

ARCHAEOLOGICAL NOTES

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. 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.

Finds of flint artefacts at Hassocks and East Chilmington

A fragment of a palaeolithic handaxe has been found in the garden of 2 London Road, Hassocks, the home of Mr. A. J. and Mrs. S. P. A. Gumbrell. It was discovered in 1977, in topsoil at TQ 30001580 during clearing work in the back garden. The bedrock here is attributed to the Folkestone Beds, a division of the Lower Greensand, and there is no record of any intervening Pleistocene deposit. The findspot is not far from the place where another handaxe was discovered, also apparently in a superficial deposit, in the 1950s, by Mr. C. Charman, off Parklands Road at TQ 307155, as briefly reported by the present writer.¹ A third handaxe from Hassocks is known² and is now in Brighton Museum.

The new find consists of the lower half, or perhaps two thirds (80×73mm), of a flint handaxe whose original shape must have been generally cordiform or sub-rectangular. It is difficult to be more precise, because the edges show much recent damage in the form of mechanical scars, which incidentally reveal that the handaxe is made of dark grey-black flint of excellent quality. It is only a guess that these scars have been caused in the recent past by garden implements, but it might be worth searching for further fragments of the handaxe, though any that survive would probably be small. Meanwhile, even the precise orientation of the implement must remain open to doubt, though the one patch of cortex present is very likely to have formed part of the butt. The handaxe is bifacially worked, being made probably from a large flake rather than a nodule. Most of the flaking has clearly been carried out with a soft hammer, and there is some step-flaking at the edges. The artefact is patinated: one face is bluish-white, with 'basket-work' patina, slight traces of weathering and some spots of iron stain. The other is creamy white, with an intermittent wash of iron stain and some more concentrated spots; the most projecting ridge on this face shows marked abrasion, while the rest are only slightly worn.

The handaxe may have been a Late Acheulian ovate or cordiform type, but the straightness rather than convexity of the only wholly undamaged section of the edge that survives leads the writer strongly to suspect what he cannot actually demonstrate, namely that it was a Mousterian handaxe of *bout coupé* type.³ If this were so, the implement would probably date from some relatively mild period during the first half of the last (Devensian) glacial, say between 75,000 and 40,000 years ago. If it were Acheulian, its age would be substantially greater. Anyone who has followed the occasional notes contributed to S.A.C. by the present writer over the past dozen years might be forgiven for thinking that he has a fixation about *bout coupé* handaxes, and perhaps it would be true, though he would hope that it did not represent exclusive truth. In fact, it is fascinating that most of the recent stray finds of Sussex handaxes sent to him for report have been of this same character: close to the classic *bout coupé* form

without quite attaining it. This was true, for example of the previous find from Hassocks and the specimens from Burlough 'Castle' and Alfriston Tye reported at the same time.⁴ It seems perfectly possible that there was a substantial Mousterian or Acheulian Tradition presence in Sussex to which all these implements belong, though there is also a good quantity of Acheulian material. Perhaps Fate will for a change direct future finders to some undamaged classic examples of the *bout coupé* type, like the one from Woods Hill, West Chilmington.⁵

In the present case, two further purely circumstantial points are just worth making briefly. First, the majority of the classic British *bout coupé* handaxes have come to light as single finds in superficial contexts, just like these Sussex implements. Secondly, many classic examples in southern Britain and also in northern France show basket-work patina, creamy white patina, spots, lines or thin washes of iron stain and small areas of weathering or exfoliation, all of which can be seen on the present example. These observations are suggestive, but prove nothing: we can merely await new finds of better quality, feeling somewhat provoked meanwhile.

The opportunity may be taken to record here another Sussex flint artefact, this one found in a superficial horizon at Warningore Farm, East Chilmington (TQ 374170) by Mr Richard L. Wells in June 1976. The object is heavy, bifacially worked and broken at one end: if we ignore the break, its shape is roughly oval. The surviving dimensions are 124×92×46mm, but one may estimate that a quarter to a third of the artefact is missing. The break, which is ancient, involves both mechanical and thermal fracture, principally the latter.

The surface of the artefact has a thick white patina with spots and streaks of iron. The flaking is crude, and was apparently carried out with a hard hammer-stone. The edges show much more rough battering than carefully controlled flaking, and the undamaged end is also thick and crudely shaped. One small concave patch of cortex remains on one face: it would have been difficult for the maker to remove this without reducing the object's size rather drastically.

Three possible interpretations of this crude biface occur to the writer: it might be argued as a roughly made Acheulian (Lower Palaeolithic) handaxe of archaic appearance and potentially Early Acheulian age; it might be regarded as an abandoned roughout for a Middle Acheulian ovate handaxe which, if it had reached the stage of soft-hammer finishing, would doubtless have created a better impression of its maker's technological competence; or, it might be seen as a roughout for a Neolithic axe, abandoned before it reached the stage of final shaping and polishing. The writer is inclined to favour the latter possibility. The object has too many flake scars and too much potential regularity of shape greatly to resemble Early Acheulian handaxes, of which Sussex has not yet produced any certain examples; it was never going to be flat enough to make a good ovate of Middle Acheulian type, and the knapper appears to have had in mind blunt edges rather than sharp ones and a thick rather than a flat end. On the other hand, it is of very much the proportions and

nature of the broken roughouts that abound at Neolithic axe factory sites, and Neolithic axes, polished or unpolished, often have blunt sides.

Classifiers of stone artefacts need to remind themselves that specimens are likely to be imperfect, damaged or atypical more often than not: the tactics can only be to review the range of possibilities and make a reasoned choice from amongst them. The two Sussex finds considered here are cases in point, and there is no useful stratigraphic information to assist the discussion of them, nor is there helpful associated material that might offer some guidance to their true age.

Both artefacts remain in the possession of their finders, to whom the writer is grateful for the loan of the specimens for study.

Derek Roe

References

¹In E. W. Holden and D. A. Roe, 'The Ade Collection of Flints and a Palaeolithic Handaxe from Hassocks', *S.A.C.*, vol. 112 (1974), 1-8.

²*S.N.Q.*, vol. 15, no. 4, 1959, 130.

³For information about British *bout coupé* handaxes, see for example M. L. Shackley, 'The *bout coupé* handaxe as a typological marker for the British Mousterian industries' in *Stone tools as cultural markers: change, evolution and complexity*, (332-9), ed. R. V. S. Wright (1977), Canberra; P. A. Mellars, 'The Palaeolithic and Mesolithic' in *British Prehistory, a new outline*, (41-99, especially 62-5), ed. A. C. Renfrew (1974), London. A fuller account will appear in D. A. Roe, *The Lower and Middle Palaeolithic Periods in Britain* (chapter 6), due for publication by Routledge & Kegan Paul in 1981.

⁴Holden and Roe, op. cit. (1974), 3-5, 7-8.

⁵Mentioned and illustrated by L. V. Grinsell in his paper 'The Lower and Middle Palaeolithic periods in Sussex', *S.A.C.*, vol. 70 (1929), 176, 181-2, though it was first published by R. Garraway Rice in an untitled note in *Proc. Soc. Ant.*, N.S. vol. 32 (1920), 80-2. This implement is now in Worthing Museum.

A flint collection from Stud Farm, Newhaven, East Sussex

Fieldwalking between 1974 and 1976 by Mr. and Mrs. R. Macmillan in the vicinity of Stud Farm (TQ 462 012) has produced a large quantity of humanly modified flint which consisted of the following:

Cores 17
These were analysed in a modified version of the system adopted in the Hurst Fen report (Clark *et al.* 1960);

Class A. one platform 7
Class B. two platforms 4
Class C. three or more platforms 5

However, five small fine blade cores (two class A, three class B), were sufficiently distinct to be regarded as most probably of Mesolithic/earliest Neolithic date.

Core fragments 3

Core rejuvenation flakes 2

Unmodified flakes including waste flakes 570

Many of these were heavily battered and superficially similar to implements (see below). Approximately 80% are with little or no cortex. Some pieces exhibit

utilisation damage but because of the generally poor condition of most flakes, no separation was attempted. A few flakes from hammerstones also occur.

Scrapers

Convex 147
Hollow 52

On thermal flakes

Convex 17
Hollow 8

No attempt was made to subdivide the scrapers into the standard categories of end, side, etc. It is not felt that these rigid subdivisions are particularly helpful and in fact the scrapers from Stud Farm will not fit easily into these categories.

Notched flakes 225

Some attempt was made to differentiate between notches caused by a single blow which could be confused with natural damage such as that caused by a plough, and those having more elaborate preparation (M. Green, pers. comm.). The larger examples cannot really be distinguished from small hollow scrapers.

Irregularly retouched flakes 148

Awls/borers 75

Spurred implements 23

Fabricators 3

Two are 'D' sectioned and one is triangular sectioned.

Knife 1

Flint axes and axe fragments (unpolished) 7

Possible Mesolithic blade segments 3

The flint occurs in several stages of patination from fresh to totally patinated. Most pieces which still retain some cortex are of chalk origin, although occasional pieces are from gravel and/or Clay-with-flints. No trends were observed between certain tool categories and either their state of patination or the flint source.

The unmodified flakes and convex scrapers were analysed so as to be comparable with published assemblages from other sites of known date. Although a consistent series of chronologically significant traits has not yet emerged, recent work has confirmed some chronological trends (Farley 1979; Pitts 1978). The expected possible sources of error from analysing fieldwalked material were considered. However, in this case no objective methods of collection were undertaken (Woodward 1978; Ford forthcoming), and consequently the material may represent one or more sites, or a general spread over several fields. More productive fields were probably visited more often and it is also suspected that the unmodified flakes were in fact collected as implements and that in-field selection occurred (i.e. 'waste' flakes not collected). This is to some extent confirmed by a ratio of flakes: implements of 1:1.1, which is extremely low, even for a fieldwalked collection. Hence with all these possible sources of ambiguity, little reliance can be placed on a metrical analysis and the results are not reproduced here but retained as an archive. However, other characteristics of the collection can be used as a chronological guide.

The numbers of blades and blade-like flakes is low, with only 3% having a length: breadth ratio of more than 5:2. The remaining unmodified flakes tend to be more squat than the Neolithic assemblage from Bishopstone (Bell 1977), but similar to numerous later Neolithic and Bronze Age collections examined by one of the authors (SF). The convex scraper collection does not contain many examples of later Neolithic types, such as those found at Belle Tout (Bradley 1970) and Rackham (Holden and Bradley 1975), but, although several examples are similar to earlier Neolithic types,

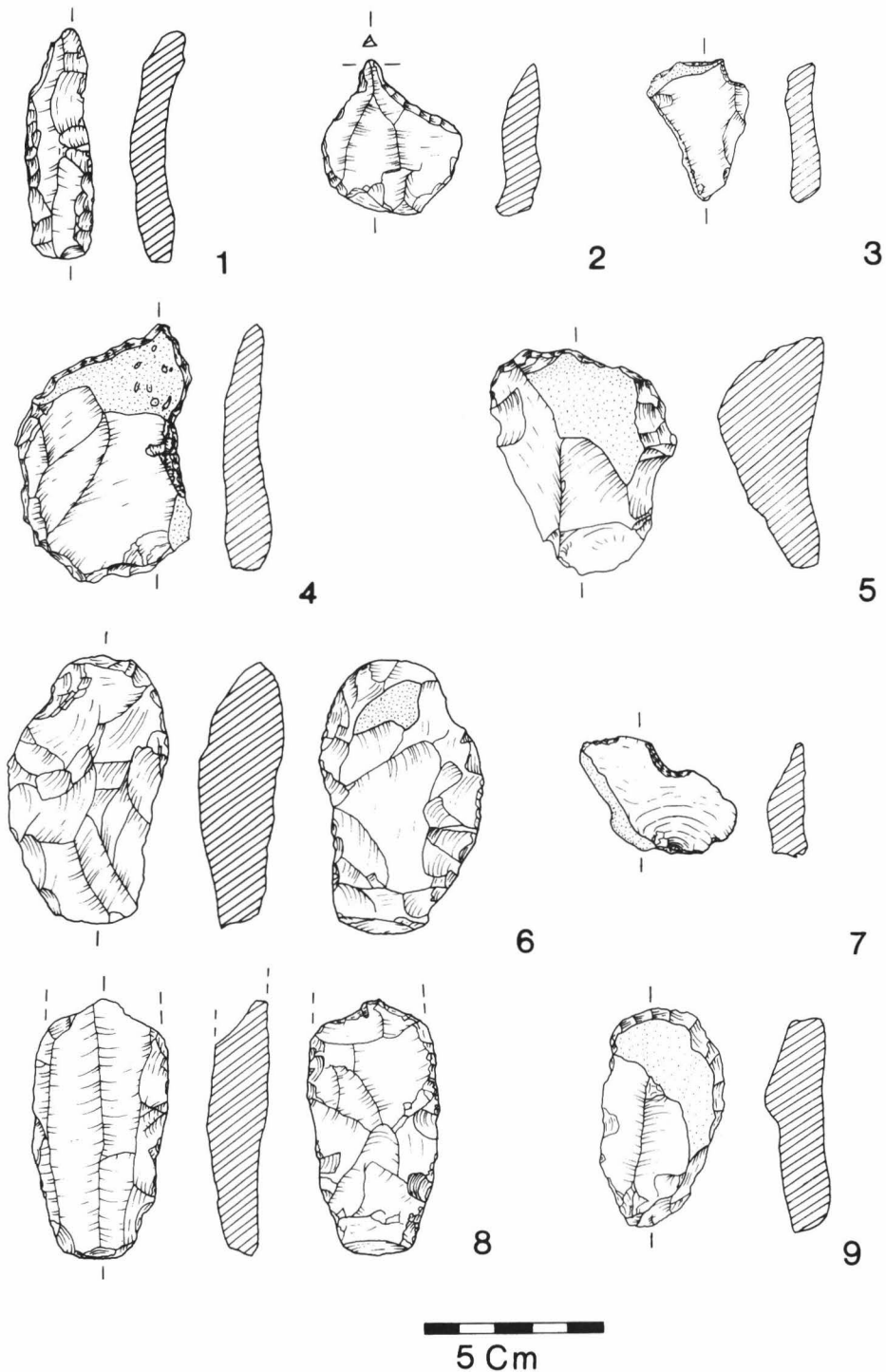


Fig. 1. Stud Farm, Newhaven, 1 fabricator, 2 awl, 3 spurred implement, 4 hollow scraper, 5 and 9 convex scrapers, 6 and 8 flint axes, 7 notched flake.

others could easily be of Bronze Age date. The seven axes and axe fragments are unlikely to be of Bronze Age date and are probably earlier Neolithic.

