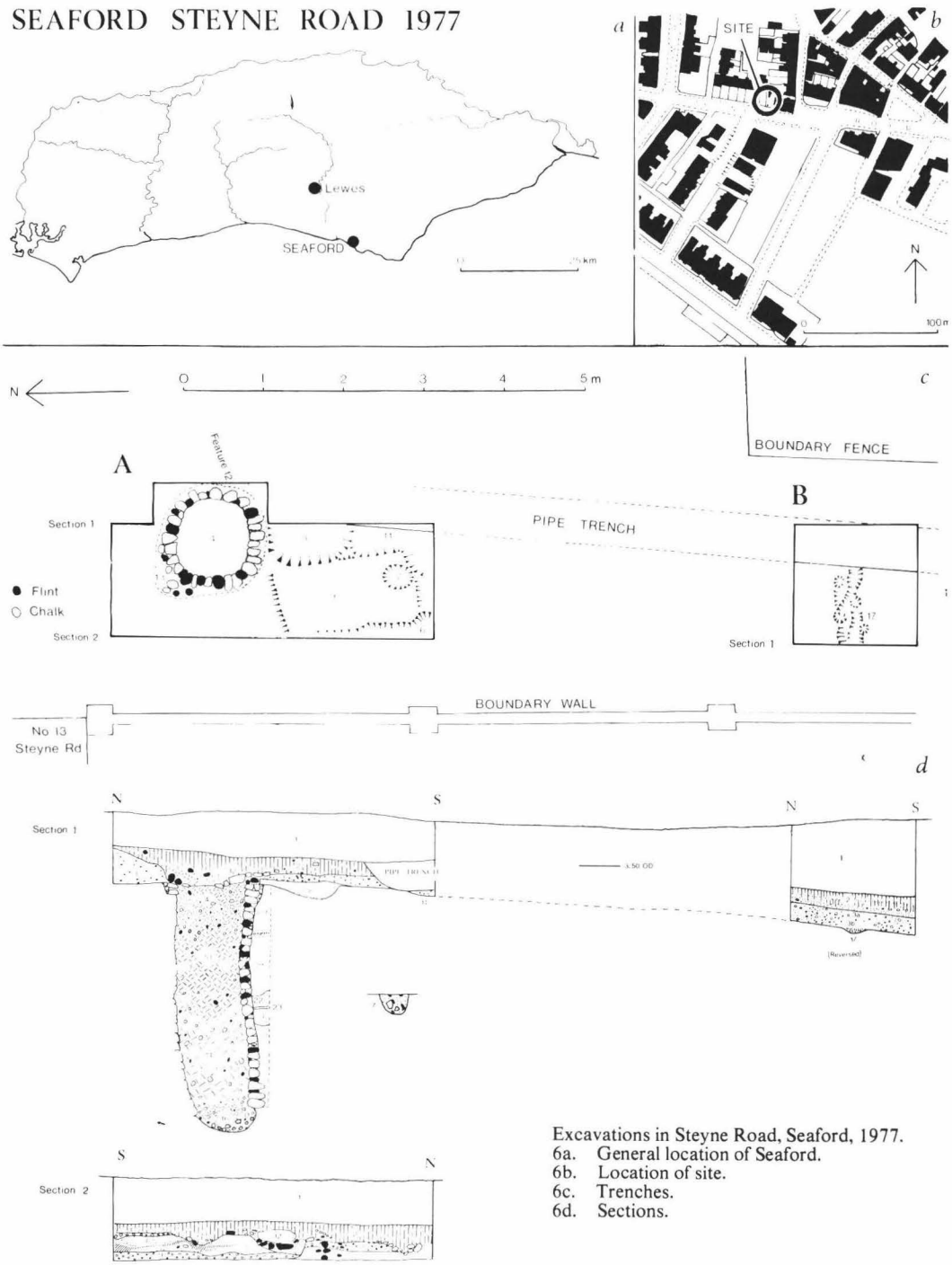
[1] Henry Hodges, *Artifacts* (1964), pp. 70-1 and see pp. 72-3.
[2] T. W. W. Smart, Notes on worked flints found in the neighbourhood of Hastings, *S.A.C.* vol. 19 (1867), pp. 53-60.
[3] I. D. Margary, *Roman ways in the Weald* (1965 edition), p. 262.

NOTES ON THE MAMMAL REMAINS IN MEDIEVAL PITS AND WELL AT SEAFORD CHURCH ST. 1976 What follows is a preliminary report detailing generally the osteological material found at the site. In all, there were batches of bones from pit/well 7, 8, 12, 77, 101/66, 128, 96, 15, 129, 138 and 64. This material was further subdivided into levels within these structures, for the most part related to whether it may have been the result of slow accumulation or more rapid filling in. The bones may therefore be accidental intrusions, such as some of the rodent material, intentional refuse dumping, or final "topping up" material presumably representing anything close at hand. Although clearly the bones are not strictly contemporary, they seem to be close to one another in date and may therefore be taken as representing mammals associated with Seaford people of the 14th century. Late intrusive material of perhaps 18th century date is not included. Although sample sizes are regrettably very small, brief consideration is given to possible inter-pit/level differences.

The condition of the bones, even though in general highly fragmented, is good. Bone surfaces are generally intact, and identifications could be made on most bones which were above nondescript fragment shape and size. The majority of non-splinter size bones could therefore be placed at least into the categories of caprovid, bovid, suid, equid, carnivore or rodent. Lists of identifications were made for all groups of bone fragments received for study. However, it would be out of place to detail all the individual identifications here, and these are archived with the senior author (D.R.B.) and at the Museum of the Sussex Archaeological Society, Barbican House, Lewes.

Most of the remains are clearly food animals, with caprovids and cattle being particularly well represented. In one or two pits, pigs were also in evidence at the different levels. In no case is there sufficient material to permit more detailed comparisons of these three group components. There is certainly no evidence, from this limited data, to suggest that proportions of the three food categories changed significantly from level to level or from pit to pit. In fact the only variable which can be remarked on is that the bones were more fragmented in some areas than in others, with the result that the proportion of unidentified small pieces of bone varied between 7% and 54% (with an average of about 34%).

Other mammal varieties represented include horse, a number of cats, limited evidence of deer, possibly one or two dogs, a number of rodents and two fragments of whale. The estimation of minimum numbers is a particularly dubious task on a site like this. The material being considered could well be the accidental or at least haphazard accumulation of mainly food bone debris—that which hadn't decayed on the surface, been eaten by dogs, or disposed of in other ways. The large number of cat bones recovered from Pit (well) 12, representing at least five animals, is unlikely to be accidental, but rather the evidence of intentional drowning or dumping. In contrast the numerous rodents may well have resulted from accidental death in the well. Although a detailed study of the rodents has yet to be made, the material is mainly from level 157 (the lowest) and consists mainly of the bones of the mouse *Mus musculus,* although



Excavations in Steyne Road, Seaford, 1977.
6a. General location of Seaford.
6b. Location of site.
6c. Trenches.
6d. Sections.

parts of two skulls of the black rat *Rattus rattus* shows clearly that this was also infesting Seaford to some extent. The occurrence of two fragments of whalebone might perhaps be related to its use commercially, and is certainly not evidence of a food joint!

There was little evidence of the sex of the animals to be obtained from most bone fragments. Moreover, although about 25 bones were immature, it was not possible to derive very meaningful conclusions from this, except to say that if occurrence of bones was related to actual animal numbers, then slightly more caprovids were slaughtered young than cattle or pig.

Nearly all the butchery marks (about 40) were noted on caprovid and cattle bones, with a significant lack of marks on pig remains. Numbers of butchery marks were about equal in cattle and caprovids, with in both cases long bone and vertebral evidence predominant. Burnt bones (? evidence of roasting) were seen in five instances. Six sheep bones and one *Bos metacarpal* displayed chewing marks, not the result of man or rodents.

There was little evidence of pathology except for noticeable arthropathy in two lumbar vertebrae of a horse; also ante-mortem loss of P3, severe periodontal infection, and malocclusion of M2 and P4 in *Bos*.

A report on the *Bird Bones* by S. Geddes, B.SC., and G. Cowles has been placed in the library of the Institute of Archaeology, University of London.

D. BROTHWELL

EXCAVATIONS IN STEYNE ROAD, SEAFORD, 1977

—A small excavation on Steyne Road, Seaford, revealed a medieval floor, well and fence line. This result challenges the assumption that Steyne Road is, at this point, the site of the medieval quay.

INTRODUCTION

Seaford's medieval history is linked to its position on the banks of the Ouse, which formerly debouched under Seaford Head. Steyne Road runs at the foot of the rise on which the town now stands (Fig. 6b), and it has been suggested that it marked the medieval north bank of the river.[1] When land on Steyne Road, near the junction with Church Street, was scheduled for redevelopment, Lewes District Council gave the Sussex Archaeological Field Unit permission to excavate. Two small trenches were dug by the writer to check the archaeological potential of the site. I would like to thank Peggy Norman, who took care of the finds, and Jill Craddock, B.A., who assisted on site, as well as Ken and Joan Astell who helped with administrative and historical research.

THE EXCAVATIONS

Running east-west across Trench A (Fig. 6c) was a post-medieval chalk wall (feature 12). It consisted of a single course of chalk blocks on a flint and clay foundation. Beneath this wall lay various medieval features (Fig. 6c), none earlier than twelfth century. The latest medieval feature was the well (feature 4) lined with chalk blocks and flint beach pebbles. The

◀

Seaford, Steyne Road, 1977

Layer nos. (for inclusion in figure 6d).

1. Made ground of rubble, beach pebbles, topsoil and bricks. 20th century.
2. Dark grey-brown earth, flint, tiles, bricks, gravel. Post-medieval.
3. Brown gravelly sand. Medieval.
   - 3a. Brown gravelly sand and clay. Medieval.
   - 3b. Brown gravelly sand and clay with pebbles. Medieval.
4. Brown clay with flint, chalk and beach pebbles. Fill of medieval well.
5. Brown sandy gravel with dirty patches. Top of natural.
6. Dark brown clay and charcoal. Medieval pit.
7. Brown sandy earth with pebbles, gravel and some chalk. Medieval pit.
8. Brown sandy clay with chalk lumps. Medieval pit/beam slot.
9. Light brown beach pebbles and sand. Medieval floor?
10. Orange brown clay with flints and chalk. Fill of medieval well.
11. Dark brown earth with pebbles and sand. Medieval pit/beam slot.
12. Chalk and flint wall. Post-medieval wall.
13. Brown clay with pebbles. Foundation trench of medieval well (4).
14. Brown clay with flints and some chalk. Fill of medieval well.
16. Brown clay with small flints, daub, charcoal, some chalk. Fill of medieval well.
17. Light brown gravel. Medieval fence line?

Pleistocene Deposits

20. Dark brown sandy clay with small flints.
21. Cream coloured chalky clay with small flints.
22. Soft khaki coloured sand with small flints.
23. Green sandy clay.
24. Soft brown sand.
25. Soft chalk, gradually becoming harder with depth.

top courses of the lining and the foundation trench (feature 13) contained fragments of a fourteenth- or fifteenth-century jug. It was hoped that the lowest levels of the well would produce a good ceramic group as at Tarring[2] and Seaford 1976,[3] but there was very little pottery in the whole fill of the well, which seems to have been filled in deliberately in the late medieval period.

In Trench A was a fourteenth-century beam slot (features 8 and 11), several pits (features 6 and 7) and a hard surface (feature 9) which may have been a floor or yard. Very few artifacts were found. The pottery groups were generally late medieval, except for that from layer three, which may be twelfth century. Diagnostic seventeenth- to eighteenth-century pottery was conspicuously absent from the site.

Trench B revealed a shallow medieval gully or fence line (feature 17). There were slight indications of stake holes in the bottom.

CONCLUSIONS

It was thought at first that a well so close to the supposed bank of the Ouse would not have been viable, but would have been contaminated by salt.[4] Mr. G. B. Fox of the Resource Planning Department of the Southern Water Authority has kindly given the opinion that such a well, which did not penetrate the water-bearing chalk very far, and which would have been used to provide a very modest supply of water, could have tapped fresh water, even within twenty metres of the river bank. It would still however, have been at risk from flooding over the top. The location of the dwelling which this well served remains problematic. The gully or fence line in Trench B seems to indicate that it was not immediately to the south. The present street plan of Seaford gives no clue, as it has probably been altered since Seaford ceased to be a port. The medieval street plans of other Sussex ports (Arundel, Brighton, Hastings, Pevensey, New Shoreham and Littlehampton)[5] are aligned either parallel, or perpendicular, to their quays. Seaford's street pattern appears to have been wrenched round from a S.S.W.-N.N.W. alignment to a N-S one. This could have been the result of erosion of the south-west corner of the town at a point where the shingle bank is at present closest to the town, and in the area of our site. This erosion need not have taken place during the medieval period as Seaford was subjected to devastating floods even after the river was diverted through Meeching (Newhaven) in 1539. For instance there were floods in 1579 and in 1703, when the sea was reported to have reached within 40 metres of the church. It again flooded in 1824 and finally in 1875 when floods reached half way up the High Street.[6] The lack of archaeological deposits dating to the seventeenth and eighteenth centuries may be the result of such episodes. The 1976 Church Street site, in contrast, produced evidence for continuous occupation in the vicinity from the thirteenth century to the present day.[7]

The site is probably not on the medieval quay and there should be a re-appraisal of Seaford's medieval layout. The evidence for such a re-appraisal will necessarily be archaeological.

D. J. FREKE.

References

[1] There is a summarised bibliography for Seaford in F. Aldsworth and D. Freke, *Historic Towns in Sussex* (1976), 54-55, and others are listed below.

[2] K. J. Barton 'Worthing Museum Archaeological Notes for 1961', *Sussex Archaeological Collections* (hereafter *S.A.C.*) 101 (1963), 27-34.

[3] D. Freke 'Excavations in Church Street, Seaford, 1976', *S.A.C.* 116 (1977) 199-224.

[4] The interim report states that the medieval bank of the Ouse could not be close to the site because of the well. D. Freke in P. L. Drewett (ed.) 'Rescue Archaeology in Sussex', *Bulletin of the Institute of Archaeology* 15 (1978) 61-2. This view is corrected here.

[5] Basic medieval plans are published in F. Aldsworth and D. Freke, *Historic Towns in Sussex* (1976).

[6] J. A. Astell, *A Chronological History of Seaford* (1973) duplicated typescript, and J. Lowerson (ed.) *Victorian and Edwardian Seaford*, 2nd edn. (1976) duplicated typescript.

[7] D. Freke (1977) *ibid.*

EXCAVATIONS AT SOUTH STREET, WEST TARRING, 1978—A small excavation was carried out in the centre of West Tarring, on a site lying between the church and the Bishop's Palace. Two building phases were identified, the later dating to the eighteenth century, and the earlier perhaps to the sixteenth century. No medieval features were found, and it is likely that the excavated area lies just outside the boundaries of medieval Tarring.

INTRODUCTION

During the 1960s, considerable archaeological work was carried out in the centre of West Tarring (Barton 1963 and 1964). A late fifteenth-century well and the remains of a medieval house, dating from the thirteenth to the sixteenth centuries, were among the finds made at that time.

Early in 1978, a proposal to build flats on a site near these previously excavated areas was brought to the attention of the Sussex Archaeological Field Unit by Elizabeth Kelly, Assistant Curator (Antiquities) at Worthing Museum. (The relationship of this site to previous excavations in the centre of Tarring is shown in Fig. 7). In view of the possibility of obtaining further information about the development of medieval Tarring, it was decided to excavate part of the area to be developed. This was carried out in July 1978 by members of the Worthing Archaeological Society, under the direction of the author.

EXCAVATION

An area 7 m. by 5 m. was cleared of modern rubble and overburden, revealing narrow footings of mortared flint (Fig. 8). Two phases of building were recognised, represented by different types of footings.

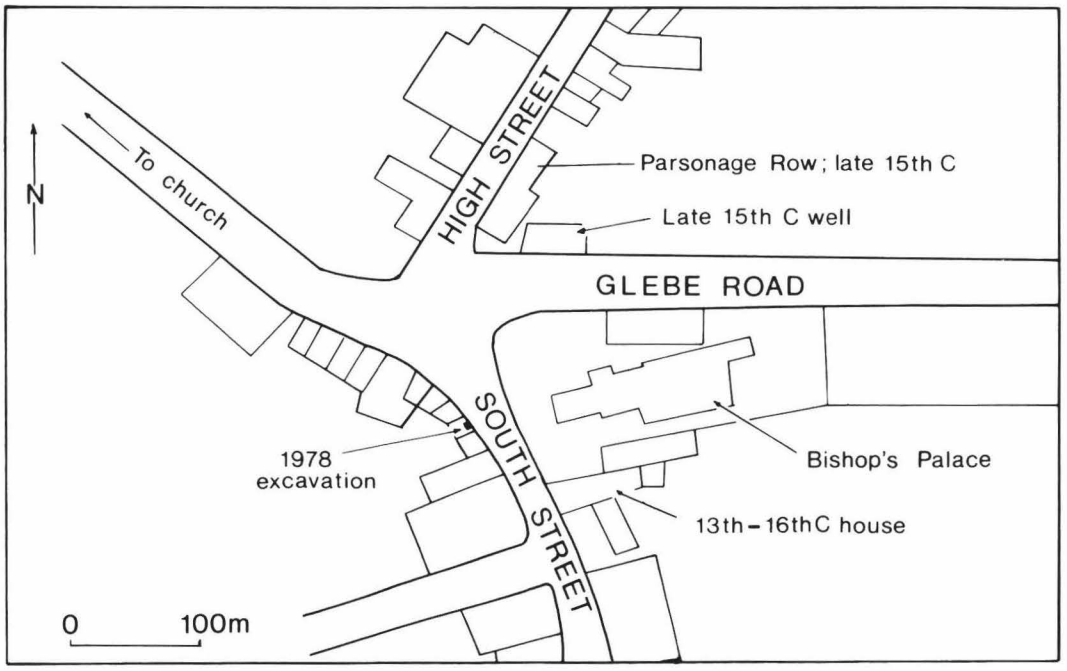


Fig. 7. Tarring 1978. Site location.

