

NOTES

A MESOLITHIC AXE/ADZE FROM NONSUCH PARK

A mesolithic flint axe/adze (fig 1) was picked up by Mr S. Norman in 1971, on ploughland close to the railway cutting which skirts the southern boundary of Nonsuch Park (TQ 232627). A patch of Thanet sand outcrops on and above the 61 m contour at this point, and the ground slopes steadily away to the east and north-east, although more gradually to the north and west.

Measuring 157 mm in length the implement is of blue-grey flint with a heavy yellow-brown surface patination. The flake-work is typically mesolithic in quality, with portions of cortex remaining on one face and around the butt, although the characteristic mesolithic cutting edge, produced by a transverse sharpening blow (the 'tranchet' technique), is not present on this example.

Mesolithic material has been found at several points within Nonsuch and Cheam Parks in the past,¹ and includes a collection of two tranchet axes² with cores, blades and waste flakes recovered from the field adjacent to the Nonsuch County School playing fields, 500 m to the north-east of the present find (TQ 235631).³ Further scatters of mesolithic material have been discovered on the other Thanet sand outcrops that run south-west and north-east from Ewell, and on the alluvial deposits in the valley of the Hogsmill river to the north-west.⁴

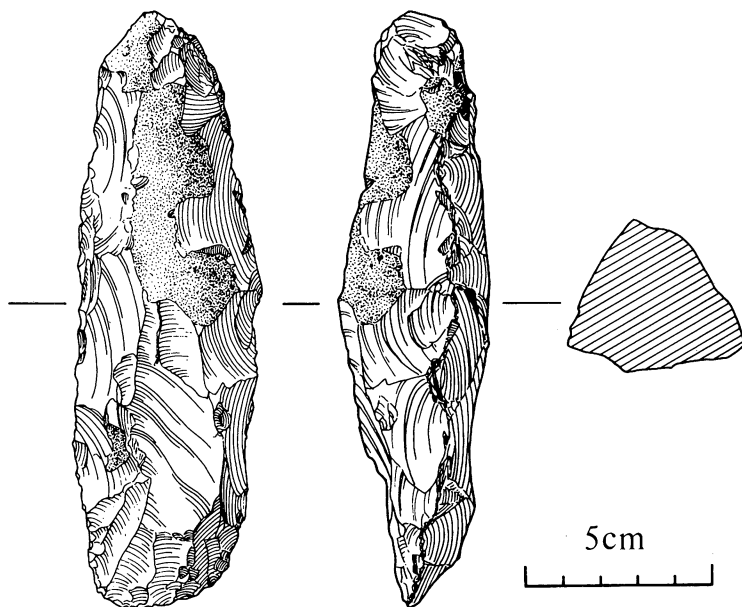


Fig 1 Mesolithic axe/adze from Nonsuch Park. Scale 1:2

I am grateful to the finder, and to the Museum Officer of the Bourne Hall Museum, S. Kahn, for permission to place the find on record. Thanks are also due to J. Barfoot for his comments on the implement, which is now on permanent loan to the Bourne Hall Museum.

References

- 1 eg TQ 226630 and TQ 239637, Wymer, J.J. (ed) *Gazetteer of Mesolithic sites in England and Wales*, 1977, 272. (CBA Research Report 20)
- 2 One of which, found in 1938 and now in the Bourne Hall Museum, was published by A.W.G. Lowther in *SyAC* 50 (1946-7) 19, fig 8
- 3 Carpenter, L.W. 'Some Mesolithic sites in north east Surrey'. *Archaeol News Letter* 6 (1958), 156; Wymer, op cit, 272
- 4 eg Carpenter, op cit, 155-6

JONATHAN COTTON

A NEOLITHIC ARROWHEAD

A beautifully made flint arrowhead was found about twenty years ago on the chalk ridge which forms part of the Pilgrims Way between Merstham and Warwick Wold. The exact find spot is not known as the trackway itself is lost at this point. It was a surface find.

The arrowhead is triangular in shape with a tang and measures 20 mm long by 18 mm wide by 4 mm thick, tapering to a sharp point. The tang is 7 mm long. It is rendered almost flat by the removal of a large flake from the convex side and is completely retouched on both sides, the edges being semi-polished. The flint is pale grey and is thin enough to be almost transparent. It has been examined in the Department of Prehistoric and Romano-British Antiquities of the British Museum and the suggested date is 'later Neolithic'. It is a very fine example of its type. (See fig 2.)

It is now in the East Surrey Museum.