When the negative evidence is considered, if, as seems likely, there is a limited amount of earlier Neolithic material present, it is surprising that serrated flakes, leaf arrowheads, laurel leaves, etc. are absent. Similarly there is an absence of plano-convex knives, transverse and barbed and tanged arrowheads etc., which could have been expected if later Neolithic material was present in quantity.

The general lack of a wide range of implement types may also be significant, as it can be shown that Bronze Age sites tend to have few implements other than scrapers, and a restricted range of these in comparison to earlier sites.

Therefore it is felt that this collection contains material from several periods. First, the fine blade cores and few blade segments are probably Mesolithic, and Stud Farm is in fact a previously recorded Mesolithic findspot (Bell 1977). Secondly, a limited amount of earlier Neolithic material is present, although this is somewhat different in composition than the assemblage from Bishopstone (Bell 1977). Finally, the bulk of the material seems to be of Bronze Age date.

To conclude, it seems fairly certain that at least one Bronze Age site exists at Stud Farm, which probably locates some of the settlement associated with the (assumed) Bronze Age round barrows on Rookery Hill. The significance of the earlier material is more problematic and it cannot be said with certainty that this represents a site. Only new fieldwork can resolve this question.

Acknowledgements

We would like to thank Richard Bradley and Robin Taylor for their help in this paper.

The finds and results of the metrical analysis have been deposited in the University of Reading, Department of Archaeology Museum.

D. T. Boodle and S. Ford

References

- Bell, M. G. 1977 'Excavations at Bishopstone', *Sussex Archaeol. Collect.* 115.
- Bradley, R. J. 1970 'The excavation of a Beaker settlement at Belle Tout, East Sussex, England', *Proc. Prehist. Soc.* 36, 312-79.
- Clark, J. G. D., Higgs, E. S. and Longworth, I. H. 1960 'Excavations at the Neolithic site at Hurst Fen, Mildenhall, Suffolk', *Proc. Prehist. Soc.* 26, 202-45.
- Farley, M. 1979 'Flint flake dimensions in the British Neolithic', *Proc. Prehist. Soc.* 45, 322-3.
- Ford, S. 'Fieldwalking patterns at Holme Pierrepont, Nottingham', (forthcoming).
- Holden, E. W. and Bradley, R. J. 1975 'A late Neolithic site at Rackham', *Sussex Archaeol. Collect.* 113, 85-103.
- Pitts, M. W. 1978 'On the shape of waste flakes as an index of technological change in lithic industries', *J. Archaeol. Sci.* 5, 17-37.
- Woodward, P. J. 1978 'A problem oriented approach to the recovery of knapped flint debris', in *Sampling in Contemporary British Archaeology* (ed. J. F. Cherry, C. Gamble and S. Shennan), B.A.R. 50. Oxford.

Excavations at the Trundle, 1980

INTRODUCTION

During routine checking of planning applications, the Archaeological Officer for West Sussex, Mr. F. G. Aldsworth, was consulted on a proposal to erect a replacement microwave aerial inside the Trundle, within one of the two fenced compounds already existing there (Fig. 2). As the construction of the aerial required a concrete base set into the chalk subsoil adjacent to a known Neolithic ditch, rescue excavation in advance of building work was thought advisable. Permission to excavate was readily given by the Southern Electricity Board, and excavation was carried out for one week in January, 1980, under the direction of the authors. (The Trundle is a scheduled site, and this work was undertaken with the agreement of the Ancient Monuments Inspectorate).

EXCAVATION

The area excavated was just inside the west entrance into the hill fort (Fig. 2). No surface indication of archaeological features was visible, and Curwen (1929a) seems to have located the Neolithic ditch here by means of ramming the ground, and listening for the different note given by ditch silts, as opposed to solid chalk. Turf and topsoil were removed over an area of c. 40m² (Fig. 3), down to the chalk subsoil. This revealed a short stretch of ditch, two post holes, and a variety of modern disturbances, i.e. two substantial concrete blocks from an adjacent mast, now dismantled, and a small, rectangular rubbish pit. One of the post holes, the square one, was also probably very recent, judging by the looseness of the fill. The round post hole, c. 30cm deep with V-shaped profile, had a tightly-packed fill, but was sterile.

Almost half of the exposed stretch of ditch had originally been excavated by Curwen (1929a), and therefore contained his backfill (stippled area in Fig. 3, corresponding to his trench SD.C1). This backfill was not re-excavated, leaving only a 3m length of ditch to be investigated. The portion of the ditch excavated in 1980 was rather irregularly cut, with a maximum depth of 1m; the ditch floor was wide and flat, and the sides were sloping. The only undisturbed section obtainable in 1980 was an oblique one (Fig. 3), but it does match Curwen's fairly well (Curwen 1929a, 38), except that he does not distinguish or differentiate any deposit corresponding to our layer 4. He does not, incidentally, record the circular post hole. It would appear that this particular stretch of ditch is relatively short, up to 7m maximum, though it was impossible to verify this absolutely because of the presence of a concrete slab (Fig. 3).

There was no sign of a surviving bank corresponding to the ditch, but the irregular, rubbly chalk layer at the ditch edge (1A in Fig. 3) may correspond to the last traces of a bank.

Finds from the ditch consisted of late Iron Age pottery (from layer 2), Neolithic pottery (from layers 2-4), 68 pieces of struck flint (no implements), three pieces of carved chalk, and a little animal bone. Soil samples were taken for analysis of land snails.

DISCUSSION

The results of the limited 1980 excavation confirm Curwen's finding of a small Neolithic ditch (part of his

THE TRUNDLE

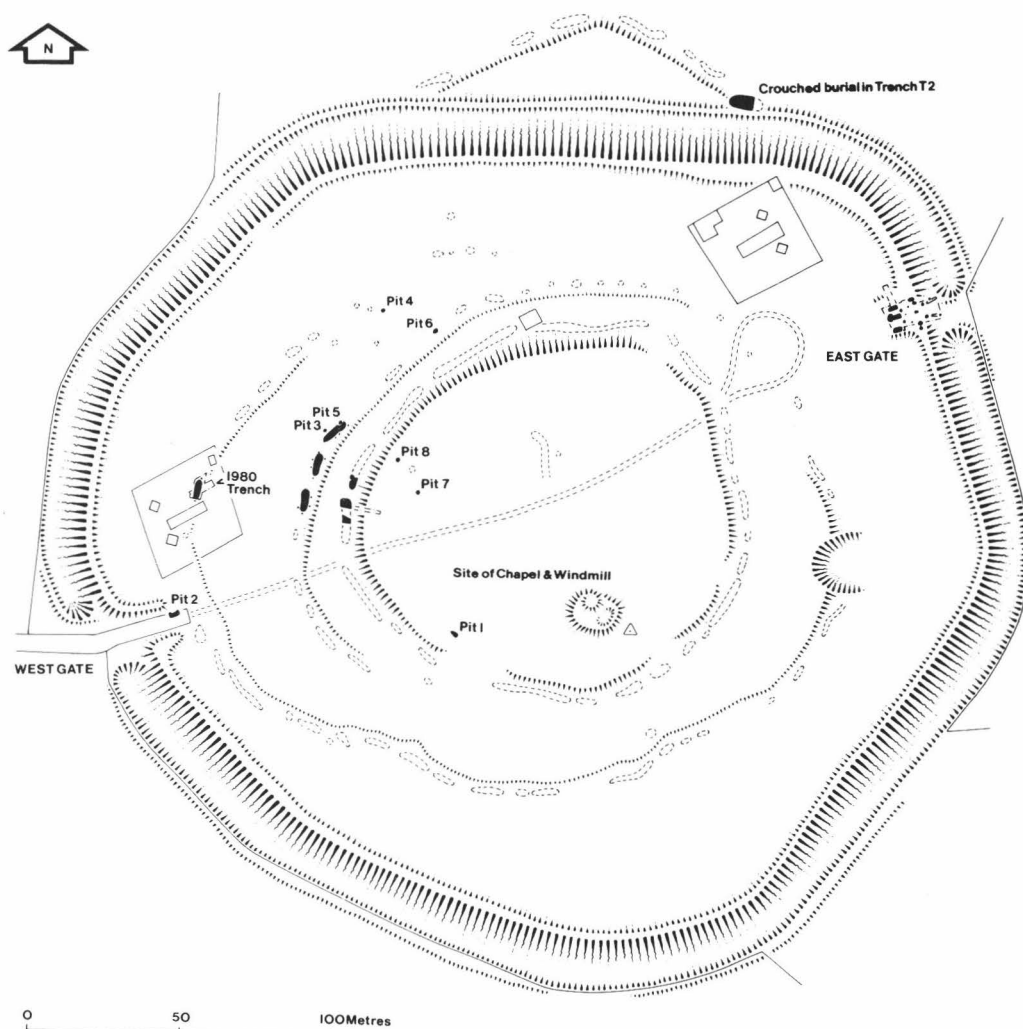


Fig. 2 Trundle 1980. Plan of the Trundle showing 1980 excavation and Curwen's finds from 1928 and 1930 (Survey by F. G. Aldsworth).

'spiral ditch system') in 1928. In addition, through the molluscan analysis and carbon-14 date, the excavation extends our understanding of the Neolithic occupation at the Trundle. The analysis of land snails (below) suggests that the spiral ditch, at least, was constructed in an area which had been recently but extensively cleared. The area later became overgrown (corresponding to the abandonment of the causewayed enclosure), but was then cleared again in the Iron Age (corresponding to the construction and occupation of the hill fort).

A carbon-14 date was obtained from the animal bones found associated with Neolithic pottery in layer 4 (Fig. 3). This was 2910 ± 100 b.c. (I-11,612); it is

consistent with the pottery and compares well with the dates of 2730 ± 80 and $2620 \pm$ b.c. from the enclosure on Bury Hill, where similar pottery was also found (Bedwin 1981).

SPECIALIST REPORTS

The pottery (by P. L. Drewett)

Thirty eight sherds of pottery were found during the excavation. Six sherds are pre-Roman Iron Age and the remaining 32 are Neolithic. Layer 1 produced two sherds of Iron Age pottery. Both are flint-gritted and the rim sherd has the curvilinear decoration

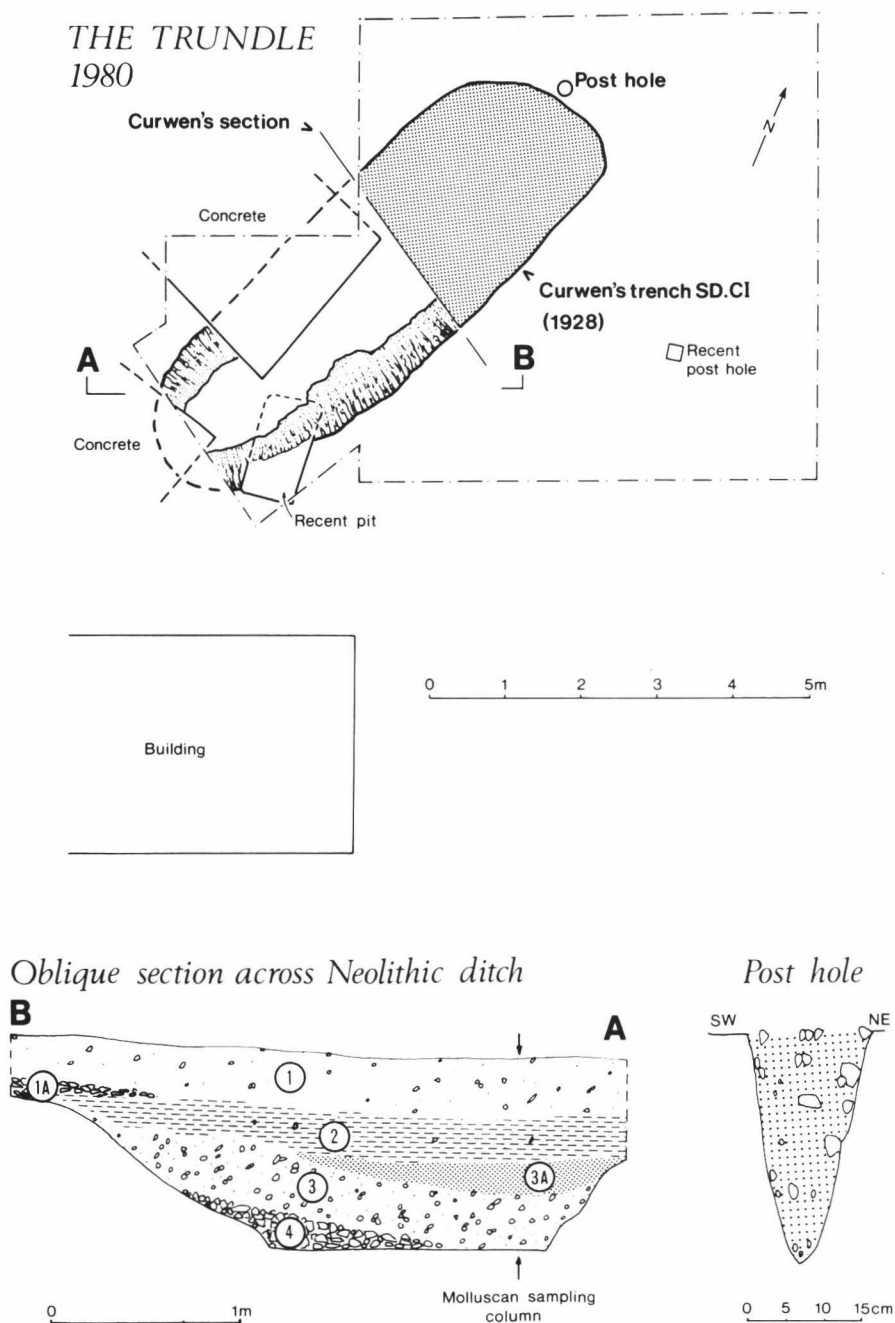


Fig. 3 Trundle 1980. Plan and sections of the excavation.