The construction of the later phase (feature 5 in Fig. 8) was dated by associated pottery to the eighteenth century, and corresponds to a small cottage standing on the site until 1966, when it was demolished. Feature 5 represents the back wall of this cottage; the front wall lay about 1.5 m. to the east of the excavated area. The cottage thus fronted directly onto South Street, with its long axis parallel to South Street.

By contrast, the earlier building phase, represented by narrower flint footings (Feature 8 in Fig. 8), probably consists of a building with its long axis perpendicular to South Street. Associated with this earlier phase were the area of irregular cobbling, feature 12, and the rammed chalk floor, feature 9. The latter was of variable thickness, and had been much disturbed by footings of the later building, and also by a series of shallow, irregular scoops (features 13, 14 and 15 in Fig. 8), one of which contained animal bone and a little pottery.

This earlier phase is difficult to date; no pottery came from contexts associated with its construction. Beneath the chalk floor, feature 9, was a disturbed, gravelly layer, feature 20, resting on the subsoil of Coombe deposits. From this layer, a few sherds were recovered, the latest of which belonged to the sixteenth century, thus providing a *terminus post quem* for the earlier building phase.

DISCUSSION

None of the excavated features can be given a date earlier than the sixteenth century. A few medieval sherds were found, however (pottery report, below), but these, and the late thirteenth century silver farthing, are residual.

The conclusion to be drawn from this excavation is that the excavated area lay outside the limits of medieval Tarring, and was not built on until the sixteenth century, at the earliest.

Pottery Report (D. Freke)

A total of 303 sherds weighing 5,885 gm. was submitted for analysis. The majority of the pottery was of fifteenth to sixteenth century date, although only features 18, 19 and 20 did not contain later pottery as well. The distribution of the pottery is shown in table 1.

The few medieval sherds were unglazed coarse sandy fabrics, and all were residual.

The fifteenth to sixteenth century wares were:

(a) White painted earthenwares, some black slipped, others unslipped (Barton 1963, p.31). These constitute 67% of the fifteenth to sixteenth century groups. (Percentages by number).
(b) Smooth, hard, unglazed, buff-coloured fabric, knife-trimmed. 5%
(c) Smooth, hard, reduced wares; reduced green lead glaze. 17%.
(d) Smooth, hard, grey-black, unglazed. 2%.
(e) German stoneware tankards. 9%.

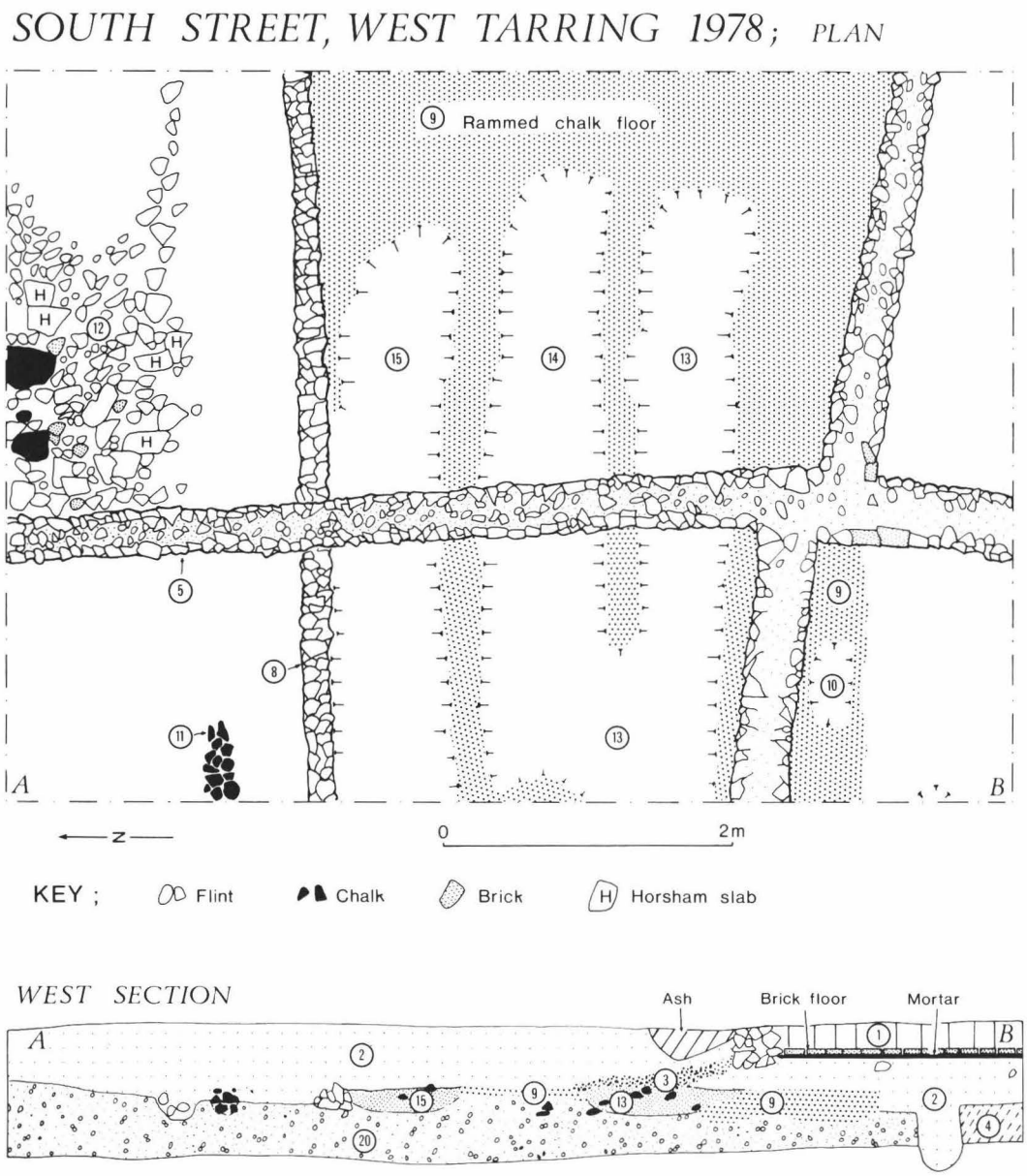


Fig. 8. Tarring 1978. Plan and main section. The eastern edge of the excavation was 2.5 m from the edge of the road.

Key to layers and features:

1 Loose modern rubble
2 Hard black gritty fill
3 Hard black layer with small chalk bits
4 Soft sticky dark brown fill
5 Mortared flint foundations
8 Rough flint footings
9 Rammed chalk floor of variable thickness
10 Small shallow rubbish deposit (modern)
11 Rough chalk footings
12 Irregular cobbled layer
13, 14, 15 Hard gritty brown fill in shallow depressions
20 Hard gravelly fill

The seventeenth to eighteenth century wares were:

(f) Hard, red-brown, glazed fabrics—'Sussex ware'. 38%.
(g) Tin-glaze earthenware. 9%.
(h) 'Westerwald' stonewares. 9%.
(i) Creamware. 9%.
(j) White, clear-glazed earthenware. 5%.
(k) Mottled, lead-glazed earthenware (tortoiseshell ware). 5%.
(l) 'Wedgewood' basalte ware. 5%.
(m) White Staffordshire salt-glazed stoneware. 14%.
(n) 'Bellarmine' stoneware. 6%.

The nineteenth to twentieth century wares were:

(p) Grey, salt-glaze stonewares. 44%.
(q) 'China'. 16%.
(r) Porcelain. 4%.
(s) 'Sussex ware'. 36%.

There is a preponderance of non-local wares in the post-sixteenth century period. The local wares are only used for kitchen utensils (Manwaring Baines 1979).

Table 1. Distribution of pottery according to features.

Features	1		2		3		4		13		18		19		20	
Date	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
Medieval	1	10	5	65			1	5								
15th/16th century	16	290	73	1260	11	175	10	125	8	130	6	180	22	45	9	100
17th/18th century	1	25	33	600	9	115	2	70	1	60						
19th/20th century	1	5	76	1635	11	510	1	40								
German 16th century stoneware	2	10											3	75	1	15
	N.B. Weight (Wt) in grams.															

Coins and Jettons (D. R. Rudling)

1. Edward I, farthing, Bristol. Class III (1280-81). Obverse: E. R. ANGLIE. Reverse: VILLA BRISTOLLIE. Ref. North 1053. Conditions: Signs of wear on the raised surfaces. In view of the fact that this coin does not show considerable signs of wear, it is possible that it may have been lost before the end of Edward I's reign (1307), but in any case will have almost certainly gone out of circulation by the time of Edward III's coinage reform in 1351. From feature 19.
2. Nuremburg, brass jetton of Hans Krauwinkel. Late sixteenth/early seventeenth century. Obverse: HANNS KRAVWINKEL IN NVRNB: Shield with a device known as the Reichsapfel. Reverse: DAS WORT GOTES BLEIPT BLICK. Three open crowns and Three Fleur de lys arranged alternately around a rose. Ref. This particular example is not listed by Barnard, but except for the legends is as German Jetton No. 82.

ACKNOWLEDGEMENTS

Thanks are due to Roberts and Son (Worthing) for permission to excavate. I am grateful to David Freke and David Rudling for specialist reports, and to all members of the Worthing Archaeological Society who took part in the excavation.

The finds are housed in Worthing Museum.

OWEN BEDWIN (on behalf of the Worthing Archaeological Society).

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Barton, K. J. 1963 'Worthing Museum Notes', *Sussex Archaeological Collections*, 101, 20-34.
Barton, K. J. 1964 'Excavations in the village of Tarring, West Sussex', *Sussex Archaeological Collections*, 102, 9-27.
Manwaring Baines, J. 1979 'Eighteenth and Nineteenth Century Sussex Ware', in D. J. Freke (ed.), *The Archaeology of Sussex Pottery*.
J. J. North, *English Hammered Coinage*, London, 1960.
F. P. Barnard, *The Casting Counter and the Counting Board*, Oxford, 1916.

MEDIEVAL FINDS FROM DENTON (1)—About 25 years ago Mr. P. Jenner of Newhaven was terracing a lawn in the garden of a cottage called Orchard Meadow in Heighton Road, Denton (TQ 455026). The cottage lies just opposite the parish church of St. Leonard and the part of its garden where the lawn was made has subsequently been built over with bungalows. Mr. Jenner encountered a subsoil of clayey material, probably hillwash, and at a depth of about 2 m. he found 17 pieces of quern and three large sherds of pottery. The quern fragments (Fig. 9) comprise much of the lower stone and part of the upper stone of a sizeable hand quern some 54 cm. in diameter. The lower stone is of variable thickness and tapers from 8 cm. to 3 cm., there is a slight rim preserved on one small fragment. This asymmetry is accounted for by considerable wear evident on the grinding surface. On the outer surfaces are clear tooling marks from its original fabrication. Messrs. B. Lake and Young of the Institute of Geological Sciences, London, have examined the stone and suggest that it is Lower Greensand but not of a lithology found in East Sussex; it might come from the Lower Greensand west of Midhurst or further afield.

Though the pottery came from the same area as the quern it is not all of one date. One sherd is the crudely made, sharply everted rim of a jar, its fabric has inclusions of coarse sand grade multi-coloured flint grits, together with small amounts of shell and traces of fired out vegetable temper. Messrs. D. Freke and K. J. Barton agree that it is eleventh century A.D., or earlier and could be pre-Conquest. The second sherd is a much better made, curved everted rim again containing coarse sand grade multi-coloured flint grits; it probably dates to about the twelfth century A.D. The third sherd is much later, the moulded foot of a one-pint stoneware tankard probably made in Staffordshire during the eighteenth century.

Though these finds lack reliable association or exact context they do provide evidence of occupation just opposite the church in the late Saxon or early Medieval period. Together with the wealth of material from the rectory site opposite they suggest that any subsequent building development in the village centre of Denton should be preceded by excavation.

The finds have been donated to Barbican House Museum, Lewes, through the kindness of Mr. Jenner. I am grateful to Chris Green for drawing the quern and for his comments on the tankard sherd.

MARTIN BELL

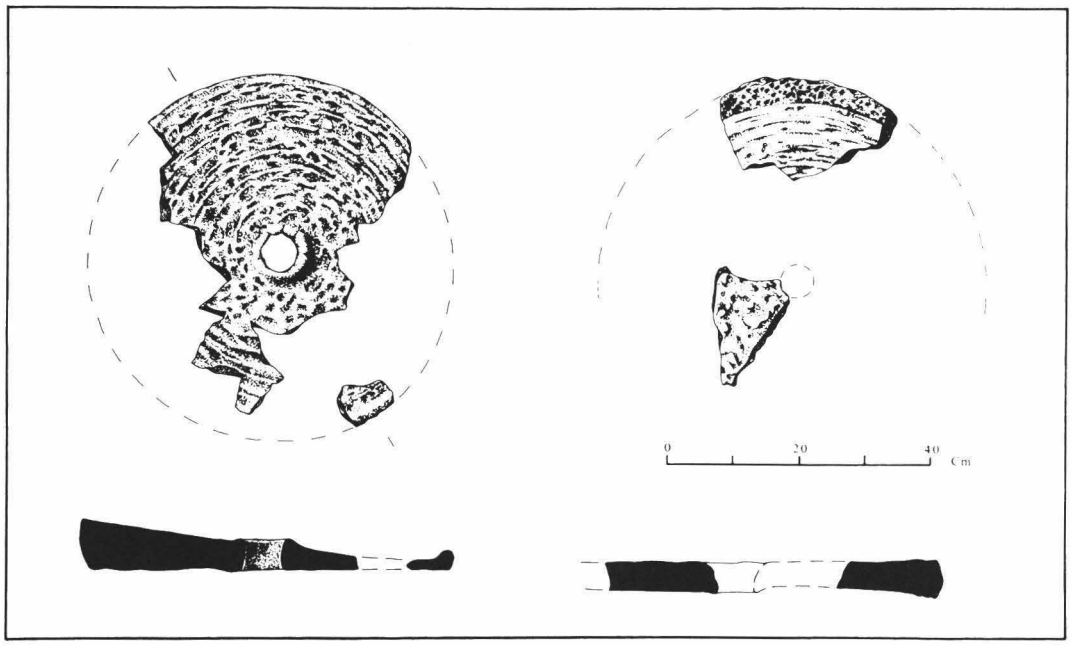

Fig. 9. Medieval quern from Denton

MEDIEVAL FINDS FROM DENTON (2)—In August, 1976, the ground was cleared mechanically in preparation for the second phase of building the Church Hall, Denton, TQ 454 026. This revealed a large medieval pit about one third of which lay under the phase 1 building and could not be excavated. The pit was about 2 m. long x 1 m. deep, approximately 8 m. from the church and 9 m. from the nearest surviving walls of a stone-built priest's house, which is dated to the thirteenth century.[1]

Pottery by E. W. O'Shea.
The pottery recovered weighed approximately 14 kg, and comprised 1052 sherds, of which 80 were rims, 59 bases and 2 handles. The sherds were from a minimum of 48 different pots, mostly common cooking pots with sagging bases in grey to light grey matrix. Fillers are fine to medium sand and crushed flint. The flint fillers are not angular and might be derived from naturally occurring sea sand, or perhaps from working of flints. Of the handles, one was a strap handle with regular oblique slashing, the other a crude rod handle from a skillet or pipkin.

Decoration is sparse, being confined to thumbing on the necks of two vessels, on the flange of another and on the bases of four vessels. One rim had shallow pricking on the top of the flange. There was one decorated glazed sherd. This has combing consisting of alternate bands of four straight lines and two pairs of wavy lines slightly spaced. The glaze is of good quality green lead glaze, dense and even, probably late thirteenth century to mid-fourteenth century and is consistent with that found throughout Sussex.

Animal Bones by T. P. O'Connor.
The following species were represented and are followed in brackets by the minimum number of individuals: Horse (*Equus* sp, 1); cattle (*Bos* sp., 2); sheep (*Ovis aries*, 2); goat (*Capreolus capreolus*, 1); pig (*Sus* sp., 3); cat (*Felis domesticus*, 3); hare (*Lepus timidis*, 1); rat (*Rattus* sp. 1) and man 1 upper front molar.

All the cats were rather small, one had a healed fracture of the left ulna which had caused lateral displacement of the distal part of the bone. Metrical analysis of the one intact sheep metacarpal showed it to be virtually indistinguishable from Soay sheep, except it was rather more robust, suggesting an individual somewhat larger than the average Soay, but rather smaller than any modern meat-producing breeds.

Bird Bones by G. S. Cowles, Department of Ornithology, British Museum.
The following species were represented: Domestic or Greylag Goose (*Anser anser*, 1); Buzzard (*Buteo buteo*, 1); Chicken (*Gallus gallus* (domestic) 8); Rock Dove (*Columba livia*, 1); Redwing (*Turdus iliacus*, 1); Starling (*Starnus vulgaris*, 1); Jay (*Garrulus glandarius*, 1); Rook (*Corvus frugilegus*, 1).

The species represented are typical of the countryside or farmyard fauna. The Buzzard was a very common bird of prey in England in the thirteenth and fourteenth centuries, and may have been killed at this site because it was thought to take lambs and domestic chickens. The Rook too may have been killed as a pest or may have been killed for food purposes as were perhaps some of the other wild species. There are remains of both adult and young domestic chickens in the material.