L.L. KETTERINGHAM

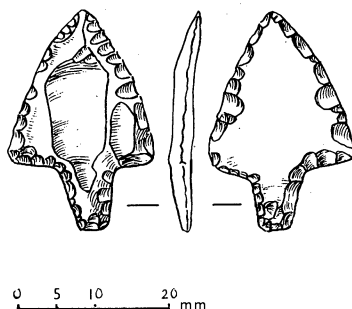


Fig 2 Neolithic arrowhead from Merstham. Scale 1:2

A FLINT DAGGER FROM WARLINGHAM

About forty years ago a very fine flint dagger datable to the Early Bronze Age was found on the surface of a field near Slines Oak, Warlingham (TQ 375581). It is of the Scandinavian pattern, finely pressure-flaked on each side of the leaf shaped blade which blends into a short, strong handle. The blade measures 90 mm from point to handle by 33 mm at its widest part. The edges are beautifully graduated, straight and sharp. They show no sign of use. The handle measures 62 mm to its longest point by 18 mm at its widest. It terminates at an angle above which the shorter edge is closely step-flaked, forming a blunter and more comfortable grip in the palm of the hand. It is oval in section. The total length of the tool is 152 mm. (See fig 3.)

The flint from which this tool is made is apparently local, identical to the majority of the nodules found in the area. It is a light greyish brown and contains many light blotches caused by fossilized inclusions. These do not weaken the flint.

This small dagger or knife has been examined by the British Pre-History Department of the British Museum where it was pronounced to be a very fine example of its type. They had no explanation to offer about its non-British design but did not see why it should not have been made in England, in this case probably close to the site where it was found. There is no patination on the flint,

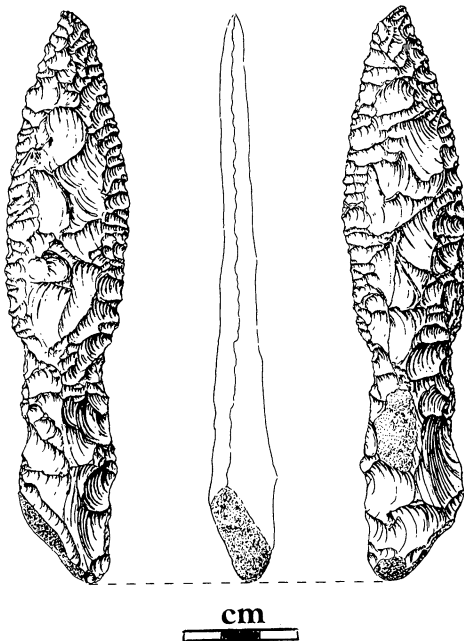


Fig 3 Early Bronze Age flint dagger from Warlingham. Scale 1:2

which is characteristic of other post-Ice Age flints from the area, although those found on the chalk bear heavy white patination.

Similar examples (both Danish), are illustrated in *Man the Toolmaker* (K.P. Oakley, 1967, 31), and in *Flint Implements* (British Museum Publications, 1968, Pl V). In both cases the handles are about equal to that of the Warlingham dagger but the blades are longer.

This dagger is now in the custody of the East Surrey Museum.

L.L. KETTERINGHAM

A FURTHER INVESTIGATION ON THE SITE OF THE CARSHALTON HILL-FORT

The Ordnance Survey (1962, 35) lists a multivallate hill-fort of over 15 acres in Carshalton, centred on TQ 269 640. This attribution is based on a report of a 'camp' (Birch 1925), which itself was partly based on earlier observations. Excavations carried out in 1961 (Turner 1963) revealed only a positive lynchet at a site originally recorded as a bank and ditch, leading to the conclusion that the 'camp' was not a hill-fort but a 'field system of indeterminate age'.

A further opportunity to examine the supposed line of the bank and ditch came in 1975, when the site of 129/133 Carshalton Road and 1/3 Sutton Grove was redeveloped. The subsoil here is Chalk, covered by between 0.4 and 0.9 m (1 ft 3 in and 3 ft) of garden soil. Examination of the builders' trenches in the northern part of the site revealed one large pit, six small pits and four gullies, all of unknown date. More significantly, there was no evidence for either a large ditch or a bank. The evidence from this site reinforces Turner's conclusion (see above), and it seems very unlikely that a hill-fort exists in this area.

Copies of the archival ('level 3') report have been deposited with:

Beddington, Carshalton and Wallington Archaeological Society,
South-West London Archaeological Unit,
Surrey Archaeological Society (Castle Arch),
Sutton Libraries and Arts Services (Sutton Central Library).

Acknowledgements

This work was undertaken by Clive and Jean Orton on behalf of the Beddington, Carshalton and Wallington Archaeological Society, with assistance from Miss M.P. Hayman. The builders, C.D. Mitchell Ltd., kindly allowed observation and surveying to be carried out during the early stages of building.