Note different scales. Key to layers in the ditch section:

- 1 Modern topsoil
- 1A Loose, rubbly chalk (? derived from bank)
- 2 Fine, gritty fill of small chalk fragments in dark brown soil matrix.

3A Fine, soft, greyish-white fill with some small chalk fragments.

3 Hard-packed layer of chalk rubble in soil matrix similar to 3A.

4 Angular chalky lumps.

The fill of the circular post hole was a hard, gritty, chalk-flecked soil.

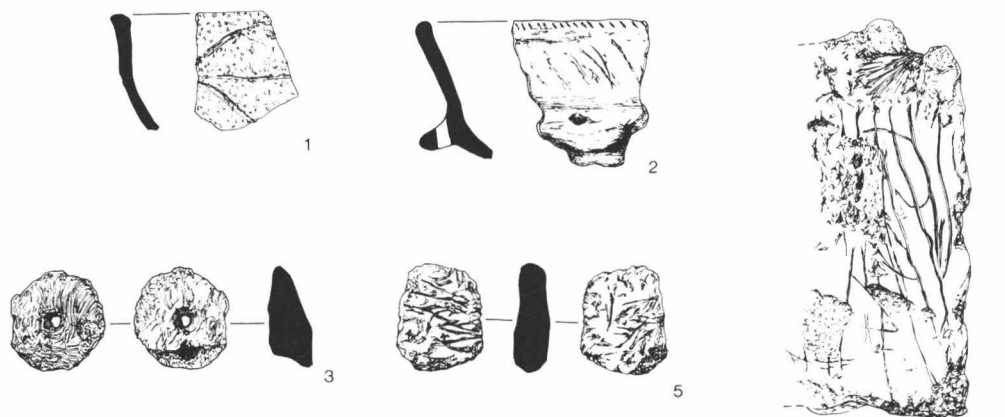


Fig. 4 Trundle 1980. Small finds; nos. 1 and 2, pottery; nos. 3-5 carved chalk objects ($\times \frac{1}{4}$). 4

characteristic of the Caburn—Cissbury style (Fig. 4, no. 1). Four fine, flint-gritted sherds of Iron Age type were also found in layer 2, together with fourteen coarse flint-tempered Neolithic body sherds of Fabric I (Drewett 1980). Two similar sherds come from layer 3. Layer 4 produced sixteen sherds, thirteen of Fabric I and three of Fabric IV (sand-tempered). One body sherd of Fabric IV was decorated with slight vertical fluting. Three sherds of Fabric I joined to give the profile of the upper part of a carinated bowl with a perforated lug (Fig. 4, no. 2). This bowl was decorated with incised diagonal lines. The pottery is consistent with an Earlier Neolithic tradition.

The flint (by P. L. Drewett)

Sixty eight pieces of struck flint were found. All layers produced flakes (layer 1 produced four, layer 2 produced eight, layer 3 produced nine and layer 4 produced 43). Three pieces of rough workshop waste come from layer 3 and one core of type A2 was found in layer 4. No implements were found. As 46.8% of the flakes were primary flakes with cortex, core preparation may have been an activity in this area.

The carved chalk (by P. L. Drewett)

Three pieces of carved chalk were found on the ditch floor (layer 4).

1. Roughly circular chalk object with hour-glass perforation. There is a second shallow, drilled depression towards one edge. Weighs 60g. (Fig. 4, no. 3.)
2. Large, irregular chalk block with incised lines and antler pick mark. The incised lines are of four types: long parallel lines, short parallel lines, straight converging lines and curved lines. Weighs 3,400g. (Fig. 4, no. 4.)
3. Small, irregular chalk block with incised lines. All appear to be of parallel or converging type. Weighs 60g. (Fig. 4, no. 5.)

Pieces of chalk with hour-glass perforations are well known from several early Neolithic sites. They appear to fall into two groups: small pieces with a roughly central hole and larger pieces with a hole towards one edge. The function of these two types has always been in doubt. Curwen (1931, 143) describes one, found at the Trundle in 1930, as a 'small piece of chalk resembling an

asymmetrical spindle-whorl but of unknown purpose'. Dr. Smith, considering Windmill Hill examples, suggests that the larger ones may have been used as weights and smaller examples as pendants (Smith 1965, 132). Simple practical experiments, however, show that small, irregular perforated chalk blocks of 40-80g function perfectly well as spindle-whorls, while 2,000-4,000g perforated blocks are ideal as loom weights (Drewett, forthcoming).

The incised chalk blocks are of particular interest as they increase the already not inconsiderable number from Neolithic sites in Sussex and elsewhere. A detailed study of these markings is in preparation (Drewett, forthcoming). From this it is clear that the regularity of occurrence of four main motifs (long parallel lines, short parallel lines, straight converging lines and curved lines) suggests more than Curwen's 'few moments of idleness' (Curwen 1929b, 17). Whether the blocks represent some form of tally system, or other form of 'written' communication, or even mobile 'art' is difficult to determine. The regularity of occurrence of specific motifs is, however, of great importance in raising these markings above the level of arbitrary doodling.

Land snail assemblages (by K. D. Thomas)

The excavation produced a series of five soil samples for land snail analysis. I am grateful to Caroline Cartwright, M.A., for extracting the snail shells in the laboratory. The results are presented in tables 1-3.

The samples

No bank, with associated buried soil, was present, so the samples relate to various phases of ditch-fill. Five soil samples were taken from the ditch, as follows:—

Sample 1 From the modern soil profile, having a thickness of c. 26cm. Disturbed by recent building operations. Fine dark soil rich in organic matter. Sample taken at 15cm from the modern ground surface.

The snail assemblage is dominated by open-country and catholic species, with open-country forms having a high frequency and being represented by a larger number of taxa. No shade-loving forms are represented.

Sample 2 Fine gritty fill of small chalk fragments in a matrix of dark soil (c. 26-44cm). Sample taken at

30cm. Late Iron Age pottery was recovered from this layer.

This assemblage is again dominated by open-country forms (but fewer taxa than in sample 1) and catholic elements. *Pomatias elegans* is very abundant (perhaps

indicating broken ground) and shade-loving forms are at low frequency. Although a late Iron Age deposit, there may have been some disturbance from layer 1 which resulted in the intrusion of the xerophiles *Candidula intersecta* and *Cernuella virgata*.

TABLE 1
Absolute frequencies of molluscs from the Trundle

Species	Sample 1	Sample 2	Sample 3A	Sample 3	Sample 4
<i>Pomatias elegans</i> (Müller)	5	15	22	17	6
<i>Carychium tridentatum</i> (Risso)	—	—	8	2	1
<i>Cochlicopa</i> sp.	1	3	3	6	1
<i>Pupilla muscorum</i> (Linn.)	2	15	10	2	1
<i>Vallonia costata</i> (Müller)	10	1	—	6	1
<i>Vallonia excentrica</i> Sterki	2	10	6	—	—
<i>Vallonia</i> sp.	—	—	—	1	1
<i>Acanthinula aculeata</i> (Müller)	—	—	1	—	—
<i>Ena obscura</i> (Müller)	—	—	4	—	—
<i>Punctum pygmaeum</i> (Draparnaud)	1	—	—	—	—
<i>Discus rotundatus</i> (Müller)	—	2	21	7	2
<i>Vitrina pellucida</i> (Müller)	6	—	—	—	—
<i>Vitrea contracta</i> (Westerlund)	—	—	1	1	—
<i>Nesovitrea hammonis</i> (Ström)	—	—	4	—	—
<i>Aegopinella nitidula</i> (Draparnaud)	—	2	13	1	1
<i>Oxychilus cellarius</i> (Müller)	—	—	2	5	—
Limacidae	—	—	30	29	8
<i>Cecilioides acicula</i> (Müller)	1	—	—	—	—
<i>Cochlodina laminata</i> (Montagu)	—	1	4	—	—
<i>Clausilia bidentata</i> (Ström)	—	—	3	2	—
<i>Balea perversa</i> (Linn.)	—	1	—	—	—
<i>Candidula intersecta</i> (Poiret)	9	1	—	—	—
<i>Cernuella virgata</i> (Da Costa)	3	4	—	—	—
<i>Helicella itala</i> (Linn.)	—	—	2	—	—
<i>Trichia hispida</i> (Linn.)	17	18	11	6	—
<i>Helicogona lapicida</i> (Linn.)	—	—	+	—	—
<i>Cepaea</i> sp.	+	+	+	+	+
<i>Cepaea/Arianta</i> apices	1	12	8	—	1
Totals*	57	85	153	85	23

*Excluding *Cecilioides acicula*
Non-apical fragments represented as +

TABLE 2
Percentage frequencies of different ecological groups in the snail assemblages from the Trundle

Ecological group	Sample 1	Sample 2	Sample 3A	Sample 3	Sample 4
Open-country	47.4	36.5	11.8	10.6	13.0
Catholic	43.8	38.8	34.0	48.2	43.5
<i>Pomatias elegans</i>	8.8	17.6	14.4	20.0	26.1
Shade-loving	—	7.0	39.8	21.2	17.4

TABLE 3
Numbers of taxa in different ecological groups in the snail assemblages from the Trundle

Ecological group	Sample 1	Sample 2	Sample 3A	Sample 3	Sample 4
Open-country	7	5	3	2	2
Catholic	3	3	4	4	2
<i>Pomatias elegans</i>	1	1	1	1	1
Shade-loving	—	4	11	6	3
Total taxa:	11	13	19	13	8

Sample 3A Fine soft greyish fill with chalk fragments (44-62cm). Sample taken at a depth of 55cm.

This is a very diverse assemblage with large numbers of specimens and taxa. The assemblage is dominated by shade-loving forms (especially in terms of the number of taxa) and catholic species. The catholic element here is dominated by the Limacidae which are difficult to identify to species, although many of them are associated with shaded or woodland habitats. Open-country species are less frequent and represented by few taxa.

Sample 3 A hard-packed layer of chalk rubble in a soil matrix similar to 3A (c. 62-88cm). Sample taken at 75cm.

This sample is dominated by catholic elements, especially the Limacidae, and by *Pomatias elegans*, possibly reflecting the unstable and loose soil conditions in the rapidly filling ditch. Shade-loving species are common while open-country species are rare and represented by only two taxa.

Sample 4 Angular chalky lumps on one side of the ditch, probably slumped down from the bank (c. 72-88cm).

This rather sparse assemblage probably reflects the very rapid accumulation of the deposit by erosion from the bank. Not surprisingly, the assemblage is dominated by the Limacidae and *Pomatias elegans*. Open-country species are rather less abundant, both in frequency and numbers of taxa, than shade-loving forms.

Samples 3A, 3 and 4 appear to be from Neolithic phases of infill, but sample 3A may represent a worm-sorted soil which developed in the stabilised ditch-fill before later (Iron Age) activity produced layer 2 and led to the complete infilling of the ditch. Layer 3A may contain land snail assemblages which span a considerable period of time, from the Neolithic to the late Iron Age, and would be worth sampling in a more detailed and intensive manner should further excavation occur at this site.

Discussion

A major problem in the interpretation of the landscape from snail assemblages from ditches relates to the nature of the ditch microhabitat. Ditches tend to provide moist, sheltered environments which become more exposed as the ditch fills with sediments. The early fill of the ditch may be unstable and consist of coarse debris which may favour a rather more limited range of species. As the fill stabilises so a diverse assemblage of snails will develop. The final phase of fill may be associated with dry exposed conditions with open-country species predominating. This hypothetical sequence fits remarkably well the sequence of snail assemblages described above.

Thus, the assemblages need not tell us anything about the surrounding landscape, only about changes in the ditch itself. But, the changing assemblages do not just reflect changes in the abundance of species already in the ditch. Many of the species must have come from elsewhere and perhaps these can give some indication of the broader environment. Evans (1972) has shown that ditches associated with Neolithic and Bronze Age barrows built in open country (as evidenced from their buried soils) tend to accumulate assemblages of snails in the primary fill which are indicative of these open-country conditions. As these ditches become overgrown, so shade-loving elements appear in the deposits, but open-country species remain very

abundant. Conversely, it has been argued for the Bury Hill Neolithic enclosure (Thomas 1981) that the absence of open-country elements from the early fill of the ditch must indicate that the enclosure was built in a woodland clearing, or in a recently cleared area.