Fish Bones by Penny Rhodes.[2]
Thirty three bones were recognised of which thirty could be identified to the following species:-
Plaice *(Pleuronectes platessa).*
Chub *(Leuciscus cephalus).* A very large example, possibly as much as 4.7 kg. This bony fish is seldom eaten but this large specimen would perhaps have provided sufficient flesh to make the effort worthwhile.
Pike *(Esox lucius).*
Ling *(Molva molva).* A rare deep water fish in this area but common in northern British waters. This example may have been salted.
Whiting *(Merlangius merlangus).*
Haddock *(Melangrammus aeglefinus).*
Cod *(Gadus morhua).* The second most abundantly represented species.
Conger *(Conger conger).* Fourteen bones from four individuals, the most abundantly represented species.
Thornback Ray *(Raja clavata).* One buckler.

This is a wide variety of species for such a small collection and represent the diverse freshwater and marine conditions in the vicinity of Denton. The presence of Ling may represent evidence of trade outside the area, and the presence of Conger indicate that they had tackle of sufficient strength to catch this powerful fish.

Because of the proximity of the pit to the site of the priest's house it seems likely that the two were associated. A rectory in the parish is first attested in the taxation of Pope Nicholas in A.D. 1291.[3]

Also from this general area came a quantity of pottery recovered by the late Mr. R. F. Michaelis during the construction of phase 1 of the Church Hall. Mr. Michaelis's finds are broadly contemporary with those reported here.

My sincere thanks to the Rev. N. Lempriere for permission to excavate, and to the following for their specialist's reports:- Mr. E. O'Shea—Pottery; Mr. T. O'Connor—Animal Bones; Miss P. A. Rhodes—Fish Bones: British Museum Ornithology Dept.—Bird Bones. To Trevor Field for his help in excavating, and to Martin Bell for his invaluable help and encouragement. Reports, drawings and finds, together with the pottery recovered by Mr. Michaelis, are at Barbican House.

BRENDA WESTLEY

[1] I. C. Hannah, 'Crawley', *S.A.C.*, Vol. LV (1912), 11.
[2] P. A. Rhodes, *Fish Remains from Point of Ayre, Orkney and Denton, Sussex.* 1977—dissertation in partial fulfilment of the degree of BSc., Institute of Archaeology, London.
[3] M. A. Lower, 'Notes on the Churches of Newhaven and Denton', *S.A.C.*, Vol. LX (1919), 96.

AN EXCAVATION AT SELMESTON, EAST SUSSEX, 1978—A trial trench adjacent to the find spot of an early Neolithic pot located a spread of flint-working waste, three post holes, three ditches and a dog burial. Pottery suggests activity from the Roman period to Medieval times. The most important group of pottery may be dated to the Middle-Late Saxon period.

In 1974, Mr. John Bell found an early Neolithic pot eroding out of the face of the disused sand pit at Selmeston (TQ 5125 0688). This was published in 1975 (Drewett 1975) and so added to the considerable range of archaeological material already published from the sand pit. This material included the well known Mesolithic 'pit-dwellings' excavated in 1933 by Professor J. G. D. Clark (Clark 1934) and the Bronze Age features located by the Curwens three years later (Curwen 1938).

The site is situated on the edge of the Lower Greensand near its junction with the Gault Clay. It is therefore surrounded by springs (Fig. 10, site 4) which may help explain the popularity of this site for settlement from the Mesolithic to the present day. In 1978, following further erosion of the sand face, a single trench was excavated by the author adjacent to the find spot of the Neolithic pot.

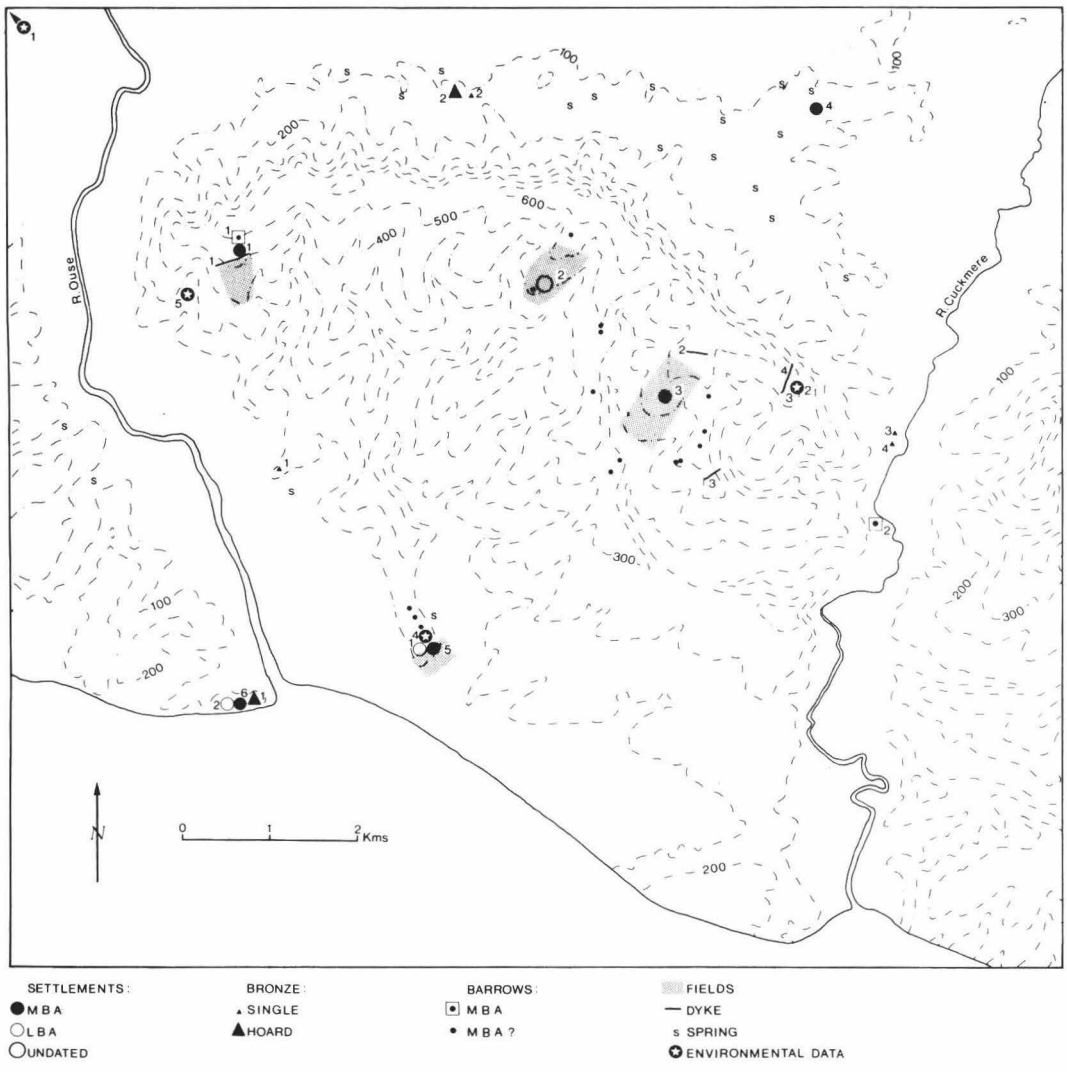

Fig. 10. Location of site (No. 4) in relation to Middle Bronze Age sites contemporary with the 1936 finds at Selmeston sand pit. (Curwen 1938).

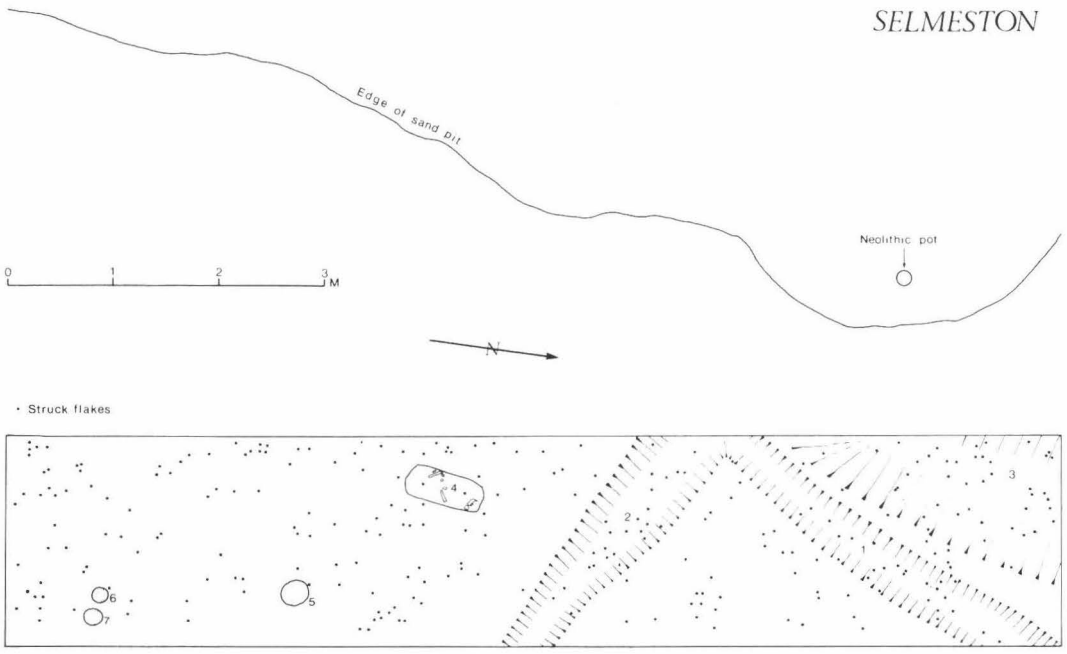

Fig. 11. Plan of 1978 excavations.

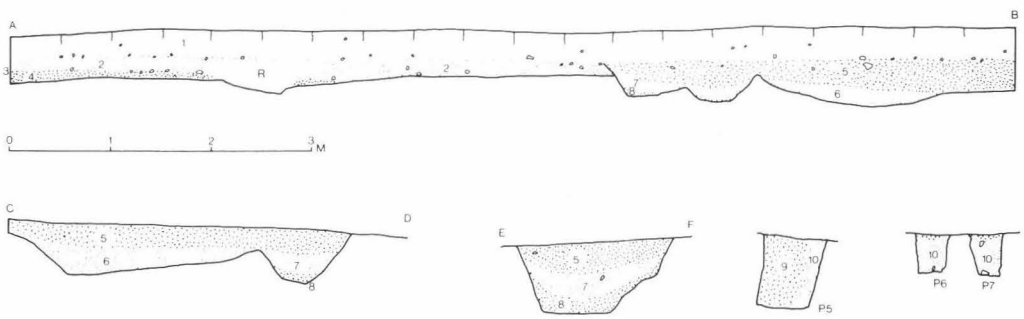

Fig. 12.—Sections of 1978 excavations.

Key:
Layer 1: Light brown sandy soil. (Modern turf and topsoil).
Layer 2: Orange-brown stone free sandy soil.
(Medieval plough soil).
Layer 3: Line of flints. (Worm sorted horizon).
Layer 4: Dark brown sandy soil with orange sandy patches and charcoal flecks. (Saxon occupation layer).

Layers with features:
Layer 5: Dark brown sandy soil.
Layers 6 and 7: Orange/green sandy soil.
Layer 8: Orange/green sandy soil with patches of green sand.
Layer 9: Dark brown sandy soil.
Layer 10: Light brown sandy soil.
R: Rabbit disturbance.

All the features located during the excavation proved to be post-Roman. A scatter of flint work was found but all the identifiable elements of the assemblage appear to be late Mesolithic and so are contemporary with the Mesolithic pits excavated to the west (Finds Report a). Sixteen sherds of Romano-British pottery indicate some activity in the area during that period but the abraded nature of the pottery would perhaps suggest it had been spread over fields with manure rather than any settlement in the immediate area.

At the south end of the trench, three posts holes were found dug into the underlying sand (Fig. 11, Features 5, 6 and 7). They were covered by a dark brown sandy soil (Fig. 12, Layer 4) containing large fragments of Saxon pottery (Finds Report b). Although no artifacts were found in the post holes, they are stratigraphically Saxon or earlier. Without extensive area excavation their function must remain uncertain. The large fragments of Saxon pottery in Layer 4 indicate that this is probably occupation debris adjacent to a settlement area rather than material spread with manure over fields. However, by the Medieval period this area is likely to have been open fields with Layer 2 representing a plough soil containing much abraded pottery of all periods. Late in the Medieval period, or perhaps in the post-Medieval period, three drainage ditches (Fig. 11, Features 1, 2 and 3) were dug. These ditches no doubt relate to the agricultural use of the area. A dog burial, of indeterminate age, was found between the ditches and the post holes.

In conclusion it may be said that the primary purpose of this excavation, to provide a context for the Neolithic pot found in 1974, was not realized. However, the spread of Mesolithic flint work indicates the continuation of activity in the undisturbed area to the east of the sand pit. Most important, however, was the Saxon material found, which clearly underlines the importance of Selmeston during the Saxon period (Bell 1978).

Acknowledgements

I should particularly like to thank Mr. J. J. Coleman, owner of the site, for permission to excavate on his land and Mr. C. Coleman for arranging access. I should also like to thank all the volunteers who helped on the excavation, particularly Arthur Sayers and the members of the Hastings Area Archaeological Research Group. Finally, I should like to thank David Freke, Caroline Cartwright and Terry O'Connor for their contributions to this report.

(a) The Flint Industry by Peter Drewett

A small assemblage of 419 worked flints was found during the excavation. Although the position of each flint flake is plotted on Fig. 11, all the flint was found in disturbed contexts. These flints are therefore in no way a closed assemblage. The bulk of the material is waste resulting from flint knapping in the general area of the trench. The flint types are summarised on table 2. The micro cores and blades indicate Mesolithic elements but the only two diagnostic tool types are the microliths. Both have been blunted down the whole of one edge so are of Clark type B1 (Clark 1939, 73). This would suggest a late Mesolithic date (Mellars 1974, 87) and so indicates that we are dealing with material broadly contemporary with the Mesolithic pits excavated to the west. (Clark 1934).

TABLE 2

	Layers:				Features:				
Type:	1	2	3	4	1	2	3	4	Totals:
Flakes with cortex	38	68	34	9	1	5	9	1	165
Flakes without cortex	33	73	31	8	5	7	11	1	169
Burnt flakes		2	4			1			7
Micro cores	3	6	1				2		12
Core trimmings	2	4	2			1			9
Rough workshop waste	6	10	4						20
Retouched flakes		3	4	1	2	1	1		12
Blades	2	1							3
Blade segments		11	4			1			16
Scrapers	1	1							2
Serrated blades		1			1				2
Microliths	1		1						2
Totals	86	180	85	18	9	16	23	2	419
Fire cracked flint	12	65	25	5	1	4	7		119
Beach pebbles		1	1						2

(b) The Pottery by David Freke

The Pottery examined was from Layers 1-4 and Features 1-4. Layer 1 contained post-Medieval as well as earlier pottery, and Features 1 and 3 contained fragments of brick. The remaining contexts produced consistently Medieval or earlier material.

The Medieval and earlier pottery was analysed firstly on the basis of the composition of the filler and its grain size, and secondly on rim form criteria (Table 3).

Grog filled. This represented *c.* 5% of the total (by weight and number). Grog tempered sherds were considered to be Roman.

Organic filler. One body sherd with organic filler was identified (Layer 1). Three rim fragments with flint and organic filler were also noted (Layers 2 and 3). Two had rims of Saxon or early Medieval forms, and one was slightly finger tipped under the rim (Fig. 13, Nos. 3 and 5).

Grog and flint filler. Two rims (probably from the same vessel) with grog and flint filler were found in Layer 2. The grain size was 1 mm (fabric 4) (Fig. 13, No. 4).

Flint and sand filled. The flint and sand filled fabrics were subdivided by grain size into five types. Grain size has been shown to be a useful guide to chronology in Sussex, with the coarser grains tending to be used in earlier pottery (Barton 1972). A secure chronological analysis based on grain size would depend upon large sealed groups. The pottery from this site amounted to only 257 sherds weighing 1,618g, and Layer 1 and Features 1 and 3 cannot be considered sealed. However, there is a marked preponderance of coarsely gritted fabrics (fabrics 3, 4, 5), and the results from the features is consistent with that from the total (Table 3). This is a very different pattern of grain size frequency to that identified at Kiln Combe, Eastbourne, (Freke and Craddock, forthcoming), a Medieval rural site on the Downs, and also from the patterns at urban sites in Seaford and Steyning (Freke, forthcoming).

TABLE 3 Distribution and frequency of texture types by number and weight (g)

	LAYERS:								FEATURES:								Totals	
	1		2		3		4		1		2		3		4			
Pottery types	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
Roman	2	25	2	8	4	20	2	25	2	10	2	5	2	17			16	110
Texture 5	3	5	13	108	5	43			4	75	3	15	7	48			35	294
Texture 4	4	25	45	266	15	101	8	205	5	35	2	22	6	30			85	684
Texture 3	2	30	34	132	11	35	4	27	2	5	3	10	4	20	1	5	61	264
Texture 2	14	65	25	120	13	39	3	12			2	10					57	246
Texture 1	2	10															2	10
'Alien' sherd			1 (Surrey Whiteware)	10													1	10
Totals	27	160	120	644	48	238	17	269	13	125	12	62	19	115	1	5	257	1618

Texture types: 1—no filler visible to naked eye
2—sandy, up to 0.25 mm.
3—fine flint, up to 0.5 mm.
4—medium flint up to 1.00 mm.
5—coarse flint, larger than 1.00 mm.