Bibliography

- Birch, Mrs J.E. 1925 'A Carshalton camp.' *SyAC* 36, 102-6.
Ordnance Survey 1962 *Map of Southern Britain in the Iron Age*.
Turner, D.J. 1963 'Excavations at Carshalton, 1961.' *SyAC* 60, 50-3.

CLIVE ORTON

A NEW HELLENISTIC MIRROR IN THE BOURNE HALL MUSEUM, EWELL

Among the collections in the Bourne Hall Museum, Ewell, is a simple bronze disc mirror of diameter 10 cm and depth 0.3 cm. The reflecting surface is flat and undecorated, but the underside is ornamented with three irregularly spaced series of spun concentric circles (fig 4).

The piece was in poor condition when first recognized in 1977, as patches of the original protective patina had been stripped off, leaving the raw bronze to be attacked by bronze disease. This has since been successfully arrested in the Conservation Laboratory of the Institute of Archaeology, London (see below), although both faces are extensively pock-marked as a result. Following conservation, the mirror has been returned to the Bourne Hall Museum.

Erroneously attributed to the small Iron Age and Romano-British settlement excavated in the grounds of 'The Looe', Reigate Rd, between 1946 and 1949,¹ its provenance is unknown, as are the means by which it reached the museum. It is here assumed to be a collector's piece presented to, or acquired by, the museum, and not a local find as has been supposed in the past.²

Despite its rather sad condition, the mirror is extremely interesting and can be paralleled by a number of similar pieces from museums in this country and abroad. Few of the mirrors from British collections are adequately documented, although two pieces, a little larger than the Bourne Hall mirror, now in the Victoria and Albert Museum, London (nos 408B.1883 and 408D.1883), are said to come from Episcopi, near Salamis in Cyprus. Another piece, formerly in the old Guildhall Museum, London (no 585), is thought to have come from Italy. There are also two unnumbered examples in the Jewry Wall Museum, Leicester; one from the Bowly Collection, now in the Corinium Museum, Cirencester (no B2864); a damaged example in the Fitzwilliam Museum, Cam-

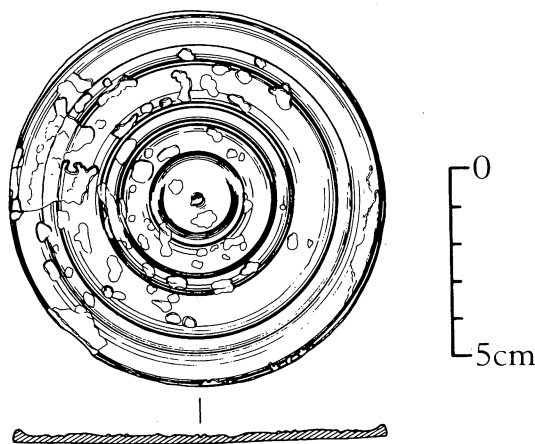


Fig 4 Hellenistic mirror from Bourne Hall Museum. Scale 1:2

bridge (no E.MW.47); and two related pieces in Birmingham City Museum (no 152'48, and the archetype for the whole group, no 339'57).³

Not all the pieces from foreign collections are provenanced. Some, like two examples in the Netherlands, have a supposed local provenance (Nijmegen no XXI.f/C.1; Leiden no e1948/8.3), while others, such as Karlsruhe no F2063, or Palermo no 797, come from private collections, the Stützel and Astuto Collections respectively, or may simply have no provenance at all, for example the delightful piece in the Römisch-Germanisches Zentralmuseum, Mainz (no 0.38830).

Fortunately, there are a moderate number which do have a provenance and a suggested date. Three examples, now in the Antiksamlingen of the Nationalmuseet, Copenhagen, come from Greece, two from Seriphos (nos ABa 268 and 269) and the third from Locris (no 1046). Another mirror from Greece now in the Kestner Museum, Hanover (no 1929.147), has been dated to the second or first century BC.

The largest collection of these pieces is, however, in the Museo Archeologico, Syracuse. Three pieces (nos 40020, 40028 and 40034) come from excavations in the Canalicchio cemetery, near Syracuse, and have been dated to the fourth to third centuries BC. Two other pieces (nos 33728 and 33729) come from Grammichele, Caltagirone; a sixth piece from Saubero on the Syracuse-Florida road (no 33762); and a seventh piece comes from the Greek city of Morgantina in the centre of Sicily (no 32276). A badly corroded mirror from excavations at Spinazzo in 1920, and now in the Paestum Museum (no 792) might also be included here. It is said to come from a third century BC Lucanian tomb.