The assemblages from the Trundle are not so easily interpreted. A number of distinctly woodland elements must have been living in the area for them to be present in the deposits of layer 3A. These include *Acanthinula*, *Ena*, *Cochlodina* and *Helicogona*, all elements of an assemblage dominated, both in terms of abundance and numbers of taxa, by shade-loving forms. But, this sample (3A) and the earlier samples contain a consistent representation of open-country forms, indicating their presence in the area at all times after the ditch had been dug, and possibly before that time. The assemblage from sample 3A is best interpreted as representing some regeneration of dense vegetation, perhaps of scrub, around the ditch, allowing relict woodland species to increase in abundance. This was followed by a clearance phase in the Iron Age (represented by sample 2), with open-country species becoming dominant.

Samples 3 and 4 are difficult to interpret. The high frequencies of catholic species and of *Pomatias elegans* may suggest very disturbed and broken-up ground. Open-country species are perhaps not as abundant as one might expect for the primary fill of a ditch constructed in a well-established cleared area; they are represented by only two species. The ditch was probably dug either in an area which had been locally cleared of trees for a long period of time, or in an area which had been more extensively cleared just prior to the construction of the enclosure. Either possibility would increase the chances of open-country species dispersing to and colonising the cleared area. The relatively low abundance of shade-loving forms in samples 3 and 4 along with the high frequencies of *Pomatias elegans* favours the second hypothesis of large-scale clearance prior to the construction of the enclosure.

The arguments used above may seem tenuous but they fit the observed data much better than do alternative hypotheses.

Summary

The sequence of land snails from the ditch fill can be naively interpreted in terms of the changing ditch microhabitat. This ignores the changing representation of taxa within the ditch, indicating that various species must be coming from outside. Therefore, we must consider these ditch assemblages in relation to the overall environment.

1. It is suggested that the enclosure was constructed in an area which had been fairly recently, but extensively, cleared. Open-country species had colonised the area but species of disturbed ground were particularly common.
2. Later the area became overgrown, perhaps with regenerated scrub, and relict woodland elements increased in abundance.
3. In the Iron Age, clearance of the scrub, possibly associated with ploughing, led to a dramatic rise in open-country species and of those preferring broken soil conditions.
4. The modern assemblage indicates open grassland conditions (the present environment is of fenced-off long grassland).

Animal bones (by Owen Bedwin)

The following fragments of animal bone were identified:—

- Layer 2; *Bos*, 2 rib fragments; *Sus*, 1 mandible fragment; *Ovis*, 1 upper molar.
 Layer 4; *Bos*, 1 vertebra, 1 calcaneum fragment, 1 radius fragment; *Sus*, 1 scapula fragment; *Ovis*, 1 pelvis fragment.

The material from layer 4 totalled c. 280g, and was used for a carbon-14 determination.

ACKNOWLEDGEMENTS

The authors are grateful to Philippa Price and Peter Pritchard for help on site, to Peter Drewett and Ken Thomas for contributing specialist reports, and to Lys Drewett for Fig. 4. The finds are in Chichester Museum.

Owen Bedwin and F. G. Aldsworth

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References

- Bedwin, O. 1981, 'Excavations at the Neolithic enclosure on Bury Hill, Houghton, West Sussex 1979', *Proc. Prehist. Soc.* **47** (forthcoming).
 Curwen, E. C. 1929a, 'Excavations in the Trundle, 1928', *Sussex Archaeol. Collect.* **70**, 33-85.
 — 1929b, *Prehistoric Sussex* London: Methuen.
 — 1931, 'Excavations in the Trundle', *Sussex Archaeol. Collect.* **72**, 100-49.
 Drewett, P. L. 1980, 'Neolithic pottery in Sussex', *Sussex Archaeol. Collect.* **118**, 23-30.
 — 1982, 'Settlement, economy, ceremony and territorial organisation in Sussex, fourth-second millennium B.C.', (forthcoming).
 Evans, J. G. 1972, *Land snails in archaeology* London: Seminar Press.
 Smith, I. F. 1965, *Windmill Hill and Avebury* Oxford: University Press.
 Thomas, K. D. 1981, 'The land mollusca from the Neolithic enclosure at Bury Hill', in O. Bedwin, 'Excavations at the Neolithic enclosure on Bury Hill, Houghton, West Sussex 1979', *Proc. Prehist. Soc.* **47** (forthcoming).

An excavation at Broadbridge, Bosham 1976

Extensive excavation of an area c. 275m by 8m between two known Roman buildings, 215m apart, produced no direct evidence of Roman occupation. Three north-south ditches were found, one of which was filled by the thirteenth century A.D. A millstream crossing the site was shown to be a substantial, artificial work, probably of Saxon or earlier date. No evidence for a Roman road west from Chichester was found; the significance of this is discussed.

INTRODUCTION

Because plans for the construction of a carriageway for the A27 road and a new roundabout threatened an

area of archaeological interest, the Sussex Archaeological Field Unit undertook this excavation in February, 1976 on behalf of the Department of the Environment, with the active cooperation of West Sussex County Council. Three previous finds of Roman material in the vicinity indicated possible Roman settlement within the area of the new carriageway. References to particular locations herein will be by reference to the National Grid coordinates as shown on Figure 5:C. Two Roman buildings were found in 1832, probably during construction of a drain (81200531 to 81180524), which appeared to continue across the excavated area in 1976 (Fig. 5:—E: 81170522 to 81130522) and probably continued southwest. This line appears on the 1839 Tithe Map as a field boundary but is not shown on the 1784 Berkeley estate map.¹ Building A (81020513) was in part an Antonine masonry building of two ranges on either side of a courtyard.² Excavations by Miss M. Rule in 1967 nearby (81040516) revealed three phases of timber building in the more southerly of her two trenches. A timber palisade underlay a rectangular building of two rooms on an east-west alignment, which was burnt down c. A.D. 310. A structure of wattle and clay on a different alignment overlay it. Building B (81190527) was built in part after A.D. 395 but little is known of it. It does not extend south of the main road and the only indication of its proximity in this excavation and two small trial trenches at H (Fig. 5:C—81160523) was one tegula fragment. In addition to the two buildings known, a Roman marble head was found before 1850, possibly at C (81070537); however, it is more probable that it was found either in the extension of Broadbridge mill after 1839 (81120538) or in the aforementioned drainage work at one of the two buildings. It has been identified as of Caligula c. A.D. 38, possibly a modern import.³

THE EXCAVATION

Trial trenches at various points along the line of the new road indicated a uniform depth of topsoil and underlying brickearth (50-70cm). This had been disturbed to a variable depth by steam ploughing. Underlying this was a layer of gravel and sand (c. 50cm) which dipped to the west of 81080528 and was itself overlain by a thin layer of Coombe deposit (20cm). Beneath the gravel lay Reading Beds' clay.

An area of c. 1850m² was stripped by machine (Hymac) to the level adjudged as the base of the ploughsoil (Fig. 5:C). Adverse weather conditions and the uniformity of the brickearth prevented detection of archaeological features except in two instances. At D (81120527), a small pit 10cm deep and 40cm in diameter contained thirteenth century pottery. Post-medieval deposits in the same area probably derived from a building at M (81140526), which is first recorded on the 1839 Tithe map. At F (81160522) the upper fill of a northeast to southwest ditch contained thirteenth century pottery, as did a shallow rubble spread immediately adjacent. Further longitudinal trenches to the surface of the gravel were excavated in order to detect any features cutting across the site. Two further ditches on a similar alignment were found, which were not datable. One ran close to and cut by F, and the other 40m to the east.

No evidence of an east-west Roman road was found, although it was anticipated on a line between northings 0520 and 0525.⁴ A verbal report was received that an east-west gravel surface had been observed at K

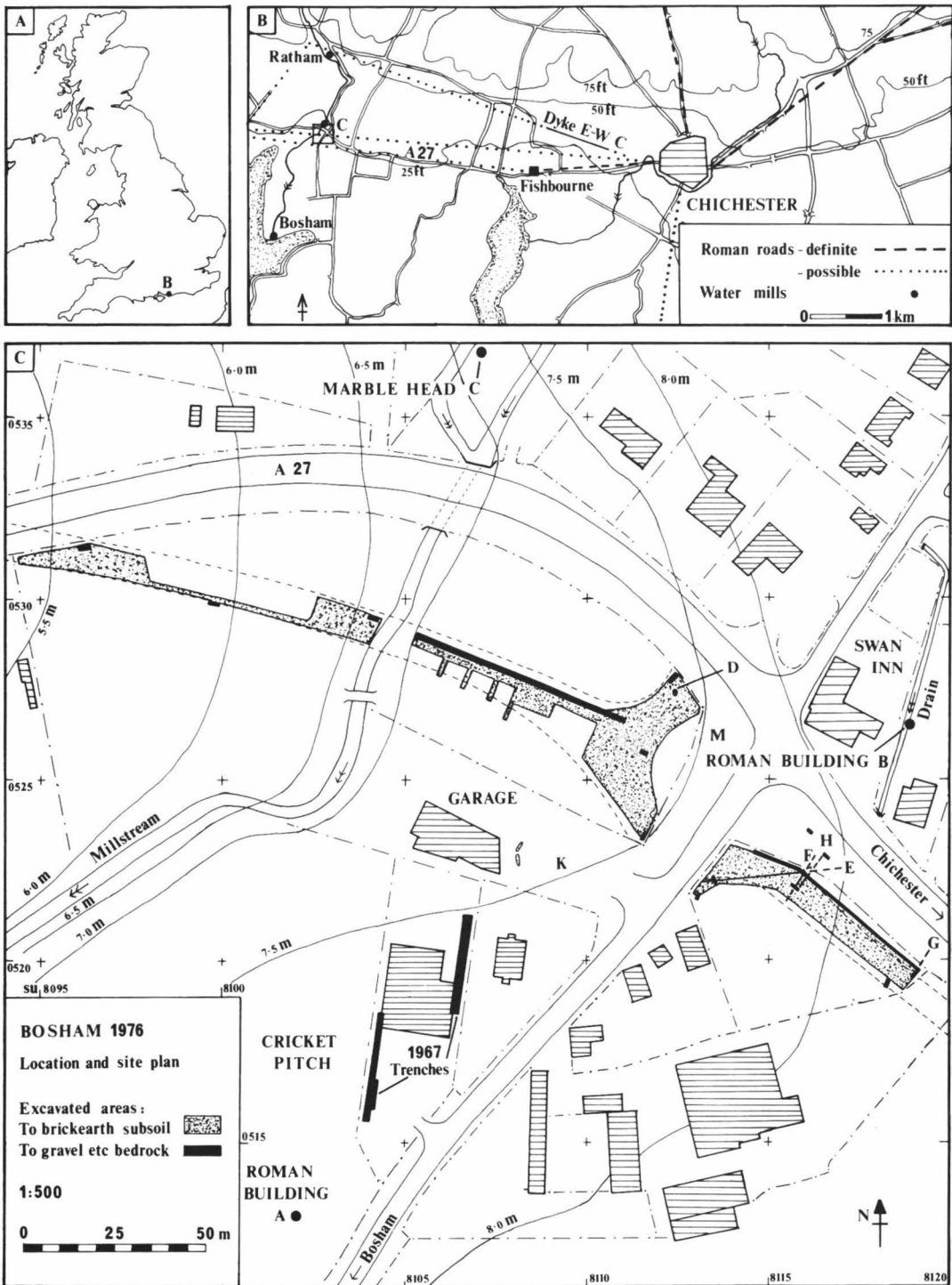


Fig. 5 Broadbridge, Bosham 1976. Site location and general plan.

(81090523) during construction of the garage forecourt c. 1972. A direct alignment from the west gate of Chichester to Nutbourne (SU 798052) remains a possibility. However, it is more likely that an early military road ran more to the south on a direct continuation of the alignment from Havant to Nutbourne via Bosham to Fishbourne to coincide with the 'north' road there,⁵ and that this was later replaced by a road on a line which completely avoided the Flavian palace. Although Dyke E-W C has recently been discounted as a possible agger,⁶ it might be reconsidered as a road on a more northerly line (Fig. 5:B). There is air photographic evidence for a road approaching Ratham and the possible Romano-Celtic temple there from the southeast from Mudberry farm in the form of two parallel ditches (SU 806062).⁷

A section of the west bank of the millstream (81040529) indicated that the material excavated during its construction was not present in the form of upcast and had presumably been exported elsewhere. Fieldwork established that the millstream was artificial from Ratham to Bosham and had been engineered with the intention of delivering water power to Bosham and intervening mills (Fig. 5:B). The date of this is probably prior to the first occurrence of the name 'Broadbridge' in A.D. 1192.⁸ Given the presumed importance of Bosham in the late Saxon and Roman periods,⁹ it might well be as early as Roman. The relationship between Roman settlement and available water power is little known as yet. The location of buildings, such as those at Broadbridge and Roman villas in general, may well have more to do with water power than anything else.

The finds (selective summary)

Pit (81120527)

Pottery: Three cordoned body sherds: one with strap cordon, two with linear cordon and spaced flat beads: similar to thirteenth century A.D. pottery from Hangleton.¹⁰

Rubble spread (81160522)

Pottery: Two plain bases, one slashed handle and one pinched base; the last is similar to thirteenth century A.D. pottery from Hangleton.¹¹

Shell: A large quantity of oyster shell.

North-south ditch upper fill (81160522)

Pottery: One rim of a jar, plain and outcurving, with a splash of green/brown glaze: generally similar to thirteenth century A.D. jars from Hangleton.¹²

Bone: Tibia of ox and jaw of sheep.

Topsoil (81160523)

Tile: One fragment of tegula with right-angled flange and notched corner.

Acknowledgements

S.A.F.U. is most grateful to the County Planning Officer, P. W. Bryant, Esq., and F. Aldsworth, Esq., of West Sussex County Council for arranging and assisting with the excavation. We would also like to thank P. Turnbull, Miss M. Rule, D. Sturdy, J. Munby, Mrs. Hunt, Dr. Cameron and all the people of Bosham who helped with the excavation.