The rim forms. The majority of the rim forms could be Saxon or Saxon-Norman. Some were comparable with rims found at Bishopstone, where a terminal date in the sixth century A.D. is suggested (Bell 1977, 235), in particular a rim with a pierced lug pulled up from the rim (Fig. 13, No. 8). This type is also known from Mucking (Jones and Jones 1975, 159), West Stow (West 1969, 175-181), Sutton Courtenay (Leeds 1947, 90-1) and some later sites (Dunning *et al.* 1959, 16-17). Other rims can be paralleled at Lewes (Freke 1976, 184) and Chichester, where a clamp kiln producing similar 'Saxo-Norman' types has been dated to *c.* 1050 A.D. (Down, forthcoming).

The pottery suggests continuous occupation in the area from the Roman period to Medieval times. The large fragments of middle to late Saxon rims suggest nearby domestic activity.

Description of illustrated pottery.

Only the Saxon and Saxo-Norman rims are illustrated.

1. Texture 2. Sandy. Dark grey, hand made. Layer 1.
2. Texture 3. Fine flint. Dark grey, hand made, finger tipping on top of rim. Layer 1.
3. Texture 4. Medium flint and organic filler. Dark grey-brown, hand-made. Layer 2.
4. Texture 4. Medium flint and grog filler. Dark grey, hand made, finger tipping on inside of rim. Layer 2.
5. Texture 5. Coarse flint and organic filler. Dark grey-brown, hand made, finger tipping under rim. Layer 3.
6. Texture 4. Medium flint. Dark grey, hand made. Layer 2.
7. Texture 4. Medium flint. Dark grey, hand made. Layer 2.
8. Texture 4. Medium flint. Dark grey, hand made, with raised, pierced lug on rim. Layer 4.
9. Texture 5. Coarse flint. Dark grey, hand made. Feature 1.

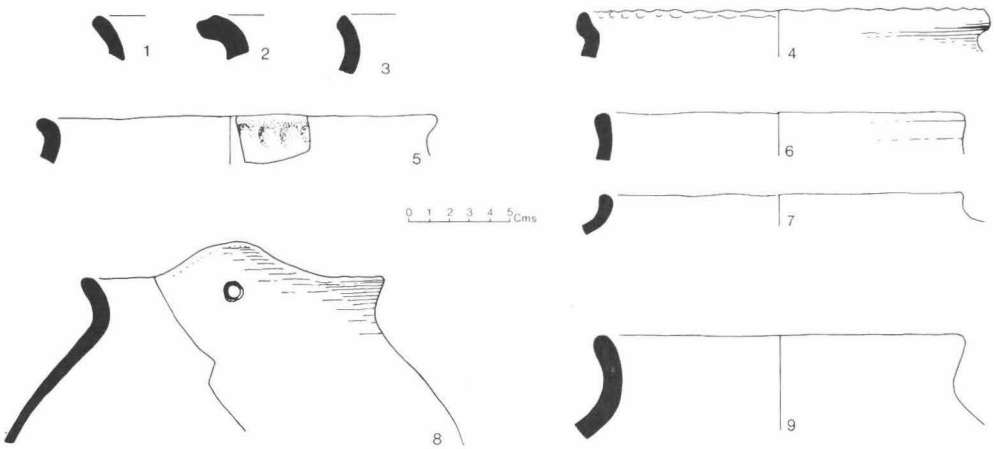

Fig. 13. Hand made Saxon and Saxo-Norman rim forms.

(c) The Animal Bones by Terry O'Connor
Layer 1. Left upper 2nd premolar of immature *Sus* (circa 12-18 months). Feature 3. Proximal end of right radius of *Cervus* (adult). Feature 4. About 20 fragments representing the right tibia, calcaneum and femur, several lumbar vertebrae, both sides of the mandible, each side bearing canine, 3rd and 4th premolars and 1st and 2nd molars, of a *Canis*. By modern standards the dog would be medium to large—about the size of a Border Collie.
(d) Marine Mollusca by Caroline Cartwright. Feature 3. 1 oyster shell.
(e) Charcoal by Caroline Cartwright. Layer 3. 1g weight. *Quercus* sp. (Oak). Layer 4. 1g weight. *Crataegus* sp. (Hawthorn). Feature 5. 5 g charcoal. *Quercus* sp.
P. L. DREWETT.

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MESOLITHIC & LATER FINDS AT SELMESTON & BERWICK—Following the report on the discovery of the large portion of a Neolithic bowl at the old sandpit at Selmeston, which was published in a recent volume of the Collections,[1] it would seem to be an appropriate time to give a short account of the current research being undertaken by the writer.

Previous work at Selmeston sandpit (TQ 513 069) was carried out by J. G. D. Clark[2] and the late E. C. Curwen[3] during 1933 and 1936, which involved excavation of Mesolithic 'pit-dwellings' and a Late Bronze Age ditch. The finds from these excavations are lodged in the Society's museum at Barbican House. A further collection of Mesolithic flints was made by the late Rev. E. D. Arundell in the early 1950s,[4] but the writer has been unable to trace the present whereabouts of this collection.

I wrote to the present owners of the sandpit during 1974, requesting permission to explore the sand faces for Mesolithic flints, and as permission was kindly granted, I succeeded in recovering flintwork of that period from the loose sand at the foot of the sandcliffs. The discovery of the Neolithic round-based bowl has already been alluded to, and fragments of later pottery also occur within the sandpit—mostly of Medieval date. The distribution of both flintwork and pottery within the old sandpit is widely scattered, and does not appear to be restricted to any particular area. It should be realised that the whole of the area excavated by Clark and Curwen has subsequently been removed by the earlier commercial working of sand, and it would thus appear that this area formed the core of the Mesolithic occupation of the site, although the small

plateau to the north-east of the sandpit has yielded Mesolithic cores and worked flakes, and may well mark the most northerly limit of the site.

A chance discovery to the north-west of the sandpit also deserves a mention at this point. During April 1976, Simon Garrett (Assistant at Barbican House), who was aware of my current research in the Selmeston area, informed me that a Mesolithic tranchet axehead had been discovered in the back garden of the Old Vicarage at Selmeston (TQ 509 070) by Mr. Colin Rose of Cross-in-Hand, Heathfield. Mr. Rose kindly loaned me the axehead to examine and illustrate for this interim report (Fig. 14 no. 1). It is a small specimen, worked in a pale-grey flint, measuring 7.2 cm in length and 3.8 cm in breadth at its widest point, and still retains a sharp cutting edge. It is curved longitudinally, and compares favourably with a larger specimen subsequently found by the writer on site B (below). It appears to have been a random find, as the writer later visited the area in which it was found, but although it was a sandy subsoil, I did not observe any other Mesolithic flintwork. This might suggest that the axe had been lost during an expedition from the occupation site at the sandpit. The finder has retained the axehead.

The writer has subsequently found that the Mesolithic occupation of the Selmeston area extended much further than had previously been supposed, and has explored a total of ten fields in Selmeston and Berwick Common, all of which have yielded Mesolithic flintwork and indications of later activities. I would like to emphasise that this project covers a small part of the overall distribution of Mesolithic flintwork, and the flints recovered are merely surface finds derived from the ploughed fields in the area of Common Lane, Selmeston. The main sites are described below, together with a summary of the finds, and comparisons with other sites that have yielded similar material.

Site B (F1/26) TQ 513 068

Subsoil—Lower Greensand. Situated immediately south of Selmeston sandpit, and forms the slope of a valley facing south. The whole of the upper part of the slope has yielded a heavy concentration of Mesolithic flintwork, including two complete tranchet axeheads, four petit-tranchet arrowheads, two triangular arrowpoints, awls, saw-blades, microliths, trapezoids, triangular core-tools, micro-knife-segments, knife-blades, scrapers, cores (both cone-shaped with one striking platform, and oblong with two platforms), and numerous worked flakes. The two tranchet axeheads measured 7.6 cm and 11.4 cm in length, and the larger of the two is curved longitudinally as was the specimen already cited from the Old Vicarage (Fig. 14 nos. 2 & 3). The triangular arrowpoints are flaked on one face only, but trimmed to shape from opposing faces along the edges (Fig. 14 no. 5). Of the triangular core-tools (sometimes described as picks), the largest specimen from this site compares most favourably with one found at Belle Tout, near Beachy Head.[5] The microliths were of Clark's classification of microliths types A and B. Later intrusive element was suggested by the presence of a Neolithic leaf-shaped arrowhead, and large quantities of early medieval pottery.

Site C (F2/26) TQ 513 066

Subsoil—Gault Clay. Situated immediately south of site B, and forms the opposite side of the valley, facing north. Widely scattered distribution of Mesolithic flintwork, and remarkably scarce. Two large core hand-tools were recovered (14 cm and 15.3 cm) that probably served as chisels, and both with their cutting-edges produced by the tranchet technique. Also cores (both types) and worked flakes and scrapers. The distribution is apparently limited to the lowest part of the slope. Later intrusive element provided by a ground and polished Neolithic axe—subsequently rechipped—and quantities of early Medieval pottery.

Site D (F1/04) TQ 520 065

Subsoil—Lower Greensand. Situated three quarters of a mile south-east of Selmeston sandpit, on Berwick Common, and forms a slope facing north. Heavy concentration of Mesolithic flintwork occurs on this site including a complete tranchet axehead, measuring 10.2 cm in length (Fig. 14 no. 4), the butt-ends of two more broken specimens, and a total of three axe sharpening-flakes (Fig. 14 no. 6), two of which were apparently derived from the same axehead. Also recovered was the third specimen of a core hand-tool measuring 7.6 cm in length, three petit-tranchet arrowheads, micro-knife-segments, saw-blades, awls, spokeshave tool, trapezoids, microliths, fabricators, scrapers, a "Horsham point", Thames Pick, cores (both types) and worked flakes. The triangular core-tools also appeared here on site D, and one compared favourably with a specimen from site B. Later intrusive element was indicated by two arrowheads of the Early Bronze Age, including a barb and tang specimen in black flint (Fig. 14 no. 7) and a triangular specimen bifacially-flaked in a pale grey flint (Fig 14 no. 8).

Site E & F (F2/04 & F3/04) TQ 520 063/TQ 519 062

Subsoil—Gault Clay. Situated immediately south of site D. Mesolithic flintwork in small quantities and widely scattered over both fields—mostly cores and worked flakes. One small convex scraper from site F compared favourably with a smaller specimen from site B.

Site G (S1/04) TQ 522 069

Subsoil—Gault Clay. Situated a quarter of a mile north of site D, with small quantities of Mesolithic flintwork again widely scattered over the whole field, including two petit-tranchet arrowheads, micro-knife-segments, and scrapers. Later intrusive element suggested by a leaf-shaped notched arrowhead of Neolithic date (Fig. 14 no. 9).

Site H TQ 522 069

Subsoil—Gault Clay. Situated a quarter of a mile south-east of site D. Widely scattered and uneven distribution of flints, mostly cores and waste flakes, but in small quantities.

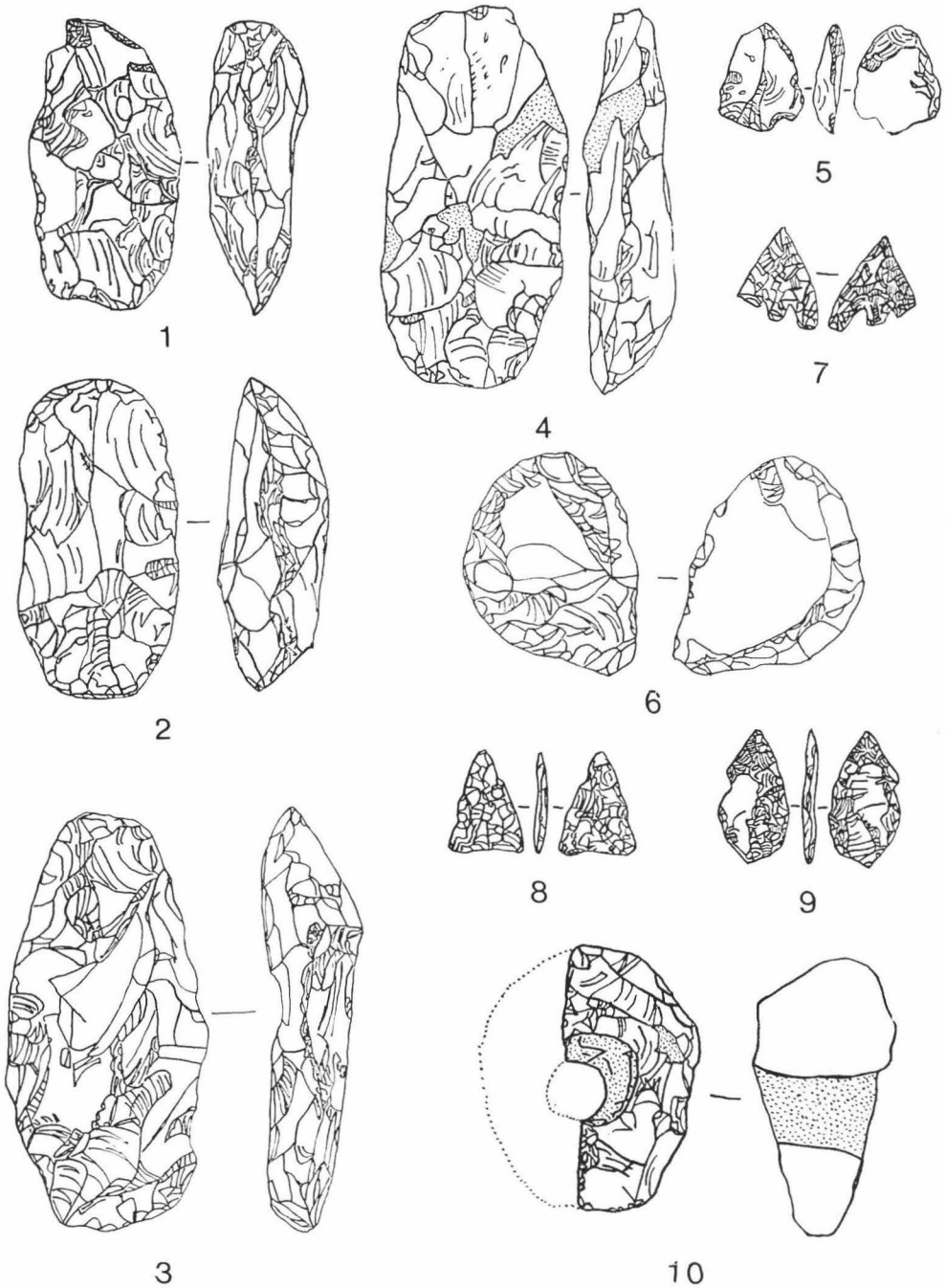


Fig. 14. Flint tools from Selmeston and Berwick. Reduced to $\frac{1}{2}$.

Site J & K (D1/04 & D 2/04) TQ 525 054/TQ 526 056

Subsoil—Gault Clay. Situated on a spur of high ground half a mile south-east of site D. Comparable to site H in a widely scattered distribution of Mesolithic flintwork, which included two petit-tranchet arrowheads, cores, scrapers and worked flakes.

Site L (D3/04) TQ 530 056

Subsoil—Lower Greensand. Situated immediately east of site K, and three quarters of a mile south-east of site D, and lies on the banks of the River Cuckmere. Heavy concentrations of Mesolithic flintwork, including a sharpening-flake from a tranchet axe, petit-tranchet arrowheads, triangular arrowpoints (comparable with site B), micro-knife-segments, microliths, trapezoids, cores and worked flakes. One find of singular importance from site L was the broken half of a naturally-perforated macehead, worked in a brown flint (Fig. 14 no. 10), which appears to be a type of adze/hammer. This may be compared favourably with a larger specimen found by the writer on Bullock Down, near Beachy Head (TQ 588 959). Later intrusive element indicated by a Mesolithic knife-blade that had been subsequently reshaped by bifacial flaking to produce a leaf-shaped point. This latter work would suggest a Neolithic date, and it probably served as a small lancehead.

Conclusions may be drawn from the fields so far examined by the writer, and some tentative suggestions are now given here.

Due to the proximity of site B to the old sandpit at Selmeston, it may safely be concluded that this forms part of the occupation-site previously excavated by Clark and Curwen. Although they did not mention this area in their report, it seems highly probable that the flintwork now being found on this site has only recently been brought to the surface by the plough. I am informed by the present owners of the field, that it came into their hands in 1970, and had previously been ploughed to a depth of 15 cm or less. Since the acquisition of site B, the plough depth is now 23 cm, and this may well indicate why this site has not previously been noticed. It would also suggest that the Mesolithic occupation level is between 17 and 26 cm below the present ground surface. Fragments of charcoal have been noticed by the writer in certain areas of the site, together with burnt sand, and these may well indicate the presence of hearths comparable with those found during the excavations within the old sandpit.

Sites D and L also appear to be occupation sites of Mesolithic date, due to the heavy concentrations of flintwork that also occur on both sites. The finding of implements of similar type on sites B, D, and L would suggest some form of correlation with each site, and this may indicate that the same community rotated its occupation sites. Further comparisons can be drawn with Mesolithic finds at Beachy Head and Belle Tout, a distance of some eight miles to the south-east of these sites.

Of the remaining sites so far examined by the writer, they can best be described as 'hunting grounds' due to the scarce distribution of flints, and in the case of site G, the finds from that area were apparently confined to working tools that may well have been lost or discarded in the hunt. They cannot—in the writer's opinion—be described as occupation-sites, as the flintwork does not appear to be confined to any specific area. An exception to this rule may be made in the case of site C, which probably formed the southernmost limits of the occupation at the old sandpit that extended over site B. It may be noted that the occupations were apparently centred on the Lower Greensand, which supports the late Dr. E. C. Curwen's suggestion that Mesolithic man preferred a sandy soil on which to dwell.

Evidence of Neolithic occupation of the area is referred to in the report by J. G. D. Clark on the excavations at the sandpit, and also by the Neolithic bowl fragment also referred to previously. The leaf-shaped arrowhead from site B, and ground and polished axehead from site C, are also both presumably assigned to that occupation, whilst the notched leaf-shaped arrowhead from site G and leaf-shaped lancehead from site L were probably lost whilst hunting, as no other finds of the period were found in either of these areas.

The discovery of the barb and tang and triangular arrowheads from site D also provide clear evidence that men of the Beaker period or Early Bronze Age hunted across this area, as no other finds of this period have been found on this site.

The ten fields so far examined by the writer represent only a small part of the overall area which needs to be carefully searched to provide a clearer picture of the distribution of Mesolithic flintwork, and thus the movement of the communities of this period. All of the fields have now been seeded, but the writer intends to continue researches at a later date, and also to examine the intervening fields as and when they come under plough. These will form the basis of a further and more detailed report.

My thanks are due to the local landowners for kindly granting me their permission to search their fields, and without whose kind co-operation this report would not have been possible. Thanks are also due to my wife, Jennie, who drew the illustrations, and to Mr. P. L. Drewett, Director of the Sussex Archaeological Field Unit, who kindly 'vetted' this report.

A. E. HOLLOWAY

References:

[1] *Sussex Archaeological Collections* 113 (1975) 193-4.
[2] *Antiquaries Journal* XIV (1934) 134-158.
[3] *Sussex Archaeological Collections* 79 (1938) 195-8.
[4] *Sussex Notes & Queries* 13 (1953) 312-3.
[5] *S.A.S. Occasional Paper 2* 'A Mesolithic Assemblage from East Sussex' by Richard Bradley, Fig. 2 no. 12.

AN EARLY BRONZE AGE COLLARED URN FROM HANGLETON, WEST SUSSEX—In January, 1976, Mr. George Trigwell of Ringmer, reported the finding of a broken pot to Mr. E. Williams of Bullock Down Farm, Eastbourne. Mr. Williams contacted the author who met Mr. Trigwell to determine the exact circumstances of the discovery. The four sherds were from a collared urn found while laying a water pipe immediately adjacent to a new cattle trough at TQ 2633 0856. The site is on the South Downs $1\frac{1}{2}$ miles due south of the Devil's Dyke and $\frac{1}{4}$ mile west of the round barrow cemetery on Round Hill. The sherds were from a whole pot found in an inverted position over a cremation. Unfortunately none of the cremation was recovered, nor was the remainder of the pot. The urn was, therefore, clearly used for burial but whether under a now ploughed out barrow or not is difficult to say without excavation. Dr. I. H. Longworth of the British Museum kindly examined the pot and provided the following note:

"Four sherds from the collar, neck, shoulder and upper body of a collared vessel, of soft fabric tempered with grog. Reddish brown externally, light brown to brown internally with dark grey patches. Both faces smoothed.

Decoration: On the internal moulding and on the external surface of the collar three horizontally twisted cord lines. At the base of the neck, in the shoulder groove and extending onto the body, twisted cord herringbone.

The vessel belongs to the primary series, three formal and two decorative traits survive. The shoulder groove is of interest demonstrating, as on a small number of other primary series vessels, convergence with more explicitly food vessel practice. Unfortunately, insufficient remains of the shoulder to demonstrate whether the groove was continuous or stopped, both forms being known in the series."

Lysbeth Drewett kindly drew the pot (Fig. 15) which has now been deposited in the Brighton Museum.

P. L. DREWETT

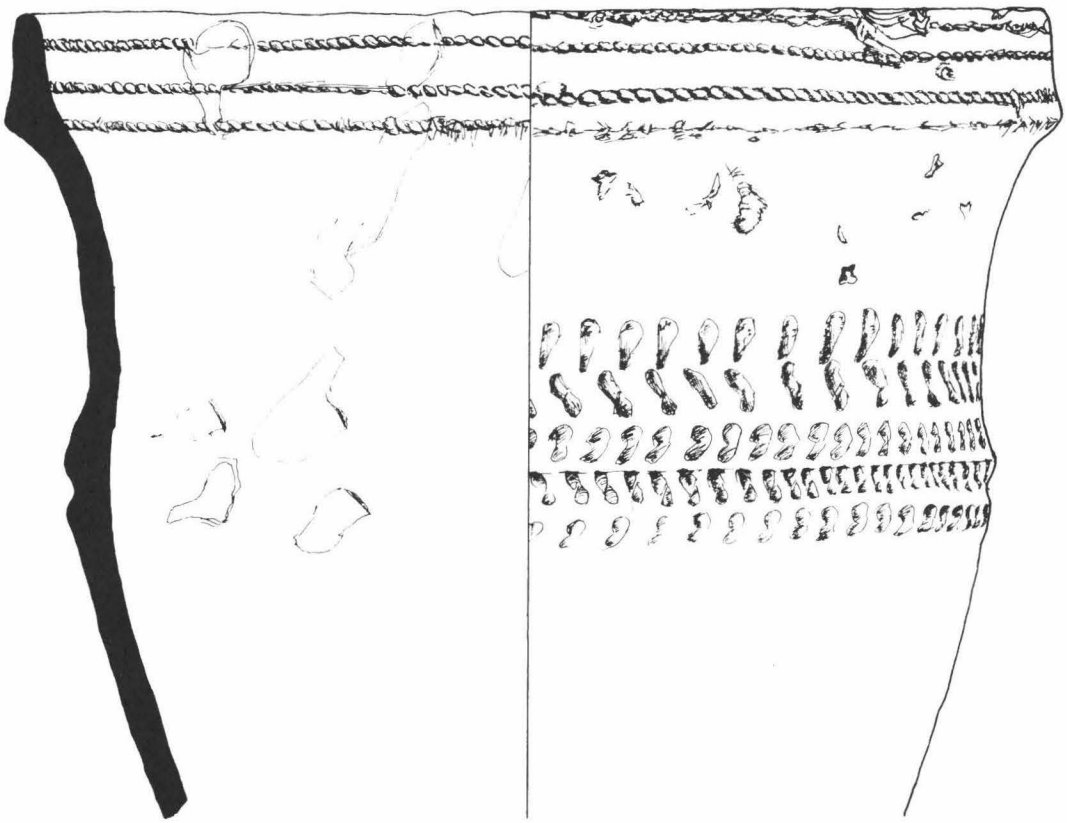


Fig. 15. Collared Urn from Hangleton (2/3).

NOTES FROM F. G. ALDSWORTH, COUNTY FIELD ARCHAEOLOGIST, WEST SUSSEX

MADEHURST WOOD WATER-PIPE TRENCH—On Wednesday the 16th of February, 1977, the Southern Water Authority laid a water pipe through the linear earthworks in Madehurst Wood (SU 9780 0879), which were discussed by the Curwens in 1920.[1] The section of earthwork affected by the scheme lies on the northern slope of the hill and extends in an east-west direction for a distance of about 450 m. It is possible that this work represents the eastern limit of the Chichester Entrenchments although there is insufficient evidence to demonstrate this at present.

As it survives, the earthwork comprises a ditch, some 10 m. in width and up to 3 m. deep, with traces of a counterscarp bank on the northern, downhill, side. The Department of the Environment had previously agreed to the laying of the water pipe on the line of the footpath, which crosses the earthworks at an angle of about sixty degrees, subject to a watching brief being maintained during the work.

The footpath was widened to about 6 m. as a terraced working strip through the woodland, and this cut into the bank and ditch of the earthwork, revealing a shallow section about 0.8 m. in depth. The upper fill of the ditch was revealed in this section, together with two other disturbances, which may be pits or post-holes. The trench which carried the water pipe was some 3.8 m. west of this section and was about 1.5 m. wide and 1.5 m. deep. In both its eastern and western faces it revealed the chalk-cut ditch which was 6.2 m. wide at the highest point. The sections observed during the making of the working strip and the cutting of the pipe trench may be combined with the profile of the ditch, as it survives some 20 m. to the east, to provide an approximate section of the original ditch in this area. Since the bottom of the ditch was not encountered the full profile is not known but it seems likely that it was originally about 10.0 m. wide and 5.0 m. deep. The fill of the southern side of the ditch was comparatively clean chalk but that on the northern side was silty loam. It seems likely that the chalk was derived from a rampart which formerly stood on the south side of the ditch. No finds were encountered.

[1] E. C. and E. Curwen *S.A.C.* 61 (1920) 20-30.

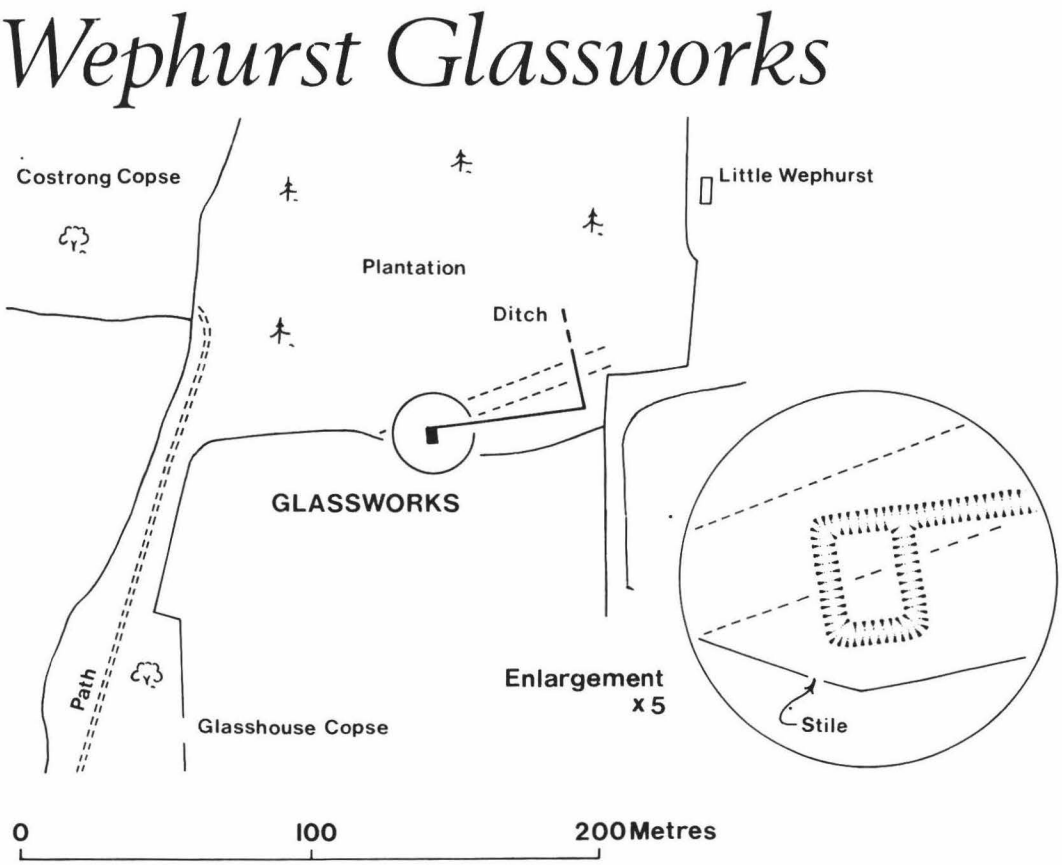
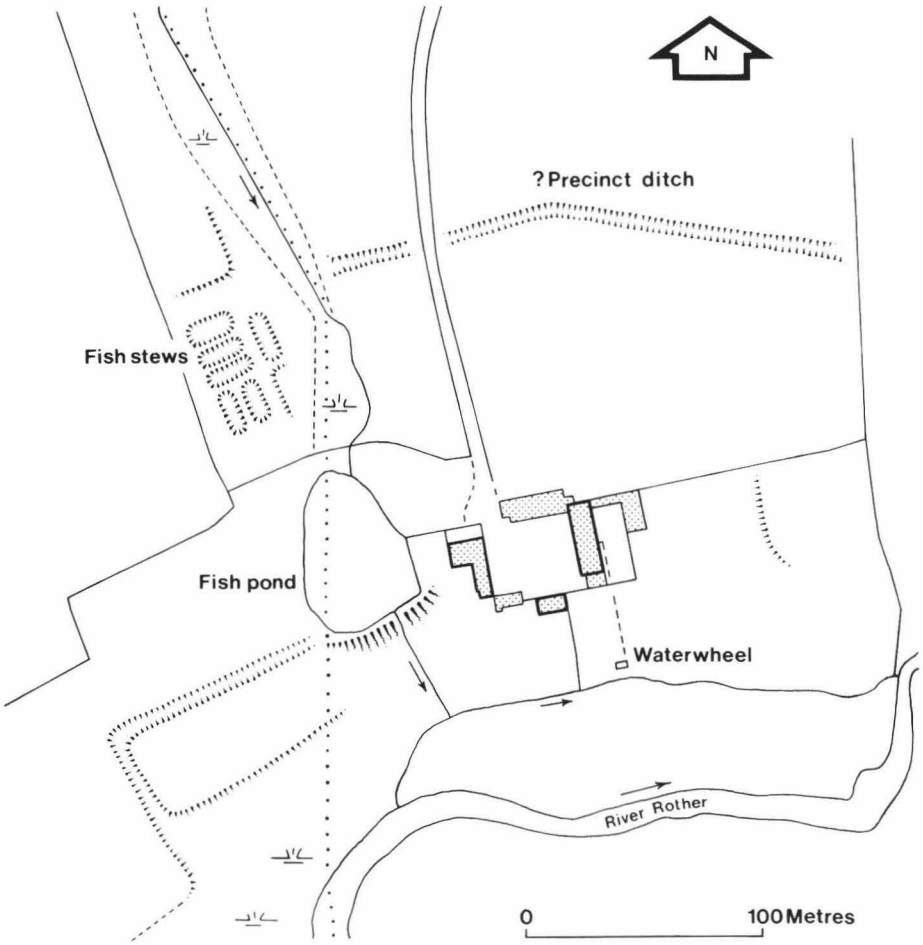
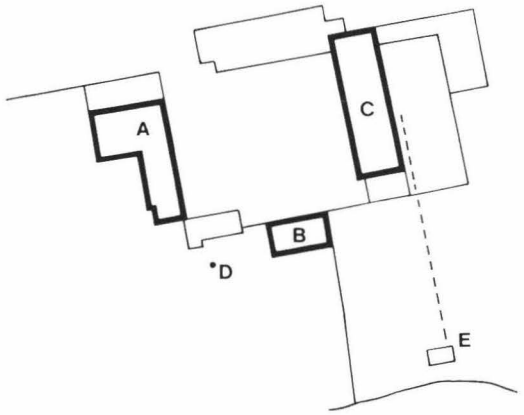


Fig. 16.

Durford Abbey





A DURFORD HOUSE rebuilt 1784
B Stable with Medieval remains
C Threshing barn
D Column base
E Waterwheel with drive to barn

0 50Metres

Fig. 17.

WEPHURST GLASSWORKS (See fig. 16)—The site of a late fourteenth- and fifteenth-century glassworks at Glasshouse Copse, Wephurst, is listed by Winbolt[1] and is described by Kenyon,[2] but could not be traced by the Ordnance Survey in 1970.

The remains, which represent one of the best surviving examples of its type, have now been located in a clearing beneath an overhead power line at TQ 0240 2936. They comprise a rectangular mound, measuring 6 m. by 4 m., surrounded by a ditch. A linear ditch extends eastwards from the north-east corner and may be contemporary.

The site has been recommended for scheduling as an Ancient Monument.

[1] Winbolt, S. E. *Wealden Glass* (1933) 46.
[2] Kenyon, G. H. *The Glass Industry of the Weald* (1967) 180-2.

DURFORD ABBEY (See fig. 17)—The Premonstratensian Abbey at Durford was founded before 1161 and dissolved in 1536.[1] The Monastic buildings were subsequently incorporated in Durford Farm, as shown in drawings by Grimm in 1782,[2] but these buildings were almost entirely rebuilt in 1784.

When the property changed hands in 1976 the new owner, Mr. Manley, kindly allowed the writer and Mr. A. G. Allnutt, of the Sussex Industrial Archaeology Society, to inspect the site and the following features were noted.

The present farmhouse, marked 'A' on the plan, is dated 1784 and occupies the position of the house drawn by Grimm. The earlier house evidently incorporated medieval features and there seems no reason why the present house should not contain medieval footings. The plinth of the south wall of a medieval building is visible on the south side of the stable block, marked 'B' on the plan, and on the inner face of the west wall of the same building are the heads of two openings just above the present floor level. One is pointed, the other round. The outer face of that to the south is shown on one of Grimm's drawings and this, and other evidence, demonstrates that the ground level within the present farmyard has been raised by about 2 metres since 1782. To the east of the farmyard is a sixteenth- or seventeenth-century threshing barn and to the south of the farmhouse are several column bases, one of which, marked 'D' on the plan, may be in its original position. An inscribed stone coffin lid is incorporated in the south wall of the house and there are numerous fragments of worked stone lying around the garden and built into walls. Medieval floor tiles, once used in a nineteenth-century summerhouse, have been buried in the garden.

To the north-west of the farmhouse are a series of fish-stews and a fish pond with channels leading in from the west and out to the east, one of which may be a precinct ditch.

South of the barn, are the remains of a late nineteenth-century iron water-wheel which has an unusual underground shaft, about 40 m. long, with universal joints, which once provided drive for machinery in the barn.