The notebook, detailed plans, sections, finds and a full finds' report and drawings will be deposited at Chichester museum.

Hugh Toller

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

References

- ¹West Sussex Record Office, MP 810.
- ²H. Mitchell, 'On the early traditions of Bosham', *Sussex Archaeological Collections* (hereafter *S.A.C.*), 18 (1866), 2.
- ³P. Connor, 'Note on the Broadbridge (Sussex) head', *Britannia* 5, 379-81.
- ⁴B. Cunliffe, *Excavations at Fishbourne, 1961-69* (Leeds, 1971), 9, Fig. 4.
- ⁵B. Cunliffe (1971), 38-9, 46, 56.
- ⁶R. J. Bradley, 'A field survey of the Chichester entrenchments', in B. Cunliffe (1971), 24.
- ⁷Aerial photograph in the possession of the West Sussex County Council Planning Office.
- ⁸A. Mawer, F. Stenton and J. Gover, *The place-names of Sussex* (1929), 58.
- ⁹*Victoria Country History (Sussex)* (1973), 184, Mitchell (1866), 1-9.
- ¹⁰E. W. Holden, 'Excavations at the deserted medieval village of Hangleton, Part I', *S.A.C.* (1963), 117, no. 26.
- ¹¹E. W. Holden (1963), 130, nos. 222-3.
- ¹²E. W. Holden (1963).

Seven Anglo-Saxon pennies from the Chancton (Sussex) hoard

In August 1980 the Chichester District Museum was offered by the Revd. J. Tickner of Chichester, a group of seven Anglo-Saxon pennies which came from a hoard of approximately 3000 such pennies discovered in 1866 on the demolition of an old farm building at Chancton Farm, about one mile north of Chanctonbury Ring. The original find was reported in *Sussex Archaeological Collections* 20, 212-21.

Of the supposed 3000 coins, 681 were deposited at the British Museum shortly after the discovery of the hoard. The British Museum received a further deposit of coins in 1915 from the collection of Sir John Evans. (See the *British Numismatic Journal* 38, 54-6, for a list of the catalogue numbers of the coins from Chancton included in the British Museum catalogue¹). The seven coins in question were retained by Mr. Tickner's grandfather, Charles Botting, who was the tenant of Chancton Farm at the time.

Six of the pennies are of Edward the Confessor and the seventh is of Harold II. (Of those in the British Museum, 58 are of Harold II and the remainder of Edward the Confessor). The mints represented are Exeter, Lewes, Steyning, Lincoln and Bedwyn. Except for the coin from the Bedwyn mint, which is of a type not hitherto recorded, all dies are paralleled by others in the British Museum collection from the Chancton hoard. The Bedwyn mint penny is a Heavy issue,



Plate I. Edward the Confessor. Bedwyn mint (Cild).

expanding-cross type and reads as follows (Plate I):

OBV. +EADFA . RDREX:

REV. +CILD ON. BEDEPINDE:

The moneyer is Cild.

Although the coins are from a find spot outside the Chichester District Museum's collecting area, they were accepted by the Museum since the donor expressly wished them to remain in Chichester.

Loraine Knowles

¹I am indebted to Miss Marion Archibald of the British Museum for this information.

Excavations on 'The Mound' at Church Norton, Selsey, in 1911 and 1965

(by F. G. Aldsworth B.A., F.S.A., Archaeology Officer, Planning Department, West Sussex County Council and E. D. Garnett; with a note on the pottery by A. Down F.S.A., and a note on a Late Saxon strap-end by D. A. Hinton M.A.)

In a recent article¹ one of us suggested that the earthworks to the south of St. Wilfrid's Chapel, Church Norton, were the remains of an early Norman ringwork castle, which formerly supported a stone tower, and also presented evidence to indicate that a church, erected by St. Wilfrid in the seventh century A.D., may formerly have stood on the site now occupied by the chapel. Since that paper was prepared the elm trees and dense undergrowth, which formerly covered the earthworks, have been removed, under the supervision of the County Planning Officer, and the site has been laid to grass. Whilst this work was in progress a number of old trenches were encountered (see Figs. 6 and 7) and these result from excavations in 1911 and 1965 which have not previously been fully published. Finds from these excavations are in Chichester City Museum² and in this article the material is discussed together with the bronze strap-end found in 1911,³ but now lost.

The excavations undertaken in 1911 have been the subject of a previous paper in the *Collections*⁴ and were discussed by E. Heron-Allen,⁵ but the finds were not fully explored. The principal features encountered were the foundations of a square stone tower and a

smaller wall to the east which may now be seen as part of a small building, possibly a chamber. An attempt to date the earthwork produced pottery sherds, apparently of fourteenth and sixteenth century date, from under the mound on the east side,⁶ but these have not been re-identified and their precise context was not recorded in 1911. Despite the conclusion in 1911 that the earthwork was constructed in the sixteenth century⁷ the present writers are in no doubt that the form of the work and the overwhelming evidence of the surviving pottery (see pages 220-1), which is almost all of the eleventh and twelfth centuries, indicates that the earthwork was constructed in the Norman period. It is assumed that the four later pottery sherds found under the bank in 1911 were sealed, not by the original bank but by soil eroded down from the bank at a later date.

In 1965 the two masonry structures encountered in 1911 were relocated and further investigated in a series of trenches excavated under the supervision of one of us.⁸ The tower proved to be about 9.5m (31 feet) square with wall footings about 2.7m (9 feet) wide of Mixon stone set in a yellow mortar. These were on a foundation of compacted yellow gravel (shown stippled on Fig. 7), up to 0.8m (2 feet 9 inches) deep. The gravel overlay clay containing oyster shells, Romano-British brick and tile fragments, and charcoal.

A north-south ditch or gully, 0.9m (3 feet) wide and 0.8m (2 feet 6 inches) deep, was found immediately to the east of the tower, and contained Romano-British roofing tile and a few pieces of burnt and vitrified clay. One piece of clay showed traces of burnt chalk which may indicate that it was from a lime-kiln. A second ditch or gully, parallel to and of similar dimensions to the first, was encountered 7.5m (24 feet 8 inches) further west and partially underlay the foundation of the tower.

To the east of the tower and the easternmost gully a further building was found. It was rectangular, measuring 6.5m (21 feet 4 inches) by 5.5m (18 feet), with walls about 0.7m (2 feet 4 inches) thick, of stone on a footing of mortar, gravel, and oyster shells. Its eastern wall had been identified in 1911 and when re-excavated it appeared to have an original entrance, about 0.9m (3 feet) wide, at its centre. Fragments of three chimney vents (Nos. 17a, 17b and 18) were found in collapsed walling from this building and finds from within it included pottery, iron nails, and an iron ring. It was probably a chamber.

CHURCH NORTON, SELSEY

'THE MOUND' AND ST. WILFRID'S CHAPEL

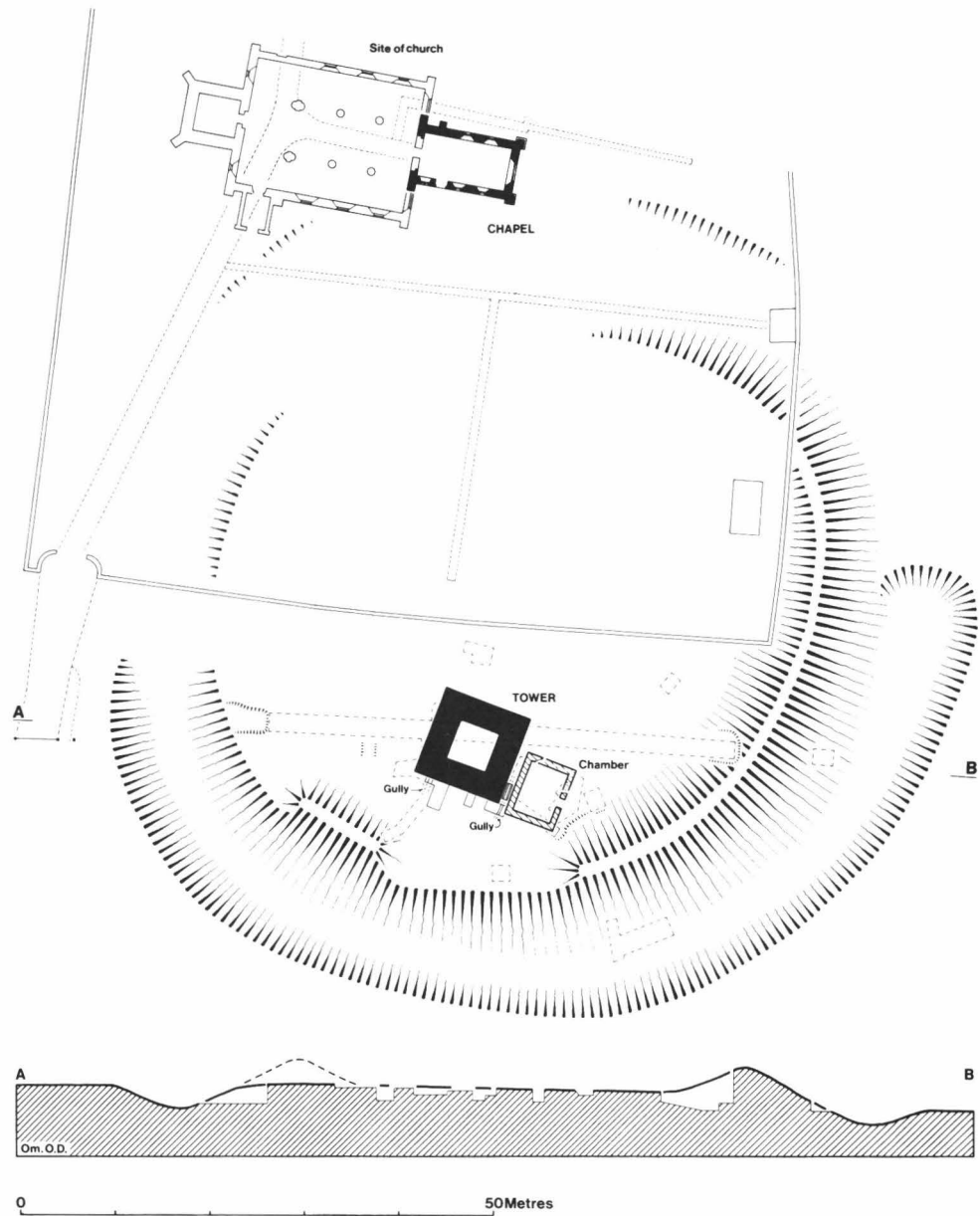


Fig. 6

CHURCH NORTON

EXCAVATED FEATURES

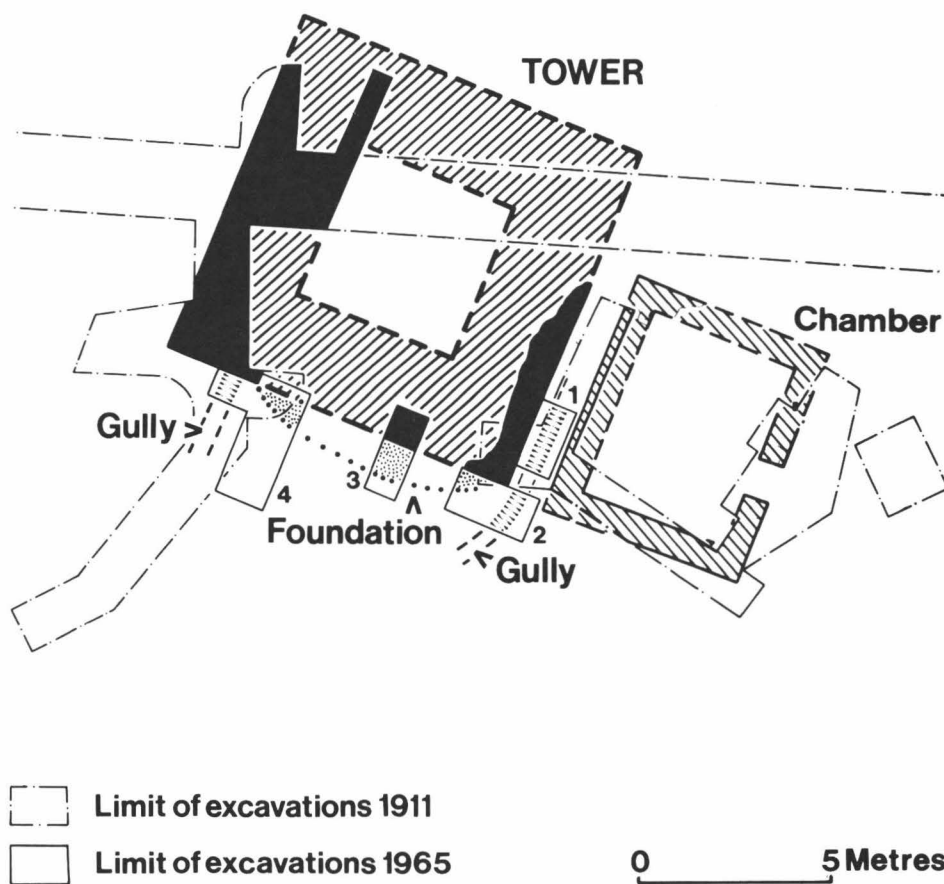


Fig. 7

THE FINDS

Chichester City Museum retains a collection of finds from the excavations undertaken both in 1911 and 1965 and, apart from pottery, these include fragments of Romano-British brick and tile, several pieces of slate, and part of a Medieval curved ridge tile, of a hard-fired grey sandy ware, with splashes of glaze on the exterior surface.