The site has been recommended for scheduling as an Ancient Monument.

[1] Knowles, D. K. and Hadcock, R. H. *Medieval Religious Houses* (1953) 65.
[2] Blaauw, W. H. *S.A.C.* 8 (1856) 41-96.

TWO UNUSUAL DITCHED ENCLOSURES IN WEST SUSSEX—Mr. Jerome O'Hea, of Chichester, has reported the discovery of two unusually large ditched enclosures which appeared as crop marks in the summer of 1976.

North of Binderton House, West Dean, at SU 8474 1120, is a sub-oval enclosure, measuring about 170 m. north-south by 120 m. which is defined by a comparatively small ditch. Within the enclosed area and adjoining the west side are traces of a small rectangular enclosure. The feature lies on the end of a spur, immediately above the coastal plain, and it is traversed by the Chichester-Silchester Roman Road.

South of Selhurstpark Farm, East Dean, at SU 9271 1036, is a sub-oval enclosure, measuring about 330 metres east-west by 200 metres, which contains a small rectangular enclosure in its north-east corner. The feature lies on the end of a spur.

No occupation material has so far come to light to indicate the date of the features and neither appears to conform to any type of enclosure identified elsewhere on the Downs in West Sussex.

A POSSIBLE NEOLITHIC OVAL BARROW ON NORE DOWN, WEST MARDEN (See fig. 18)—In February, 1977, Mr. Eric Holden drew the attention of the writer to the existence of an unusual earthwork somewhere on Nore Down, which was thought by Mr. John Boyden, to resemble a feature in Fargo Plantation, west of Stonehenge.

The feature in Fargo Plantation comprised a beaker grave surrounded by a ditch, about 20ft. in diameter, which had two, opposed, entrance-causeways.[1]

On the eastern slope of Nore Hill, immediately above a steep slope at SU 7731 1306, are the remains of an oval mound, about 25 m. long, 12 m. wide, and 0.4 m. in height. It is oriented east-west and is flanked by side ditches, each up to about 8 m. wide and 0.8 m. deep. In general form it resembles a Neolithic oval barrow and appears to be unploughed. It could be a pillow mound or the result of surface quarrying but the overall proportions and regularity appear to rule these out although there are shallow surface disturbances in the area and an irregular mound to the east.

[1] J. F. Stone *Wessex* (1963) 72 fig. 8 and plates 24 and 25.

AN IRON AGE GOLD COIN FROM PULBOROUGH (See plate 1)—In December, 1976 Mr. T. E. Judd reported to Horsham Museum the discovery of a gold coin on the surface of a ploughed field near Pulborough, at about TQ 0744 2001. The coin, which is retained by the finder, appears to be a Gallo-Belgic E (Morini) uniface stater (Mack 27) and probably dates to 65-45 B.C. (Plate 1 faces p.256.)

Nore Down

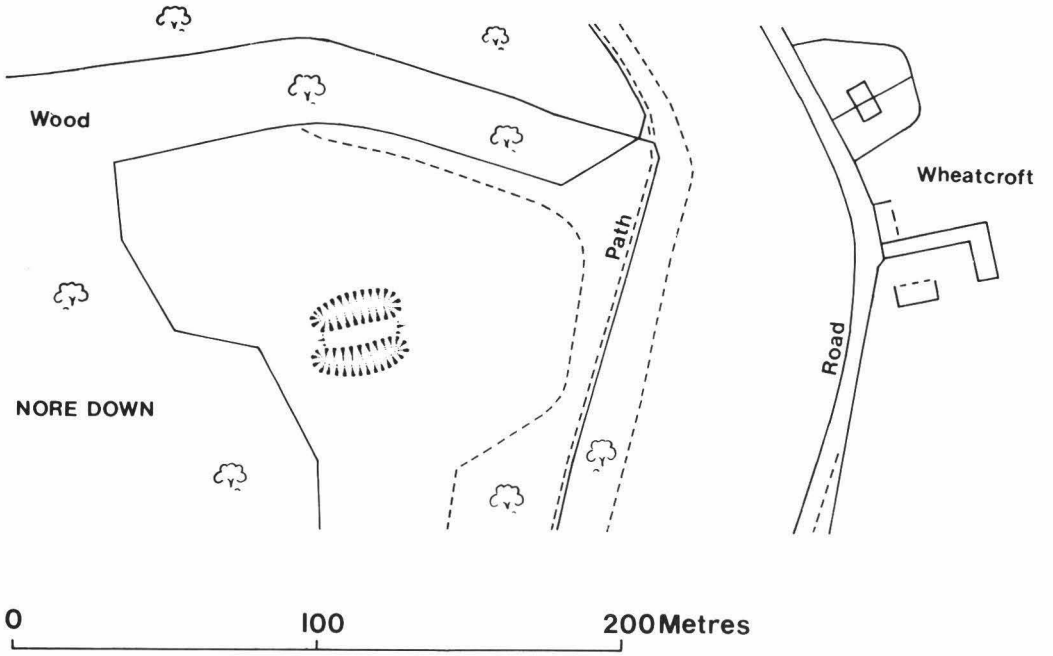


Fig. 18.

SIXTEENTH-CENTURY HOUSE FOUNDATIONS AT WEST HEATH, HARTING—Mr. J. L. Hosking, of East Harting, has reported the discovery and excavation of the foundations of a probable sixteenth-century house which has subsequently been destroyed by sand quarrying. The site was located at SU 7829 2278.

A rectangular building, measuring 9.1 m. by 6.4 m. was represented by foundations of greensand blocks, flint and mortar, up to about 1.0 m. wide. These footings contained several pieces of re-used worked stone, including a column capital of Sussex 'winkle stone', which almost certainly came from the nearby Durford Abbey after it was dissolved in 1536.

The house, which is shown on an estate map of 1632, may have belonged to Jane Wyndesore who died in 1572.

ROMAN VILLA AT HOOKSWAY, TREYFORD—Mr. Michael Boxall, of the West Dean Estate, reported the discovery of a flint wall when scrub was being cleared on the lower side of Batten Hanger. A concentration of flint and Romano-British roofing tile, at SU 8180 1534, indicates that this was probably the site of a Roman Villa.

A PROBABLE IRON-AGE FARMSTEAD SITE AT LORDINGTON, STOUGHTON.—During the summer drought of 1976, Mrs. Francis, of Lordington, drew my attention to parch marks in the field immediately north of Lordington House, a seventeenth-century structure around which are the earthwork remains of a shrunken medieval village (see fig. 19).

The field was under pasture during the August of that year but two enclosures, and other features, were visible as very distinct brown parch marks about 1 m. wide. Enclosure 'A', centred at SU 7824 1016, was sub-rectangular, measuring about 90 x 70 m. with entrances to the north and south, and enclosure 'B', centred at SU 7820 1004, was about 40 by 20 m. with an entrance in the south-west corner.

With the kind permission of Mr. John Veltom, of Sindles Farm, a trial trench was excavated, in March, 1978, through the western side of enclosure 'A' and at a distance of 23 m. from the gate in the nearby field boundary a ditch was located in the position indicated by the former parch marks. This ditch, which appeared to have a steeper slope on the inner side, was 1.2 m. wide and was cut, through about 20 cm. of topsoil into the underlying chalk, to a depth of 0.9 m. below the present surface of the field.

ENCLOSURES AT LORDINGTON

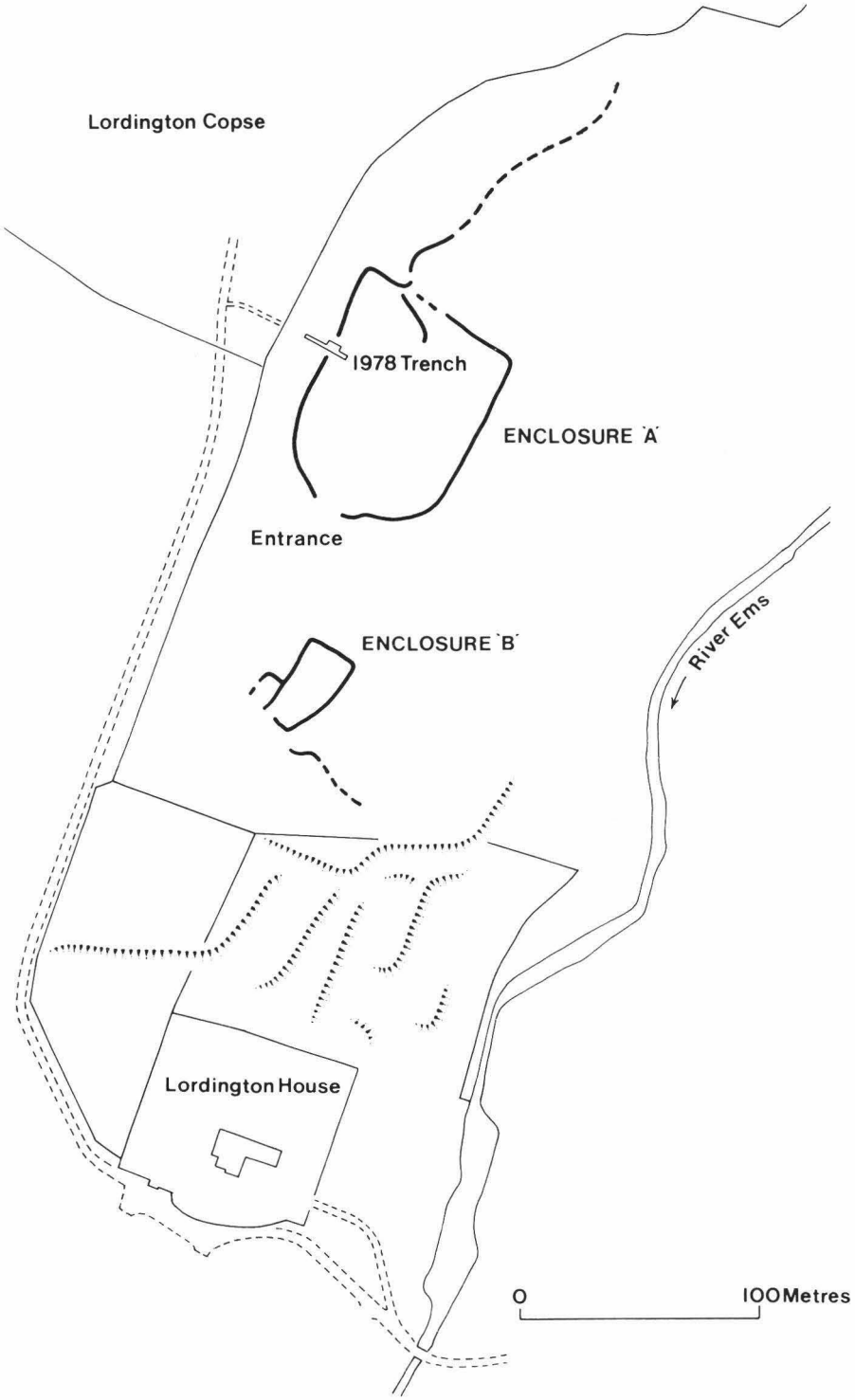


Fig. 19.

The only finds were a struck flake and fragments of a cow horn but the form of the enclosures, on the gently sloping right bank of the river Ems, indicates an Iron Age date.

F. G. ALDSWORTH

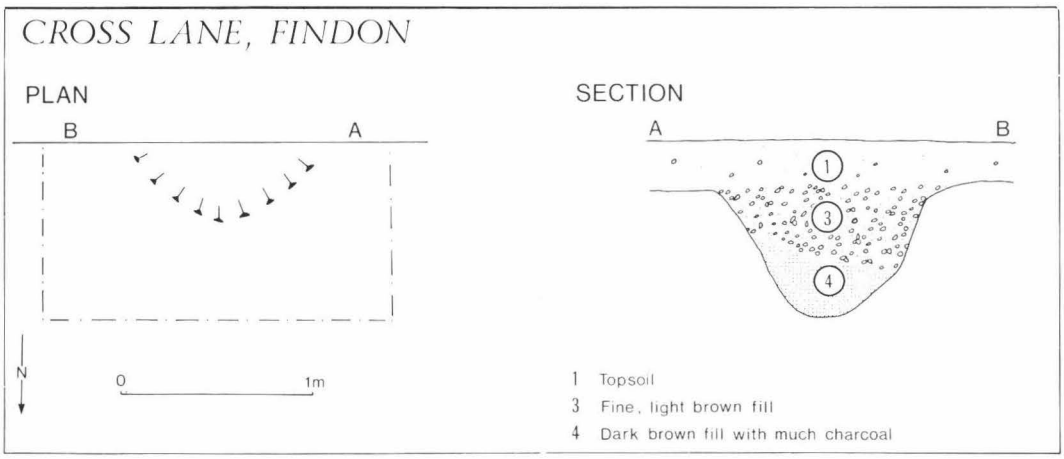


Fig. 20. Cross Lane. Plan and section of Bronze Age pit.

BRONZE AGE POTTERY FROM CROSS LANE, FINDON, WEST SUSSEX (TQ 1245 0812)—In February, 1976, Mr. John Sayles Jnr. noticed a small V-shaped feature on a building site at Findon, where a cutting had been made for an access road. The owner of the site readily agreed to excavation, which was carried out on March 6th, 1976. The feature turned out to be the edge of a small pit, cut into the chalk subsoil (Fig. 20). The lower fill of the pit, layer 4, contained considerable amounts of charcoal, charred acorns, and about a dozen sherds of Bronze Age Pottery, some of which are illustrated in Fig. 21.

Dr. Ann Ellison, Director of the Wessex Archaeological Unit, has examined the pottery, and reports as follows:

1. Rim sherd displaying simple, rounded rim and a slight carination about an inch below the rim, incised with irregular nail impressions. Sparse grog and medium flint inclusions. Smoothed surfaces.
2-7. Six featureless body sherds with sparse fine flint inclusions.
8-10. Three body sherds with grog inclusions, two of which are decorated with irregular fingernail impressions.
11, 12. One body sherd and one fragment of base with sparse medium to large flint inclusions.
13, 14. Two body sherds with medium dense, small to medium calcined flint inclusions, decorated with all-over fingernail rustication.

(All these sherds are from layer 4).

Discussion. The grog and flint-gritted fabrics are all typical of the Bronze Age wares of Sussex. The rim sherd with fingernail-impressed carination is best paralleled by the Late Bronze Age assemblage from New Barn Down.[1] The rusticated sherds pose more of a problem because random, all-over fingernail impressions are in fact quite rare in Sussex. Rusticated ware is common in Beaker assemblages, e.g. Church Hill flint mines, Findon,[2] and the Belle Tout settlement,[3] but in most cases, the fingernail impressions are arranged in opposed rows. The only vessel with a random (but not all-over) pattern of fingernail impressions is from Belle Tout.[4] Dating from the Middle Bronze Age there is a vessel with all-over fingernail impressions from Aldwick Crescent, Findon Valley (unpublished; Worthing Museum 55/19), but again the fingernail impressions are arranged in rough, short rows. It can be concluded that the decoration and fabric of the rusticated sherds suggest an Early or Middle Bronze Age date.

The charcoal from layer 4 was identified by Caroline Cartwright as fragments of ash (*Fraxinus* sp.); the acorns have been retained for carbon-14 dating when a low-level counting service becomes available.

The site at Cross Lane was situated on low ground between Cissbury to the east and Church Hill to the west, i.e. in a valley bottom. The nature of the finds suggests debris from a settlement; there were no surface indications of other features.

I am grateful to Mr. C. Ainsworth, John Sayles, Roy Plummer and John Friar for help with the excavation, and to Dr. A. Ellison for the pottery report. Lys Drewett drew the pottery in Fig. 21. The finds have been deposited in Worthing Museum.

OWEN BEDWIN

References

[1] E. C. Curwen, 'A Late Bronze Age Farm and a Neolithic pit dwelling on New Barn Down, Clapham, near Worthing', *S.A.C.*, 75 (1934), 137-70.

[2] R. C. Musson, 'An illustrated catalogue of Sussex Beaker and Bronze Age pottery', *S.A.C.*, 92 (1954), 106-24.

[3] R. J. Bradley, 'The excavation of a Beaker settlement at Belle Tout, East Sussex, England', *Proceedings of the Prehistoric Society*, 36 (1970), 312-79.

[4] R. J. Bradley, *op. cit.*

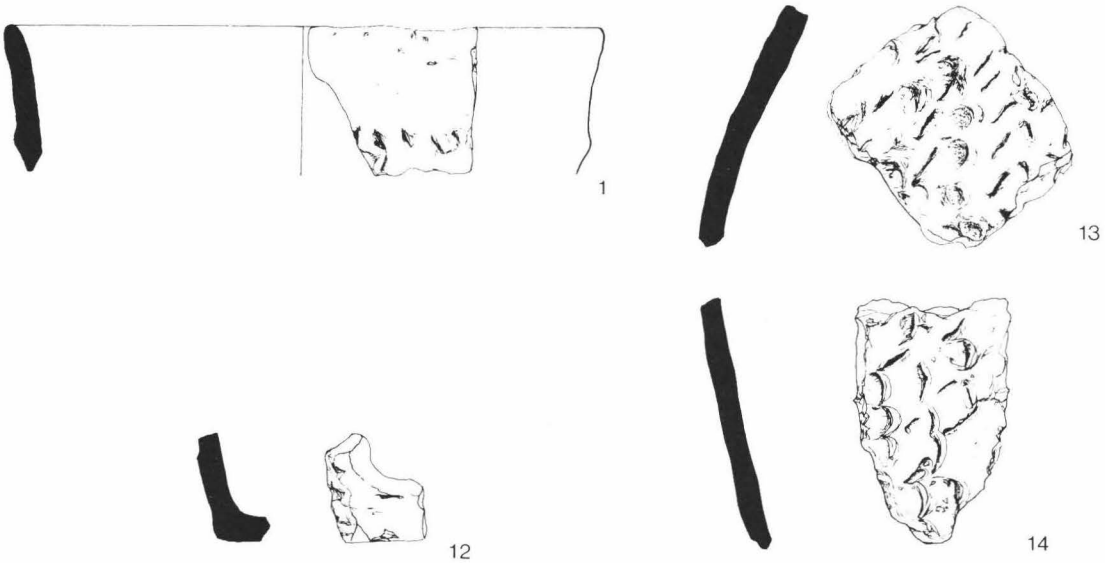


Fig. 21. Cross Lane. Bronze Age pottery (x$\frac{1}{4}$).