The Pottery by Alec Down F.S.A.

Of the pottery (Fig. 8), all the diagnostic sherds are described here.

Sherds from about fifteen or sixteen vessels (1-16) survive from the 1911 excavations but there is no record of their precise provenance. Most of the material recovered in 1965 (17-52) is marked with a site and context code and can therefore be related to areas of the

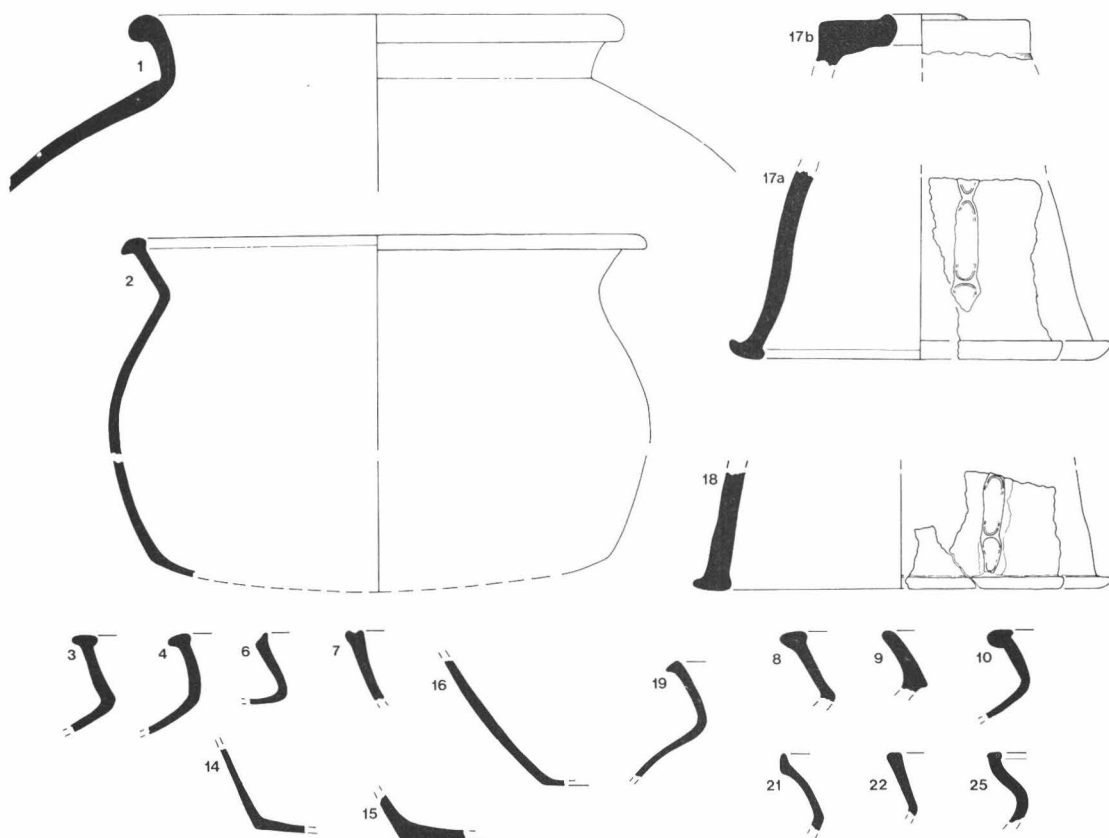


Fig. 8 Church Norton, Selsey 1911 and 1965—Pottery and Chimney Vents ($\frac{1}{4}$)

excavation, but because of the nature of the records of the excavation the material is probably best seen only within the context of the whole site.

1. A single rim sherd of a Romano-British necked jar of a fine sandy grey ware fabric with traces of a red oxide slip on the shoulder. It could date from any time after the first century A.D.

The remainder of the pottery from the 1911 and 1965 excavations is mostly Saxo-Norman and unless otherwise noted the date range is about A.D. 1050 to 1150, the vessels are cooking pots, and the fabric is grey, hard-fired, with sparse small flint grits, generally reduced in firing but with a red/buff oxidation.

2. Rim, body and base sherds from one vessel.
- 3-5 Rim sherds (5 not illustrated and probably from same vessel as 4).
6. Rim sherd, with sand and flint, which could be as late as the thirteenth century.
7. Lid sherd, mainly with sand, and rather similar fabric to 6.
8. Rim sherd of a necked pot or storage jar. Soft dark-brown fabric, with coarse sand, selected flints, and some chalk.
9. Rim sherd of a vessel which was probably hand made and finished on a slow wheel. The fabric is soft black, heavily tempered with coarse sand,

and the external face is rough and lumpy. The sherd is probably pre-Conquest and could be as early as the tenth-century.

- 10-13 Rim sherds (only 10 is illustrated).
14. Base sherd.
15. Base sherd—possibly same vessel as 10.
16. Base and body sherd.
- 17a. Sherds from the top and body of a chimney vent in a hard sandy fabric, with flint.
- 17b. Part of the base of a chimney vent, of a form similar to that which would complete 17a but the fabric is slightly different. Oxidised brick red, with flint, and smoke blackened.
18. Sherds from the top of a chimney vent, similar fabric to 17a. but softer.
19. Rim sherd of black burnt fabric, with flint. Poorly fired being both oxidised and reduced.
20. Rim sherd similar to 5 (not illustrated).
21. Rim sherd to carry a lid. This unusual rim form has not been noted in Chichester.
22. Rim sherd, hard-fired grey fabric, with sand.
23. Rim sherd, similar to 4 (not illustrated).
24. Rim sherd of soft grey fabric, with flints, oxidised red (not illustrated).
25. Rim sherd of a fabric like 22.
- 26-50 Rim sherds (not illustrated).

51. Small sherd, possibly part of the neck of a vessel, of hard sandy grey fabric with external light green glaze. Probably thirteenth-century or later (not illustrated).
52. Body and base sherds of a cooking pot of a grey fabric, with small flint grits, oxidised reddish buff both internally and externally. This could be as late as the thirteenth century (not illustrated).

The Strap-End found in 1911 by David Hinton M.A., Department of Archaeology, University of Southampton.

Strap-end, copper alloy. This object was recorded and illustrated by Salzmann⁹ and Heron-Allen,¹⁰ and briefly discussed by Wilson,¹¹ who noted that the four full-length figures on it are paralleled on late Anglo-Saxon secular metalwork only by the Fuller brooch and the Abingdon sword, both objects of the ninth or early tenth centuries. A subsequent find at York¹² extends this list slightly.

Strap-ends of this sort, with a split end containing two rivet holes, a wide central panel, an animal head terminal, and a plain reverse, are common objects.¹³ They can be as early as the eighth century,¹⁴ but the apparently dancing figures on the Selsey example, and the division of the main panel into four by a cross, are Trehiddle-style traits of the ninth and early tenth centuries. There is thus no reason to date the Church Norton, Selsey, strap-end as early as, for example, the seventh-century gold ring fragment from the area.¹⁵ The open-centred cross on it is closely paralleled by that at Dymchurch, Kent,¹⁶ which has interlaced animals in the four panels, not human figures. It is sad that the precise details of these figures cannot be seen on either Salzmann's or Heron-Allen's photographs, and that the object itself does not survive. The man on the Abingdon sword¹⁷ is generally taken to be the symbol of St. Matthew, and this provides the closest analogue. Could the four Selsey figures be the four evangelists? It seems more likely that a less explicit symbolism was intended: the figures on the Fuller brooch, for instance, symbolize the five senses.¹⁸ Others in the late Anglo-Saxon corpus of art include dancers and musicians, not all in roles which we fully understand.¹⁹

CONCLUSION

The evidence provided by the excavations undertaken in 1911 and 1965 indicates that the main period of occupation was from the mid eleventh to the mid twelfth centuries A.D., thus supporting the suggestion that the earthworks were probably constructed in the Norman period and probably soon after 1066. The square tower probably dates to the same period and may be seen as a keep within a ringwork motte of the type described by King and Alcock.²⁰ The occurrence of Romano-British and late Saxon material indicates earlier occupation in the vicinity and the absence of later Medieval and post-Medieval pottery in any quantity indicates that the occupation of the site was comparatively short-lived after about 1100 A.D.

F. G. Aldsworth and E. D. Garnett

References

¹Aldsworth, F. G. 'The Mound' at Church Norton, Selsey, and the site of St. Wilfrid's Church *Sussex Archaeological Collections* 117 (1979) pp. 103-7.

²Accession Numbers 5304 (1911 finds) and 5305 (1965 finds).

³Salzmann, L. F. Excavations at Selsey, 1911 *SAC* 55 (1912) pp. 56-62 Plate v; Heron-Allen, E. *Selsey Bill* (1911) Plate xxxvi Fig. 1.

⁴Salzmann op. cit.

⁵Heron-Allen op. cit. pp. 195-7.

⁶Salzmann op. cit. pp. 59-60.

⁷Salzmann op. cit. p. 61.

⁸Garnett, E. M. Report on excavations on the 'Mound', Selsey. July-September 1965. Undated typescript in Chichester City Museum.

⁹Salzmann op. cit. p. 60 and Plate v.

¹⁰Heron-Allen op. cit. Plate xxxvi Fig. 1.

¹¹Wilson, D. M. *Anglo-Saxon Ornamental Metalwork 700-1100 in the British Museum* (London 1964) p. 30.

¹²Wilson, D. M. Two ninth-century strap-ends from York *Medieval Archaeology* 8 (1964) pp. 214-16.

¹³As for example Wilson, D. M. and Blunt, C. E. The Trehiddle hoard *Archaeologia* 98 (1961) pp. 75-122 (especially pp. 120-2).

¹⁴Evison, V. I. in Farley, M. Saxon and Medieval Walton, Aylesbury: Excavations 1973-4 *Records of Buckinghamshire* 22 (1976) pp. 153-290 (especially pp. 247-8).

¹⁵Page, R. I. *An Introduction to Runes* (London 1973) pp. 29 and 163.

¹⁶Wilson 1964a op. cit. p. 28 and Fig. 1.

¹⁷Hinton, D. A. *A Catalogue of the Anglo-Saxon Ornamental Metalwork, 700-1100, in the Department of Antiquities, Ashmolean Museum* (Oxford 1974) No. 1 Panel 3.

¹⁸Wilson 1964 op. cit. in note 11 No. 153.

¹⁹Hinton, D. A. *Alfred's Kingdom: Wessex and the South 800-1500* (London 1977) p. 55, Fig. 17.

²⁰King, D. J. C. and Alcock, L. Ringworks of England and Wales in Taylor, A. J. (ed.) *Chateau Gaillard III* (1969) pp. 90-127.

A silver ring brooch from Cliffe Hill, Lewes

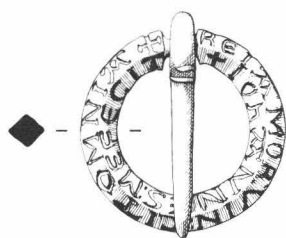
The circular silver brooch (Fig. 9) found at Cliffe Hill, Lewes, has been recently given to the Barbican House Museum, Lewes, by the finder Mr. J. R. Hancocks. The brooch measures 18mm in diameter, it has a diamond-shaped section, and retains its original pin. It is engraved with an inscription which runs along the two upper sides and along one of the lower sides. The inscription was inlaid with niello. It reads:

+ REI AMOR : VIN : CIT OMNIA

+ IOHANNES : ME FECIT

+ PENSEZ DE : MEI AVUS : MEIOT

The inscription is in the lombardic (rounded) script which dates it to the thirteenth or early fourteenth century. The first part of the inscription contains the words amor vincit omnia (love conquers all). This is a common inscription occurring on both rings and brooches. It is more frequent in lombardic letters than in the later black letter. The word 'rei' is puzzling. It may stand for the love of things but this is not convincing. The second part of the inscription contains the words 'John made me'. The first three words of the last line mean 'think of me'. The meaning of AVUS



†REIÆ MOR:VIN:CIT OMNIA

†IOHANNES.MEFECIT

†PENSEZDE:MEIÆVVS:MEIOT

Fig. 9 Silver ring brooch ($\times 3/2$).

MEIOT is not clear but it may represent a name. The brooch is an interesting addition to the inscribed circular brooches of the thirteenth and fourteenth centuries which have been discussed by J. G. Callender and the author.¹

John Cherry

¹J. G. Callender, 'Fourteenth-century brooches and ornaments'. *Proc. Soc. Antiq. Scotland*, LVIII (1923-4), 160-84.

J. Cherry 'A ring brooch from Waterlooville, Hants.' *Medieval Archaeology*, XIII (1969), 224-6.

An excavation at 1-3 Tower Street, Rye, East Sussex

INTRODUCTION

The town of Rye lies on an outcrop of Ashdown Sands capped with Wadhurst Clay, the Ashdown Sands are of an argillaceous type, namely Fairlight Clays (Gallois *et al.* 1965). The outcrop is connected to the higher land to the north only by a small neck of land, along which the London Road runs. This was the only connection except for the Udimore Road which involved a ferry across the River Tillingham. This river and the Rother combine at this point and provide good harbour facilities. As a result of this a significant trade developed here and the town was one of the earliest members of the Cinque Ports Confederacy, from A.D. 1197. This combination made it a favourite point for French raids, encouraged by the poor defences of the town. The most significant attack being that of A.D. 1381. However, from this time the silting up of the harbour began to increase rapidly so that by the seventeenth century the town had become a small fishing village. The demolition of two nineteenth-century houses provided an opportunity to investigate the nature and date of the defences erected in the fourteenth century.

THE EXCAVATION (Fig. 10 and 11)

A trench 12.8m \times 2m was excavated at right angles to the town wall. A J.C.B. 3C was used to remove the first

metre, that is contexts 1 and 2, the rest being removed by hand. Contexts 5, 7, 8 and 10 were all sandy clay containing beach pebbles and fragments of pot. Context 7 however was dark black and much more silty; it contained much more pot and a quantity of bone, leather and wood. They appear to be a succession of dumped layers levelled off by context 5, to provide a flattish surface. Beneath were two similar layers of compacted beach pebbles. They differ by the size of pebble (much larger in context 13), the finds (very few in context 13), and a sandier matrix in context 6. It is suggested that they form an intentionally laid deposit with the purpose of providing a flat, durable and reasonably well drained surface. Finally a dark grey silty layer, context 9, sufficiently water-logged so as to preserve a tree, identified as being of the *Betula* genus, but very little pottery was found. However part of a late seventeenth-century candlestick indicates that the area was open at this time while a George II half-penny, A.D. 1740-54, from context 6 indicates a date for the levelling of this area.

There were only two other contexts; one, context 4, a nineteenth-century foundation trench, the other, context 12, is a post-hole with no datable contents but it must on stratigraphical grounds pre-date the levelled area.

DOCUMENTARY EVIDENCE

The documentary evidence for ditches in this part of town is both confused and ambiguous. From A.D. 1329 the town received irregular murage grants (Page 1973), but it was only after the French raid of A.D. 1377 that a murage grant was made for a stone wall, to be erected in the three years after the grant given in A.D. 1381. That something existed before can be demonstrated in the land grant to the Augustinian Friars in A.D. 1378 (Dell 1962, 134-2). The plot is described as being by the 'foss of the town wall'.

Soon after the new murage grant the area north of the town was being reclaimed and developed for building and agricultural land as many documents show (122/3, 122/6, 137/17) with references occasionally to gutters and dykes. In 1506 a major new ditch, the 'Horsepett', is mentioned (130/13) and the implication is that this and the town ditch flowed into the harbour. This no doubt added to the silting of the harbour which had already been going on for many years (Aldsworth and Freke 1976). From now on the mention of larger ditches becomes more frequent as in 1587 with a new conduit (130/41), and in 1687 a new ditch at the Rope Walk Causey (127/25) which is specifically given as being two rods wide. Two years later it is referred to as a sewer but more interestingly a proviso is attached (127/26) for 'resumption should the land be required for fortifying the town'.

DISCUSSION

The archaeological evidence shows a shallow and wide ditch which was open at least into the late seventeenth century, possibly into the eighteenth, if the document of 1717 (127/31) is to be associated with this ditch. Moreover, if this association is correct, the ditch was regarded as a potential defensive feature in the late 1680s (127/25, 127/26). This ditch was filled in c. 1750, coinciding with the last reference to any similar ditch. It therefore seems reasonable to conclude that at this time

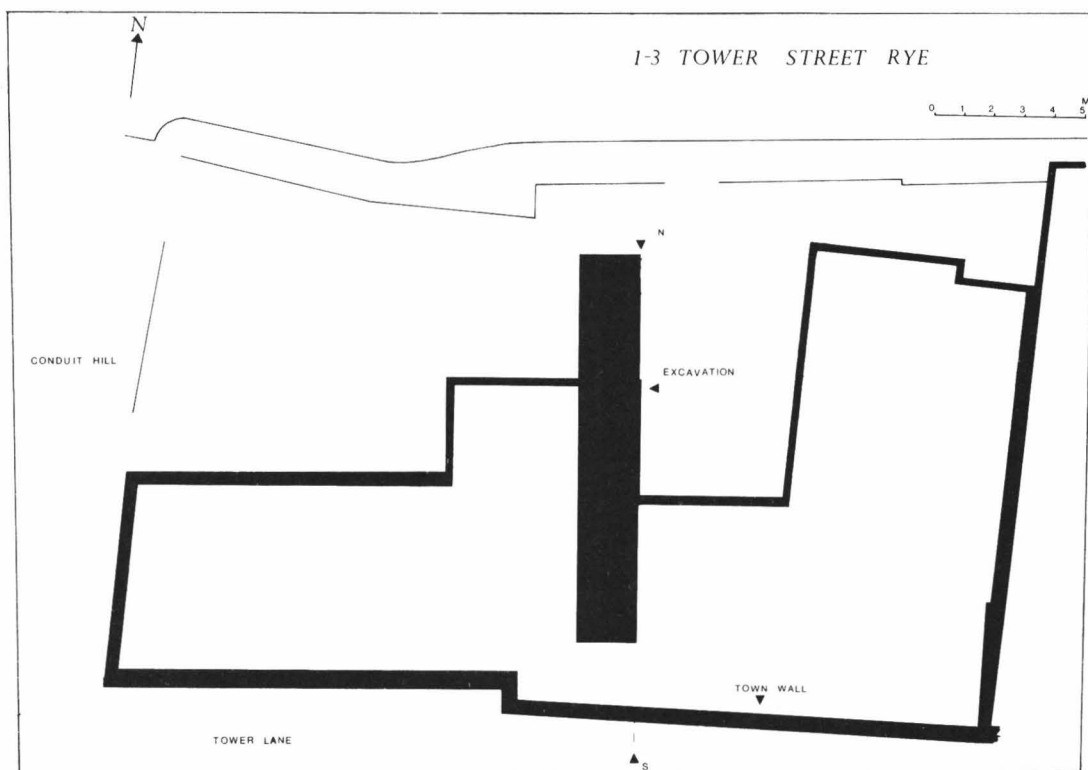


Fig. 10 Rye. Site location.

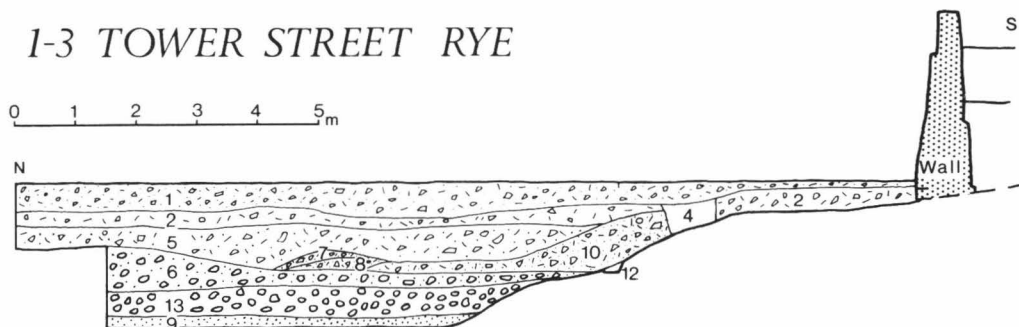


Fig. 11 Rye. Section, including town wall.

a ditch for some purpose ran around at least part of the town wall.

Evidence for an early ditch is not to be realised through the archaeological material owing to the fact that the ditch was kept very clean. Any attempt to elicit proof from the documents is brought into question by the existence of numerous ditches, dykes and gutters mentioned, most of which cannot be located even roughly. Indeed the very fact that the area was being drained from the late fifteenth century at least could mean that no defensive ditches were necessary. Town ditches may be dealing with sewage, drainage or as

enclosures, hence they run north-south as well as west-east. Not even the earliest reference (134/2) can refer to a defensive ditch as reference is plainly made to a 'foss' inside the town.

CONCLUSION

It may be concluded, therefore, that there is no evidence for a defensive ditch in the medieval period although in the late medieval and post-medieval period a ditch existed, probably to carry off excess water. The potential defensive nature of this late ditch may be

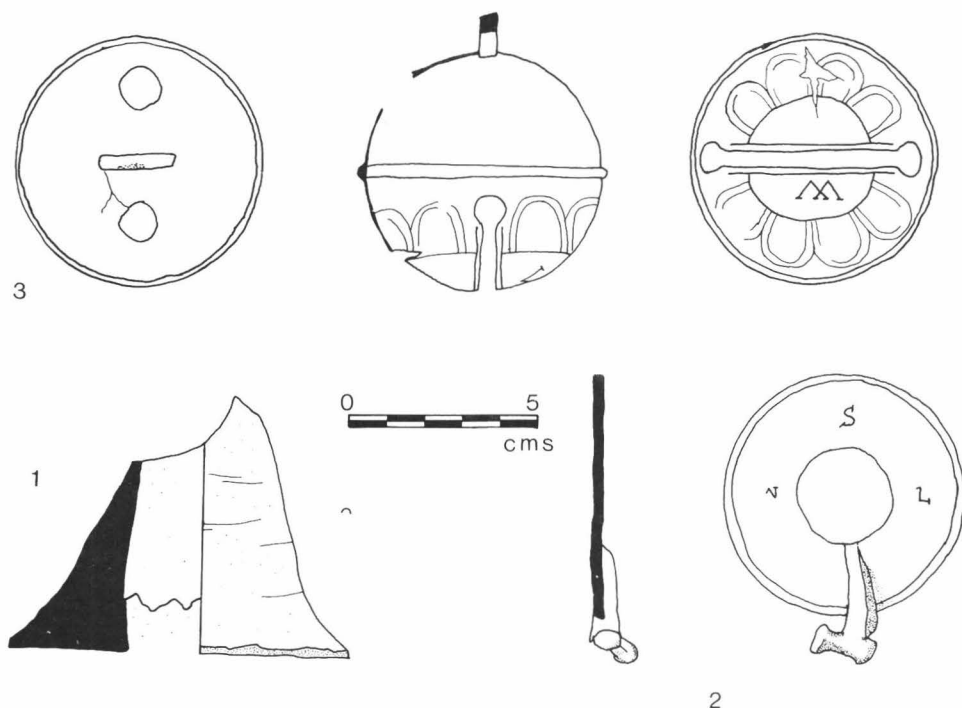


Fig. 12 Rye. Small finds.

recognized as the houses in that area were liable to be demolished if the town were attacked.

FINDS

This is only a selection of the total finds based on their stratigraphic or individual significance. A full list is deposited with the finds themselves and other archive material.

Pottery

1. Fragment, hard grey-white fabric with mica and fine sand inclusions; light green glaze; French probably Saintonge. Late thirteenth century. 2g. Context 1.
2. Fragment, the same. Rim sherd of jug. 5g. Context 5.
3. Fragment, hard grey fabric; grey and blue glaze; Westerwald stone ware 2g. Context 6.
4. Fragment, hard grey fabric; brown salt-glaze; Rhenish stoneware. Late fifteenth century. 10g. Context 9.
5. Base of candlestick, soft pink fabric with medium flint, grog and sand inclusions; light green splash glaze; local. Late seventeenth century. 170g. Context 9. Fig. 12 No. 1.

Clay Pipes by R. G. Stapley.

Sixty-five fragments of clay pipe were submitted, of which 58 were undatable.

6. Context 4. Small bowl with small, flat heel and rouletted rim, c. 1600-40.

7. Context 5. Large, thin bowl, c. 1820-40; short, thin bowl, c. 1780-1820; bowl with large spur initialled 'IW', John Walker?, c. 1798.
8. Context 6. Small bowl with heel, late seventeenth/early eighteenth century; stem and heel, c. 1680-1710.
9. Context 7. Tall bowl, initialled 'IW', c. 1780-1820. (Oswald 1975).

Metalwork

Context 6.

10. Pewter lid, initialled 'N S L', seventeenth-eighteenth century mug lid six centimetres in diameter, 75g. Fig. 12 No. 2.
11. Fish hook, a non-ferrous metal, the hook is not barbed and the end is beaten flat, the top of the shank has a round pin-like head.

Context 7.

12. Two cow bells of a type made in Shaftesbury, Dorset between the late seventeenth and the late nineteenth century, grooved decoration of arcading around the lower half, one initialled 'W' (165g.), the other 'WG' (95g.), the latter illustrated. Fig. 12 No. 3. (Identified by V. and A. Metalwork Department).

Coin Report by D. R. Rudling.

Context 6.

13. A George II (1727-60), copper halfpenny. Old bust (1740-54), 174?. Condition: extremely worn.

Glass by J. D. Shepherd

14. Base of bulbous flask. Fifteenth-seventeenth century. 25g. Context 5.

Stone

15. Part of roofing slate with peg-hole. 185g. Context 7.

The animal bones by M. J. Kylo

The animal bone collection from the excavation of the Rye town ditch, though relatively small, was unusual in nature. It was therefore considered worthy of examination even though it dates from the mid-eighteenth century.

There were 474 identifiable bones and bone fragments—of which 254 were sheep metapodials—and 84 other fragments, including ribs and vertebrae (Table 1). Minimum number of individuals and meat weight calculations were considered inappropriate for this collection. Metrical analyses of the sheep metapodials have been archived. Most of the bones were from contexts 6 and 7, in which animal species were represented in similar proportions. Though probably not deposited at the same time, all layers are from the same period and will be treated as one group for the rest of this report.

ACKNOWLEDGEMENTS

Thanks are due to the landowners, the Sussex Housing Association for the Aged for permission to excavate, and Mark Roberts and Mark Renkin for their help excavating. Thanks are also due to D. Rudling, Mrs. M. Kylo, J. Shepherd, for their specialist reports and P. L. Drewett for his help and advice. In addition, Mrs. M. Kylo would like to thank Pat Stevens and Dale Serjeantson for their help and encouragement in the preparation of her report.

The finds are deposited in Lewes Museum. The large quantity of leather is at the moment being conserved and will be published later.