EARLY IRON AGE POTTERY FROM LITTLEHAMPTON—Two groups of Iron Age pottery were found by Mr. M. Reed on a building site at Littlehampton, near the known site of the Roman villa. The smaller group of pottery (from TQ 040 021) was found in a small pit; the larger group (TQ 039 024) came from a ditch about 1 m deep, cut into the brickearth subsoil. The ditch had been sectioned by machine at an oblique angle; its width, though difficult to measure, was about 1.5 m at the top.

The pottery was examined by Susan Morris (Institute of Archaeology, Oxford) and her report is as follows;

Site 1 (TQ 040 021)

1. Body sherd, smooth finish, decoration of rows of stabbed dots, fabric fine/medium, flint grit and sand. (Numbered sherds correspond to those in Fig. 22).

Not illustrated. Two sherds fine/medium, flint grit; one sherd fine/medium, flint grit with grog and sand.

Site 2 (TQ 039 024)

2. Rim sherd, flat top, round exterior, roughly smoothed fine, flint grit with quartz sand fill.
3. Flat base, upright profile, rough finish, fine/medium, flint grit and quartz sand.

Not illustrated. 38 sherds fine/medium, flint grit; four sherds fine/medium, flint grit with grog; nine sherds fine, flint grit with sand and grog; 96 sherds fine, flint grit with sand; 56 sherds fine, flint grit with sand and haematite finish, frequently well burnished.

Discussion

The small size of the pottery sample and the lack of diagnostic pottery within it preclude detailed analysis. These two sites have produced similar pottery and should be given an early Iron Age date, probably within the sixth to fifth centuries, of which the haematite slip is a typical finish. The fabrics represented are basically flint grit, usually of a fine or medium aggregate size and, occasionally, with admixtures of sand or grog. These tend to produce a coarser fabric, which was characteristic of the sherds from site 1, and, to a lesser extent, from site 2. A finer fabric occurred at site 2 only, possibly suggesting a slightly later date within the range mentioned above. The number of vessels represented is small, a minimum of eight; the numerous sherds of the haematite ware, for example, probably belonged to a single large jar.

Stabbed decoration is known from several Sussex sites; sherds with similar styles of decoration having been found at the Caburn, Stoke Clump, and Kingston Buci. The pottery is broadly comparable to the earlier phases of many sites in Sussex, such as the Trundle,[1] Lancing,[2] Highdown,[3] and the Caburn.[4] More exact comparisons will be possible after the excavation of a larger collection of diagnostic Iron Age pottery.

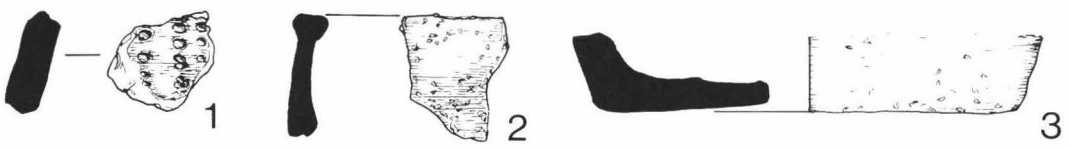


Fig. 22. Iron Age pottery from Littlehampton (x$\frac{1}{4}$)

The discovery of this early Iron Age material at Littlehampton is interesting for two reasons: first, it adds to our scanty evidence of Iron Age occupation of the Coastal Plain; secondly, as the pottery was found close to the Roman villa, it indicates settlement in the area prior to the establishment of the villa.
OWEN BEDWIN

REFERENCES
1 E. C. Curwen, 'Excavations in the Trundle, Goodwood, 1928', *S.A.C.*, 70 (1929), 33-85.
2 S. S. Frere, 'A survey of archaeology near Lancing', *S.A.C.*, 81 (1940), 141-73.
3 A. E. Wilson, 'Report on the excavations at Highdown Hill, Sussex, August, 1939', *S.A.C.* 81 (1940), 173-204.
4 E. and E. C. Curwen, 'Excavations in the Caburn near Lewes', *S.A.C.* 68 (1927), 1-56.

A BARBED BRONZE SPEARHEAD FROM THE ROTHER—In late 1974, or early 1975, a barbed bronze spearhead was found in river dredgings on the south (Sussex) bank of the Rother, just east of Newenden, at a spot which, from the description, can be identified as lying within TQ 843 275. Unfortunately, the finder not only removed traces of the wooden shaft inside but also sharpened the edge 'to see what it was made of.' Subsequently, it was acquired by Hastings museum (Acc. No. 975.20) and conserved by the Pitt-Rivers Museum, Oxford. It is intended to place it on exhibition at the Old Town Hall Museum of Local History, High Street, Hastings.

A well-known comparison is the barbed spearhead from the Humber near Ferriby.[1] The Rother example is, however, smaller (22 x 6.4 cm) and has a slightly more 'ogival' outline, reminiscent of the leaf-shaped sword and probably derived therefrom.The shaft was held to the head by a slightly off-centre pin; the shaft itself could only have entered the spearhead to the length of 5 cm since the midrib is of oval section and solid, likewise reminiscent of the leaf-shaped sword (Fig. 23).
DAVID DEVENISH

1 Later Prehistoric Antiquities of the British Isles' *Brit. Mus.*, Fig. 10/7.

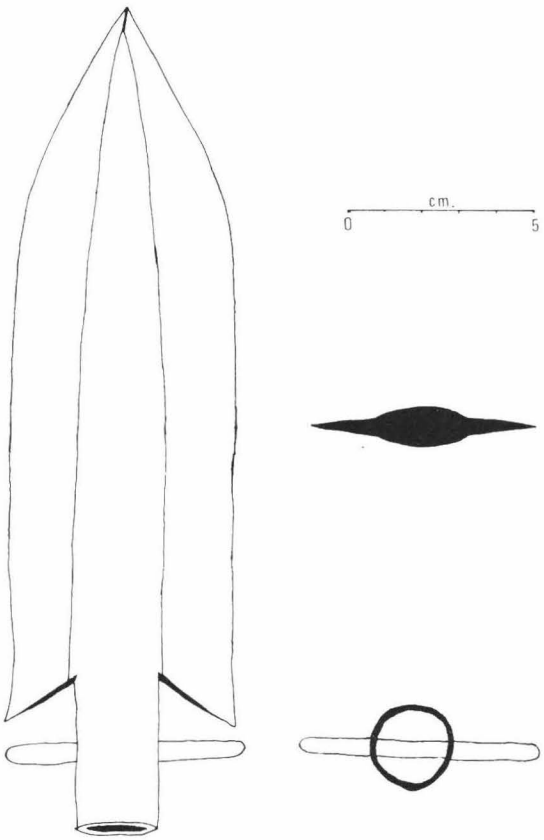


Fig. 23. A barbed bronze spearhead from the Rother

Plate 1. Iron Age gold coin from Pulborough

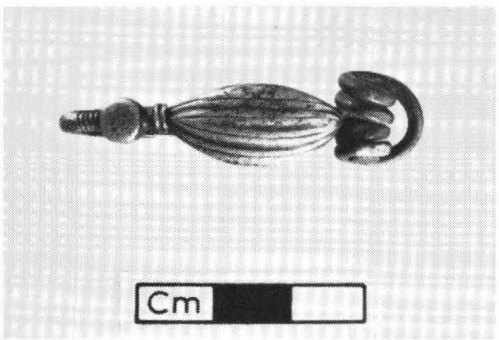


Plate 6 a

Plate 6 a } La Tène I brooch from Bognor Regis
Plate 6 b } (photo Mrs. R. M. Jupe).

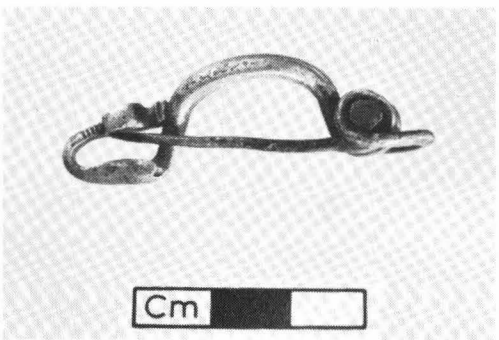


Plate 6 b

IRON AGE AND ROMANO-BRITISH SETTLEMENT IN ERIDGE PARK (TQ 575 339)—The ploughing of part of Eridge Park in the late 1950s turned up a quantity of late pre-Roman Iron Age and Romano-British pottery concentrated in about half an acre. Nearby at about TQ 575 340 were two small areas of dark soil and slag.

The site was discovered by Brian Stapple and Ian Jeffrey (two schoolboys who had worked at High Rocks) who collected pottery from the surface and brought it to the Tunbridge Wells Museum. Later more pottery was found by Stapple and James Money.

Prof. S. S. Frere, who examined the pottery in 1959, then reported that it included the following:

i Footrings (pedestals) of Wealden form of Southern 2nd B
ii Decorated sherds of South Eastern B
iii Belgic pedestal base
iv Southern 2nd B saucepan bases and body sherds
v Wealden copy of Gallo-Belgic platter
vi Sherd with Wealden imitation of Belgic combing
vii Sherds of Wealden form of Southern AB hemispherical cups (hang-over from Iron Age A)
viii Rim of Patchgrove ware
ix At least twenty examples of Wealden pottery with curving rims copying Belgic forms
x Native copy of Arretine cup
xi Rim of Samian Drag. 45. central Gaulish mid second century A.D.

Some of the Iron Age pottery is paralleled at Saxonbury (TQ 578 329), about $\frac{3}{4}$ mile to the south, and High Rocks (TQ 561 383), $2\frac{3}{4}$ miles to the north-west.

These finds suggest a small settlement occupied in the late pre-Roman Iron Age and into the Romano-British period up to the middle of the second century and for some of its life at least connected with local iron-working.

The pottery is in the Tunbridge Wells Museum, some of it on display and some in a box in the basement.

J. H. MONEY

A LA TENE I BROOCH FROM BOGNOR REGIS—This note is to put on record a La Tène I bronze brooch (fourth—third centuries B.C.), bought by the Sussex Archaeological Society in 1970 from Mr. E. Holden of Bognor Regis. It is now in Barbican House Museum, Lewes (Register No. 1970.2), where it is described as a 'first century A.D. bronze brooch. Spring broken. Found on sea bed by vendor offshore at Bognor'[1].

The illustrations (Plate 6 and Fig. 24) obviate the need for a detailed, verbal description. The brooch is a very well preserved example of an insular series described by Hodson[2]. The near-horizontal foot-profile, the short catch-plate and the low bow, by which Hodson characterised this class, are all recognisable in the Bognor specimen. Most noticeable, however, is the skeuomorphic spring. The coil is wound round a rod, as far as can be seen, of squarish section. Viewed from above (Fig. 24, centre), the third coil of the 'spring' from the top is, in fact, an extension of the pin, twisted around the rod so that the former pivots freely out to about 90 degrees with the long axis of the brooch, when viewed from the side. There can be little doubt that, in this brooch at least, the 'false spring' is an original feature and not, as has been suggested for similar brooches in the past,[3] a true spring that has broken and been repaired.

The decoration on the bow, consisting of grooves, alternately narrow and wide, running from the coil to the foot, is comparable to that on a number of other brooches of La Tène I profile from central and southern England, including the three described by Hodson in his original description of the general type;[4] other examples of brooches with this motif are illustrated by Fox, from Woodeaton (Oxon) and, nearer Bognor, from Lancing (Sussex).[5] This can be contrasted with the well known line and dot present on some similar brooches in Wessex, described by Fowler,[6] and mapped by Cunliffe;[7] it is commonly found on brooches with the same skeuomorphic spring described above. Significant though the two distributions clearly are, it is, perhaps, a little premature to imply that the one represents the output of a workshop near Hammersmith[8] or the other that of a 'single bronze-worker settled somewhere in the area'.[9] These objects merit close study, a prime consideration being the compilation of a comprehensive corpus, permitting a more sophisticated analysis of the distribution patterns that is currently possible.[10]

MIKE PITTS

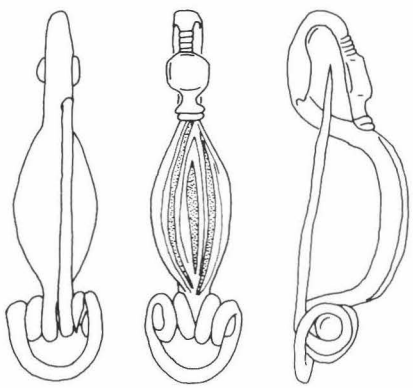


Fig. 24 La Tène I brooch from Bognor Regis

[1] An unsuccessful attempt was made by the writer to contact Mr. Holden, with an aim to obtain a more precise location for the find. The gentleman in question is apparently unrelated to the frequent contributor, of the same name, to these Collections.

[2] F. R. Hodson, "Three Iron Age brooches from Hammersmith", in G. de G. Sieveking ed., *Prehistoric and Roman Studies*, British Museum, 1971. 50-56.

[3] e.g., C. F. Fox, "A La Tène I brooch from Wales: with notes on the typology and distribution of these brooches in Britain", *Archaeologia Cambrensis*, 82 (1927), 68.

[4] Op. cit., note 2, Plate XIII, B–D.

[5] Op. cit., note 3, Figs. 18b and 8, respectively.

[6] M. J. Fowler, "The typology of the brooches of the Iron Age in Wessex", *Archaeological Journal*, 110 (1954), 88-105.

[7] B. W. Cunliffe, *Iron Age Communities in Britain*, Routledge and Kegan Paul (1974), Fig. 14.8.

[8] Op. cit., note 2, p.55.

[9] Op. cit., note 7, p.273.

[10] I would like to thank Professor F.R. Hodson for reading through and commenting on this note; the opinions expressed are my own.

SOME RECENT FINDS OF IRON AGE POTTERY ON THE WEST SUSSEX COASTAL PLAIN—Despite the large numbers of late Iron Age coins from the coast of this part of Sussex, which have led many to believe in the existence of a tribal capital at Selsey, reports of Iron Age finds from inland are rare. The only publication of certain pottery of this date is that by Miss White (now Mrs. J. G. D. Clark) and Professor Hawkes, who described a collection covering the whole of the Iron Age from Selsey.[1] All but a small handful of the objects described in that article have since been lost. This apparent lack of Iron Age material, compared with the great abundance of, for example, Roman finds, may well be at least partly related to the interests of those individuals noting discoveries. This note records some recent finds made in the area of Bognor Regis. Unless otherwise stated, they are now all in the Chichester District Museum, along with the remnants of the collection from Selsey. 'Roman Gazetteer numbers' refer to the writer's gazetteer of finds of this date from the Plain (this volume of the *Collections* pp. 63-83).

Tote Copse, Aldingbourne. SU 923 048.

In 1974, a shallow trench (about 1 m across and 1 m deep) was dug on an east-west alignment immediately north of the Tote Copse mound, for laying a pipe to a cattle trough. This cut through four ill-defined features. One of these produced a group of sherds of Roman fabric (Roman Gazetteer No. 81), and a second, a collection of Iron Age pottery, as follows:

1. About a third of a fine, ribbed bowl with mainly red-brown surfaces, but with a large reduced patch on the inside; the body interior is black and contains a filler of much finely-crushed flint. This filler stands proud of the outer face of the pot, suggesting that its original surface has dissolved (apart from a small patch below the rim, which is a light red-brown colour). There is a light foot-ring on the base. The pot appears to have been made on a fast wheel (Fig. 25a).

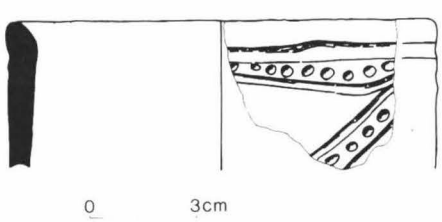


Fig. 25b. Iron Age pottery from the West Sussex Coastal Plain

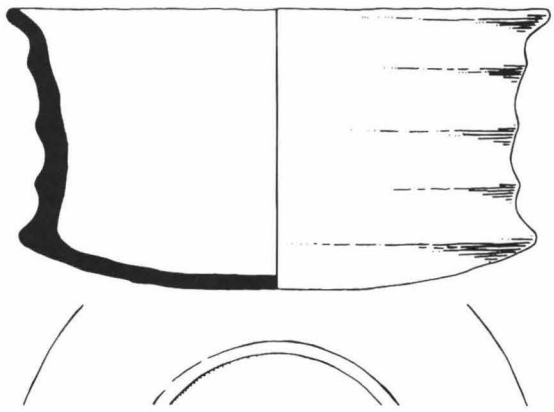


Fig. 25a. Iron Age pottery from the West Sussex Coastal Plain

2. A rim sherd of a saucepan pot, decorated with grooves of rounded section and impressed dots. The fabric, which is black throughout, is unusual for Iron Age pottery in the area, containing no flint filler. It is light in weight and of a corky texture, presumably due to a now vanished filler which was burnt out during firing or has dissolved in the soil (Fig. 25b).
3. A flat base angle of typical gritty local Iron Age fabric.
4. Seventeen small, gritty Iron Age sherds, including one with a groove that suggests it may be part of a saucepan pot, with horizontal grooving similar to those from Selsey[2] or the Trundle.[3]

Although small, this is an interesting group of pottery. No clear stratigraphy was observed and would, anyway, be somewhat suspect in such a small exposure: nonetheless, it is, perhaps, worth recording that the decorated rim was found higher in the section than the ribbed bowl. It is possible that the fabric of this rim originally contained a filler of crushed shell (which could have dissolved in the acid soil), which would, in sympathy with the style, make an East Sussex source arguable.[4] The ribbed bowl is, to the writer's knowledge, without direct parallel, although in shape, if not fabric, it generally recalls the Aylesford-Swarling material, and would thus traditionally be given a later date (first century B.C. or later), as is also implied by the evidence for it being wheel thrown (or turned). The Brewsters recorded nothing earlier than the twelfth century A.D. from their excavations on this site in 1961-62.[5]

Chalcroft Lane, Bersted. SU 917 003

The straightening of a road bend in 1974-5 was watched by Messrs. D. Barber, J. Deen and M. Reed. A wealth of archaeological features was disturbed and quantities of Roman (Gazetteer No. 105) and Medieval[6] material recovered. There were also, from various contexts, 25 sherds of dark, flint-gritted Iron Age pottery. Three rims, a base sherd with two horizontal grooves above the angle, as well as the fabric of all this material, ally it with the saucepan pottery of the area.

A29/A59 Bognor Regis SU 935 100

Major roadworks in 1975 were watched by Mr. M. Reed and the writer and evidence for Roman settlement was recorded (Roman Gazetteer No. 66). Two Roman features (in one of which were also found some scraps of pre-Flavian Samian) produced a total of eight small sherds of the typical local, gritty, Iron Age fabric. Similar finds of scattered, small, Iron Age sherds in Roman ditches have been made at Hazel Road, North Bersted,[7] where excavations have demonstrated the presence of a pre-Roman settlement.

MIKE PITTS

[1] G. M. White and C. Hawkes, "Prehistoric remains from Selsey Bill", *Antiquaries Journal*, 14 (1934), 40-52.
[2] Op. cit., Figs. 3.3 and 3.4.
[3] E. C. Curwen, "Excavations in the Trundle, Goodwood, 1928", *S.A.C.* 70 (1929), Plate XIII, no. 155.
[4] Miss S. Hamilton, Pers. comm.
[5] T.C.M. and A. Brewster, "Tote Copse Castle, Aldingbourne, Sussex", *S.A.C.* 107 (1969), 141-179.
[6] In the possession of Mr. C. J. Ainsworth.
[7] O. Bedwin and M. W. Pitts, "The excavation of an Iron Age settlement at North Bersted, Bognor Regis, West Sussex 1975-76", *S.A.C.* 116 (1978), 293-346.

AN EDWARD III QUARTER-NOBLE FROM PETT, EAST SUSSEX (TQ 8274 1400)—During the late 1960s, Miss B. A. Bilson discovered, in the rear garden of her home at Horringer, Pett Road, Pett, a gold Quarter-noble of Edward III. The coin is of the Treaty Series (1363–1369) and was minted at London (Ref. North 1243). It shows only slight traces of wear and has had very little circulation. Weight: 29.6 grains.

D. R. RUDLING

A CHALK-CUT SHAFT AT BELLE TOUT, EASTDEAN (TV 557 956)—This note is intended to complement 'A Chalk-cut shaft at Belle Tout', by Richard Bradley.[1]

In 1971, when the shaft was examined, the wave-cut platform at the foot of the cliff was obscured by a scree of fallen chalk, into which the shaft continued.

On July 6th, 1975, Arthur Sayers took the opportunity, afforded by a long tide, to clear the opening of the shaft which had, as anticipated, been exposed in section on the wave-cut platform formed since the original cliff fall, in 1971.

The beach was cleared from the shaft entrance and the shaft was excavated for a short distance, approximately 0.8 m, this depth being dictated by the rapid flow of water into the shaft from the cliff.

The fill was disappointing as it consisted of beach pebbles and foul-smelling seaweed, both of which had, presumably, replaced the original filling after it had been scoured out by the waves.

The shaft at this point was 1 m in diameter and details of four footholds were obtained, varying from 23 x 15 x 15 cm deep to 23 x 14 x 18 cm deep, and were slightly smaller than those previously recorded, as was the vertical interval, which was 40 cm, comparing with the previously recorded 55 cm.

Bradley pointed out that the shaft was approximately 1.7 m in diameter and that, 9 m above the shore, the shaft narrowed. This seems to be the case as the exposed section was 1 m in diameter. If the shaft is for the extraction of water, it probably ends at the gault clay, which is visible along much of the cliff but is not to be seen under the shaft. The gault is, at most, only a few metres deeper and it is reasonable that the shaft should be narrowing, if the supposition is correct. At present, the total depth of the shaft, from the fill, is 34.22 m.

The remaining shaft is worth observing over the next decade, to see if there are signs of it stopping at the gault but, once the remains of the shaft in the cliff have fallen, it will be difficult to locate.

LAWRENCE STEVENS

[1] R. J. Bradley, 'A Chalk-cut shaft at Belle Tout', *S.A.C.*, 112 (1974), 156.

NEOLITHIC AXE FROM SOUTH HEIGHTON (TQ 483 035)—A polished flint axe of typical Neolithic type found by Brenda Westley whilst field walking at South Heighton. This was an isolated find. The axe, which measures 9.75 cm by 5.5 cm with a maximum thickness of 2.5 cm, is covered by a heavy white patina and the cutting edge shows evidence of some considerable use. Accurate dating is, of course, not possible since this type of axe is now considered to have been in use for over two millenia. Axe at Barbican House Museum.

CLIVE SKEGGS

ROMAN BRONZE FITTING FROM SOUTH HEIGHTON (TQ 447 035)—Bronze fitting found whilst field walking at South Heighton, consisting of two thin bronze plates held together by four rivets, possibly covering the join in a leather strap (Fig. 26), similar to that found at All Saints, Chichester *(Chichester excavations* 2, Phillimore 1974, 82-3) which was thought to be Roman, possibly military.

BRENDA WESTLEY

Acknowledgements
I am greatly indebted to Messrs. D. J. Freke, E. W. Holden, P. J. Drury and D. Atkinson for the above reports, and to L. Funnell, D. M. Meades and M. Tebbutt for assistance in field walking.
C. F. TEBBUTT, F.S.A.

[1] Scheduled Ancient Monument No. 412 (Sussex).
[2] C. F. Tebbutt, 'Two newly-discovered medieval sites', *S.A.C.* 110 (1972), 31-34.
[3] C. F. Tebbutt, 'Old Buxted Place', *S.A.C.* 113 (1975), 51-53.
[4] *Ibid*, 52.
[5] E. W. Holden, 'Slate roofing in medieval Sussex', *S.A.C.* 103 (1965), 67-78. J. W. Murray, 'The origin of some medieval roofing slates from Sussex', *ibid.*, 79-82.
[6] C. F. Tebbutt, 'Old Buxted Place', *S.A.C.* 113 (1975), 51-3.
[7] Murray, *op. cit.*, 79.
[8] Holden, *op. cit.*, 75, no. 4.
[9] From a moated site during drain trenching by machine. Information by courtesy of Mrs. Z. Vahey in 1975.
[10] Holden, *op. cit.*, 76, no. 20.
[11] *Ibid.*, 76, no. 15.
[12] For which see Drury, P. J. and Pratt, G. D., 'A late 13th and early 14th century tile factory at Danbury, Essex', *Medieval Archaeol.* 19 (1975), 92-164, esp. 139-40.
[13] For this general type of pattern see, for example, Drury and Pratt 1975 *art. cit.*, figs. 50.B11; 63.120.
[14] I am grateful to Elizabeth Eames and Mark Horton for their comments on the fragment.
[15] Lower, M.A., 'A medieval pottery at Hastings', *S.A.C.* 11 (1859), 229-30; Vidler, L.A., 'Floor tiles and kilns near the site of St. Bartholomew's Hospital, Rye', *S.A.C.* 73 (1932), 83-101; Ponsonby, Lord and Ponsonby, M. 'Monastic paving tiles', *S.A.C.* 75 (1934), 19-64.

SUTTON RECTORY—In 1924, I published, in *S.A.C.*, my conclusions about this building then, now no longer, the Rectory, which included a drawing showing medieval timbers surviving; and adding an outline of, what I supposed to be, the original design, that of a Great Hall with nave and aisles. Unfortunately, I did not show this to Mr. W. H. Godfrey before publication; he, who had forgotten more about the subject than I had ever known, disagreed with my conjecture, in favour of a hammer-beam truss. There seems no reason to assume that the designer of the roof of Westminster Hall had no predecessor and I take an opportunity of correcting a long-standing mistake.
W. D. PECKHAM

THE DATES OF JOHN BURTON'S JOURNEYS THROUGH SURREY AND SUSSEX—The following are corrections to the 'Shorter notice' which appeared in vol. 114 (1976), pp. 337-8: p.337, first line, last word to read *'Hodiporountos'*; in line 6, read '(pp. 53-66, in Latin)'; in para. 5, line 5, read 'July 1728'; in footnote 3, read 'Mr. T. H. Aston'; p. 338, the paragraph should read: 'The reason for Burton's journeys was to visit his mother and stepfather, John Bear, who was rector of Shermanbury and who, at least between 1736 and 1744, run a small boarding school for the sons of local gentry.[1] In the Latin letter, "A journey through Sussex", Burton said that his stepfather had lived in that poor spot "per lustra plusquam septem" which literally means for more than 35 years—but presumably less than 40. Mr. Bear was instituted at Shermanbury in 1711, so the second letter may have been written during a summer between 1746 and 1751, any of those years being consistent with the statement that Bear was a septuagenarian, as he had attained his 70th birthday in 1743-44.'
JOHN H. FARRANT

ON THE ALLEGED FRANKISH ORIGIN OF THE HASTINGS TRIBE—C. T. Chevallier[1] adduces placename evidence for a Frankish origin of the Hastings tribe. His theory is set up to account for the well-known and well-documented separateness, both political and linguistic/onomastic, of the Hastings area. I accept, therefore, that there is something to explain, and that Chevallier's theory is well-motivated. In a general way it may be right. But the detail of his placename evidence needs to be challenged.

The *bol/bul* evidence
Chevallier cites the Sussex placenames Bullington, Bowlings, Bulverhythe as evidence for Frankish influence. Specifically, he links the names with *Boulogne* (Latin *Bononia,* earlier *Gessoriacum*), believing *Boulogne* to be a Germanic *-ing/-ung* name. This won't work. If it was an *-ing* name, it would scarcely appear as *Bunnun* in the Anglo-Saxon Chronicle, but as **Bunning* or the like. *-n* and *-ng* are rigorously distinguished in Old English. *Boulogne* is also scarcely from **Bolung -ness* with elision of [ss]; there is no authority for it and even less linguistic plausibility. In the medieval French spelling *Boulongne* the *ngn* is the normal spelling form for the sound [ɲ] that is approximately English [n + y], which never reflects Germanic [ŋg] (as in *finger*). As such it reflects a regular development from Gallic Latin *Bolonia,* earlier *Bononia.* (Interchanges of [l] and [n] before another [n] in the same word are far from rare.) There is thus not the slightest chance that *Boulogne* is an *-ing/-ung* name.

As for the Sussex evidence, Bulverhythe is straightforwardly from OE *burhwara-* (genitive plural of the word 'townsman') with frequent Anglo-Norman [l] for [r]. This frequent interchange is plausible because Old English [l] and [r] were quite different in sound from Old French [l] and [r], and to a Norman ear English [l], [r] might well sound similar since they were both pronounced with the back part of the tongue raised in a secondary half-closure. (Technically, they were both *flatted* sounds, which Old French [r] at least certainly wasn't. Cf. Mawer, Stenton and Gover: The placenames of Sussex e.g. pp. 534f.).

Bolintun, that is modern Bullington, is a regular derivative of the known Old English personal name Bula, and is thus an entirely regular Sussex placename derived from a clan name: "Bula's people's place". Granted the frequency of this placename type, especially in Sussex, we should think twice before putting our money on Chevallier's long shot; he derives it from whatever underlies the name Boulogne.

Chevallier mentions that Camden records that Britons[2] called Boulogne *Bowling Long.* This is not impossible, but probably just represents an ordinary uneducated attempt to render a foreign name into English, cf. *Wipers* for *Ypres,*

Tri(n)chinopoly for *Tiruchirapalli* and so on. There may even be an element of pun about it, cf. the expression *Bowling along*. Anyway Camden is also responsible for the myth that the name of the site of the 1066 battle, Senlac, is from *"sangue-lac"* 'bloody lake', which does his reputation as a linguist and etymologist no good at all (cf. Mawer *et al.* p. 499).

Senlac

As for Senlac itself, Chevallier wishes to link it with Senlecques (Flanders) and with the multifarious root *"laag* or *lach"*, *"lagh* or *lage"*, related to *"lager"* in the sense of 'compound'. This latter form has in England, however, the corresponding form *lair*, related to *lie, lay, layer* and the like. In no way could this have given rise directly to forms with a [k]-sound in English. Such *c* spellings as are found in Continental Frankish manuscripts are reckoned to be due to the influence of Anglo-Saxon scribes who wrote *c* for the Frankish [g] sound in those positions in the word where Old English (Anglo-Saxon) had no [g] sound at all. So to rescue the hypothesis that Senlac is Frankish, we have to assume a Frankish name with a [g] sound, anglicised as [k]. Again, however, there is evidence for Old English *lacu* 'stream, lake' in various places in this part of Sussex (Rushlake, Shiplake), so we should beware of the outsider; not even Chevallier cites any other name in East Sussex alleged to be a *"laag"* name. In any case, the thirteenth century forms with final *-e* strongly suggest an origin in a two-syllable form like *lacu* rather than Chevallier's three one-syllable suggestions. Worst of all for his theory, a form in Frankish [g] would have yielded forms spelt with *g* on French-speaking territory, which they don't, cf. Chevallier's *Eperlecques* and so on.

It is possible that Frankish [g] spellings actually represented a not fully-closed stoppage at the back of the mouth (a velar fricative), rather like that in Spanish *hago*. If this was so, then transcription in English as *k* or *c* is vanishingly unlikely.

If we explore Chevallier's alternative origin of *-lach*, where *ch* represents the sound in *Bach*, then this would not have yielded forms with Old English [k] at the end of a word, but rather the spellings *h* or later *gh*. That it was not *ch* on the continent either is shown by spellings like *Sperlake* (1140) for Eperlecques; when frenchified, Dutch/Flemish names in *ch* simply tend to lose it, cf. *Malines* for *Mechelen*. The assumption of Mawer *et. al.* that Senlac is from *lacu* seems more coherent, therefore.

Whilst some other of Chevallier's evidence is interesting, e.g. the continental distribution of personal names in *Hast-* and *Watt-*, we should take his case as not conclusively shown because a fair amount of the placename evidence for Frankish origin can be shown to be unsubstantiated, as above.

I venture to end by pointing out that Boulogne has always been said to have been colonised by Saxons, not Franks, a view which Chevallier repeats (p. 58), so the Hastings area must at least have been a dual settlement. The evidence I have quoted leads me not to believe in an early Saxon colonisation from Boulogne and to have an open mind on the Frankish party from Flanders.

RICHARD COATES

[1] C. T. Chevallier, 'The Frankish origin of the Hastings tribe', *S.A.C.* 104 (1966), 56-62.

[2] I presume this means loosely Englishmen, not ancient Britons, else the whole suggestion of Camden's is idiotic.

BELLE TOUT—This note investigates the name of the old lighthouse, once in Eastdean parish, but now within the borough of Eastbourne. It is a nineteenth-century building (Bradley 1971, 8). It will be seen from the forms cited below that the name is older and presumably refers to some previous building on the site. There exists a mistaken impression that Belle Tout is the site and not the building; Bradley (1970, 312) describes it as a "gorse-capped plateau of virgin downland". The name of the building is not interpreted in Mawer, Stenton and Gover's work on Sussex placenames (1929). Here are the recorded forms of the name.

Beltout (Budgen 1724; Toms 1912).

Belle Tout (general, for example Ordnance Survey 1974).

Despite its French appearance in the most modern form, it is presumably simply "Bell Toot", i.e. lookout point with a bell, referring to its lighthouse/coastal warning function. The difficulty is that Middle English *tote* "lookout" usually appears in Sussex dialect as *Tote*, cf. *Toat Farm*, Pulborough, *Toat Hill*, Slinfold, *Tote Hill*, Stedham, and *Tote Copse*, Aldingbourne. *Tott Farm*, Hurstpierpoint, is probably also a *tote*-name. It is standard *toot* (cf. *toothill* in any dictionary) rather than dialect *toat* possibly because it has its origin in an official, not specifically local function. The modern name is a fancy spelling based on such Romance names as *Belmont*, Hastings and *Belvedere*, Horsted Keynes, which characteristically refer to places with good views. Compare in this connection the name of Beachy Head ◁**Belchief (Beuchef*, 1274 Quo Warranto) "beautiful, prominent headland" and *Belsar's Hill*, Willingham (Cambs.), ◁*Belassis* "beautiful, prominent residence". The latter is an earthwork constituting the highest point for some distance.

Bell Toot has been mistaken for a *bel*-name, and the *toot* has been given a fake French spelling accordingly. There is a suggestive parallel at *Hambury Tout* (West Lulworth, Dorset).

RICHARD COATES

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