James Hadfield

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TABLE 1 Species by context

Layer	4 No.	6 No.	%	7 No.	%	10 No.	12 No.	Total No.	%
Cattle	3	69	20.1	35	29.4	—	1	108	22.8
Sheep	2	221	64.4	69	58.0	6	—	298	62.9
Pig	—	6	1.8	1	.8	—	—	7	1.5
Horse	—	36	10.5	10	8.4	—	—	46	9.7
Dog	—	9	2.6	4	3.4	—	—	13	2.7
Cat	—	2	.6	—	—	—	—	2	.4
	5	343		119		6	1	474	

The distribution of bones present reveals this to be an unusual deposit, 83% of the sheep bones being metapodials. There is a wide range in size of fused bones, the average being larger than at either Exeter or King's Lynn. An explanation for the high proportion of sheep metapodials has not yet been discovered. Though metapodials were often used for bone-working there is no evidence for it here. They are possibly refuse from a tannery, as leather was also present, or a slaughterhouse, except one would expect more phalanges to be present. None of the metapodials appear to be cut, but about one-third are abraded or flattened, possibly as a result of prolonged exposure.

A large proportion of the cattle bone is from high quality cuts of meat, with butchery frequently evident. Almost 70% was from categories 2 and 3, the best cuts, as described by Maltby (1979). Pig was poorly represented but 86% of the pig bone was from these categories. Bone from these animals appears to be domestic refuse. A relatively high proportion of horse bone was present (9.5% at Rye as against 0.07% at Exeter (Maltby 1979) and 2.4% in King's Lynn (Noddle 1977). The radii indicate the minimum presence of six individuals, femur members indicate four individuals. There was no evidence for horse butchery.

References

- Aldsworth, F. and Freke, D. J. 1976, *Historic towns in Sussex*.
 Dell, R. G. 1962. *The records of Rye Corporation* Lewes.
 Gallois, R. W. and Edmunds, F. H. 1965 *The Wealden district*, 4th edn. London.
 Holloway, W. 1847. *The history and antiquities of the ancient town port of Rye Sussex*.
 Maltby, M. 1979. *The animal bones from Exeter 1971-1975* Exeter Archaeological Reports, vol. 2.
 Noddle, B. 1977, 'Mammal bone', in H. Clarke and A. Carter, *Excavations in King's Lynn 1963-1970* Society for Medieval Archaeology monograph.
 Oswald, A. 1975, *Clay pipes for the archaeologist*, British Archaeological Reports 14 Oxford.
 Page, W. 1973, *Victoria County History*, vol. IX.
 Payne, S. 1969, 'A metrical distinction between sheep and goat metacarpals', in P. J. Ucko and G. W. Dimbleby (eds.), *The domestication and exploitation of plants and animals* Duckworth.
 Turner, H. L. 1970, *Town defences in England and Wales* London.
 Vidler, L. A. 1934, *A new history of Rye*.

HISTORICAL NOTES

This section of the *Collections* is devoted to 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.

New Light on the Deprivation of Puritan Ministers in Sussex After the Hampton Court Conference

It has always been known that a number of Puritan ministers in Sussex were deprived of their benefices after the Hampton Court conference but there has been uncertainty about the form taken by the deprivation. R. B. Manning in *Religion and Society in Elizabethan Sussex* (1969) 211, after some discussion, concludes that 'although [the sentence was] most certainly carried out by the authority of Bishop Watson . . . the actual deprivations were most likely pronounced by lieutenants of the metropolitan acting as commissaries of the bishop of Chichester'. There is, however, evidence that the sentences were actually pronounced by Watson himself despite the infirmity which afflicted him in the last months of his life.

Four cases brought in the Exchequer by English bill make the position clear and also cast an interesting new light on the puritans own reaction. Watson sat in person at East Grinstead on the last day of April 1605, assisted by John Drury, doctor of laws, his commissary, Thomas Pye, doctor in Divinity, Lawrence Barde, doctor in Divinity, John Mattock, bachelor in Divinity and 'sundry other preachers and ministers of the word of God'. Those who would like to rescue Watson's reputation from the accusation of utter negligence could draw, perhaps with due caution on the alleged 'mild and charitable' advertisements and admonishments which Watson was said to have made to the ministers at earlier dates, inviting them to 'subscribe and conform . . . to such articles, rites and ceremonies as are set down and established by his majesties said laws and ordinances touching ecclesiastical government'. The failure of these preliminaries, however, resulted in the decree of April 30 suspending them from their ministry and depriving them of their benefices.

Watson was using his ordinary power as bishop in taking this action. The defence of their subsequent conduct produced by the four deprived ministers involved in the exchequer action, Christopher Goldsmith, Stephen Gough, Stephen Vinall and John Warren, is precisely that Bancroft, having 'a purpose and intent (according to his plan to visit the state, persons and causes ecclesiastical of the county of Sussex and diocese of Chichester) . . . some time before the said pretended sentence of deprivation, did lawfully and absolutely . . . inhibit and prohibit the said bishop of Chichester from the execution of all jurisdiction and authority ecclesiastical within the said diocese of Chichester (which was in force at that time).¹ It seems unlikely that so gross a censure of Watson's capacity would not have been included in the archbishop's register, but the Puritan ministers, at least as a delaying tactic, had on these grounds appealed to the Archbishop's court of the Arches where, on June 9 1606, the cases still remained, they claimed, unheard. Until the archbishop had decided, the clerics asserted

that the induction of any successor and his collection of revenues would be invalid.

The four patrons of the advowsons, Sir Thomas Shirley at Steyning, Sir Edward Montague at Hellingley, the college of St Mary Magdalene at Bramborough and Sir Edward Lewknor at Kingston Bowsey, had taken the sentences as definitive, however, for they had nominated new ministers. Three of the four new men were reputable scholars. Jonas Michael, nominated at Steyning, was a Master of Arts and 'a public preacher lawfully authorised'; Thomas Lancaster at Hellingley and Nathaniel Virtue at Bramborough were Bachelors of Divinity. Only John Postlethwaite at Kingston Bowsey was 'minister' alone. All could enter bills in the Exchequer because they could claim that their ability to pay the king's First Fruits and Tenths was affected by the recalcitrance of their predecessors. All had certainly been put to some expense.

Jonas Michael's case is the fullest and most interesting—revealing as it does the possibilities of obstruction inherent in the range of different processes and courts available to the would-be litigants. Michael claimed to have been inducted at Steyning on 25 October 1605 in the presence of his predecessor, Stephen Vinall, but to have agreed, at the request of Sir Thomas Shirley, the patron of the living, to permit Vinall to continue to live in and use the vicarage house and pasture ground of the vicarage until the following Lady Day. During that time Vinall evidently changed his attitude and refused to leave on Lady Day. Michael then sued the writ *De Laica removenda* out of Chancery and the sheriff disseised Vinall at the beginning of March. Vinall then sued an affidavit in Kings Bench, obtained a writ of restitution and had this, in turn, executed at the end of May so that he was put back in possession. Michael immediately obtained *subpena* in the Exchequer and, summoned by the writ, Vinall swore the oath affirming the truth of his reply, on 9 June 1606.

The disruption had affected the holding of services in the busy market town and the baptism of children, for which each party blamed the other. The cases comprise bill and answer only and there is no surviving decree on the Exchequer, probably indicating that it was pursued no further, doubtless because Bancroft upheld Bishop Watson's sentence, depriving the puritans of their tenuous legal foothold.¹

Sybil Jack

¹The cases are to be found in Public Record Office: Exchequer Bills and Answers Sussex James I and VI E112/166, 170, 171, 173.

Chimney-pieces at the Royal Pavilion, Brighton

Illustrated (Fig. 1) are two from a group of five sepia pen and wash drawings of the Victorian chimney-pieces at the Royal Pavilion.¹ Dated 1851, they are noteworthy

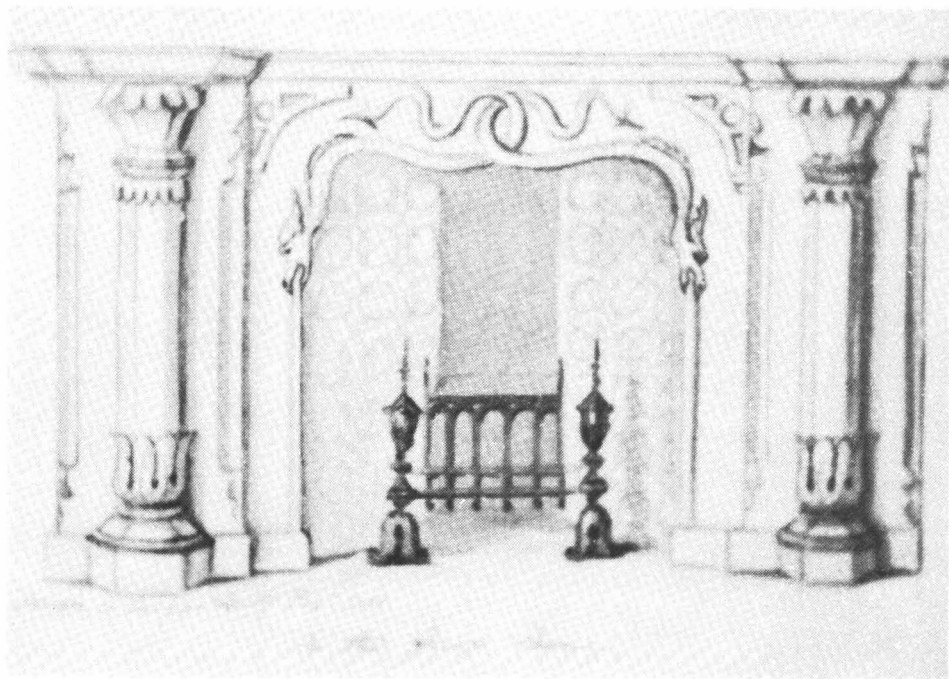


Fig. 1

because no contemporary plans or working drawings are known to have survived and the identity of the designer has been noted only in passing both by Henry Roberts and Clifford Musgrave in their detailed studies of the building. The sculptor John Thomas (1813-1862), was a protégé of Sir Charles Barry; Dr. Musgrave mentions him as having 'apparently carried out work in the Houses of Parliament'. In fact all the interior carving there is his, as are the statues on the North and South fronts. He was further responsible for a considerable number of designs for public buildings and railway stations. In 1848 he supplied two statues, 'War' and 'Peace', for the Prince Consort and the following year a chimney-piece with Shakespearean motifs for Isombarud Brunel. At the time of his death he was working on a chimney-piece for Windsor Castle.

The Pavilion chimney-pieces are recorded in the MS. Notebook of Dr. William King M.D., a Town Commissioner and member of the Royal Pavilion Committee, which supervised the restoration and redecoration 1850-1851.² He supplies the following list: 'Mr. Thomas:

2 Chimney-pieces in Banqueting Room	85
2 in Banqueting Gallery	50
1 in Saloon	37
2 in North Gallery	28
2 in Music Room	50
2 in Ladies Cloak Room	42
Fixing and painting	30
4 Long Gallery	15
	£322'

The entry for the Long Gallery is scratched out and not included in the total, so presumably Thomas supplied ten pieces in all. The original chimney-pieces and hearths installed for George IV had been removed during the ruthless dismantling when the building had ceased to be used as a royal residence. In 1850 it was purchased by the town, and in September of that year it was decided to spend £4,500 on immediate repairs and renovating ten rooms for use as a public amenity. At the Opening Ball on 21 January, 1851, both Thomas and R. A. Stickney, the town surveyor, received praise for the 'skill and taste in the selection of the style of . . . the beautiful and highly wrought marble pieces . . . they are quite unique and reflect much honour on this branch of English art'.³

Thomas's designs are carried out in Caen stone and, complying with the strictures of the Pavilion Committee, 'the chimney-pieces, of course, are not so costly . . . as the originals'. Dr. King's report to the Town Commissioners, 6 September 1850, had stipulated that 'the object of the Committee will be to get the work done in the best manner and at the least cost'. Dr. Musgrave accords them a degree of qualified praise: 'Though lacking the finesse of those Holland designed, they too have a robustness and vitality and the designs are carried out in a fashion sympathetic to the material'.⁴ Thomas employed the dragon motif for the Music Room piece, and in the Banqueting Room the gigantic plaitain leaves on the painted, domed ceiling are echoed in the spandrels of the fireplace arches.

The pen drawings form a group of five, most probably part of a complete series illustrating the pieces Thomas supplied. Each is inscribed 'drawn by George Ruff, Feb 1851', with the name of the appropriate room. Ruff appears to have been a builder, of 28 Upper Rock Gardens.⁵

There is no evidence that he was in any way involved with the renovation work, although that would have explained his interest in the interior, apparently accessible to the public after the Opening Ball in January 1851, in spite of the fact that some work was still going on. The drawings of the Music Room and South Drawing Room pieces are of particular interest; these have now, in their turn, been replaced with replicas of the originals as they appeared in Nash's *Views of the Royal Pavilion* and Thomas's pieces can no longer be seen by the public. (The remaining three drawings in the group are of the Banqueting Room, Saloon, and North Drawing Room pieces, all of which are in-situ.) The original for the Music Room came from the workshop of Sir Richard Westmacott R.A. (1775-1856) and is now in the Chinese Room at Buckingham Palace. He received £1,244 2s. 6d. for it, and the replica in its place in the Music Room today does credit to it in authenticity of detail if not materials. The originals in the South Drawing Room, in white statuary marble with ormolu embellishments, to designs by Robert Jones have been reconstructed from those shown in the aquatints in the *Views*. Their present whereabouts are unknown.

J. A. Kiechler

References

¹Private collection.

²Brighton Reference Library, SB97 24006, p. 62.

³Brighton Reference Library, SB9 SM1, 'History of the Royal Pavilion', 3, Contemporary press cuttings.

⁴Clifford Musgrave, *Royal Pavilion, a study in the Romantic* (1951).

⁵*The Court guide and general directory for Brighton* (Brighton: Robert Folthorpe, 1850, 1852).