Finally, a slightly larger mirror, but of the same general appearance, was found during recent excavations in Benghazi. A date somewhere in the last three quarters of the first century BC has been suggested, although, as with all grave finds, the date of manufacture could be very much earlier.

On present evidence it appears that the Bourne Hall mirror is not of Roman or recent origin as has been suggested, but belongs to a modest group of some thirty simple bronze mirrors which were circulating in the central Mediterranean area during the Hellenistic period. Although most of the provenanced pieces come from Greece or Magna Graecia, it would be unwise to suggest a place of origin or workshop on such slender evidence. It seems likely that the Bourne Hall mirror was acquired during a visit to southern Europe, and it is only to be regretted that such an interesting item has so little documentary history.

Conservation and technology, by Paul M. Barford

This object arrived at the Conservation Laboratory of the London Institute of Archaeology (Lab no 3136) showing advanced stages of active 'bronze disease' at many points on the surfaces, and especially around the rim. The original corrosion products had been removed chemically in the past, almost certainly by an acid. This had etched and pitted large areas of the metal surface, although patches of the more resistant cuprite (red, cuprous oxide) remained. In some areas, mainly on the front (polished) face, this cuprite had been roughly ground down, close to the original surface.

It is likely that the original surface, just above the remaining metal, was well-preserved originally, although there were regions of pitting which were due

either to underground corrosion, or a previous attack of bronze disease. It was these pits that were cleared out by the chemical stripping, which often removes all the corrosion products down to the bare metal — thus eating through any surfaces or other evidence preserved in the corrosion layers. The metal itself sometimes conforms closely to the original surface (as in this case), although often it does not. For objects with the surface preserved in the middle of corrosion products, mechanical methods are often the only way to recover the evidence.

The process of mechanical cleaning is in many ways very similar to the excavation of an archaeological site. The work is done on a minute scale, with small tools, such as scalpels and needles, under a binocular microscope.

On the object being discussed, a fairly standard procedure was used. The remaining cuprite was removed easily from the surface, revealing a layer of copper redeposited by the chemical treatment, which was much more difficult to remove. All traces of the bronze disease (which had developed mainly in the bases of the pits and also at the edges of the cuprite patches) were removed. Further corrosion was inhibited by vacuum impregnation with a 3% alcoholic solution of Benzotriazole (BTA). This probably combines with the cuprous chloride (which appears to be the source of 'bronze disease') to form a stable complex in a thin film, which is then protected with an acrylic lacquer also containing the inhibitor BTA ('Incralac'). The undesirable gloss and texture of the lacquer is removed by the addition of a finely divided matting agent.

The probable process of manufacture could be determined by close examination of the mechanically cleaned areas. The main feature observed was, however, due to the etching effect of the chemical stripping. This was the large size of the dendrites (in excess of 9 mm at the centre, becoming slightly smaller around the edge). These are evidence of casting, and their size is due to the rate of cooling of the molten metal. They are often much smaller when cooled at the contacts with the mould, although this 'chilled margin' was absent from the present object. The metal was probably poured into an extremely hot mould and allowed to cool slowly. Also, it is obvious that the cast blank was thicker and larger than the finished object, and because of this, it is not possible to say what type of mould was employed. The alloy used was a low tin bronze (not a speculum).

The blank was cut to the required shape on a lathe, the front made smooth (although it is just slightly convex), and the decoration added to the back, where the centering mark remains. The turning is very well done, except perhaps on the edge and rim, although this is much corroded. The front was very finely polished, so much so that there were no marks at all to suggest how the operation had been carried out. The state of preservation of the dendrites indicates that the blank had not been cold worked or had any form of heat treatment.

Acknowledgements

Our thanks are due to Sean Kahn, Museum Officer of the Bourne Hall Museum, for making the mirror available for study and publication; to Ina Godman, Rosamond Hanworth and Tom Walls for their enquiries and information regarding the mirror's provenance and documentation; and to Paul Barford of

the University of London, Institute of Archaeology, for undertaking the work of conservation.

References

- 1 *SyAS Bull* 145 (March 1978), 3–4, see also above, p 232
- 2 No additional information has resulted from a published appeal (*SyAS Bull* 153 (January 1979), 3–4), although Tom Walls informs us that the Glyn family, formerly of Church Street, Ewell, were enthusiastic travellers, and it seems possible that the mirror was brought back by one of them from a trip abroad. In the absence of further information, however, the question must remain open.
- 3 Lloyd-Morgan, G. 'Four mirrors in the City Museum and Art Gallery, Birmingham.' *Papers of the Brit School at Rome*, 43 (1975), 80–2, Pl III, gives a full discussion of the group.

G. LLOYD-MORGAN AND JONATHAN COTTON

RECENT FINDS OF ROMAN BROOCHES IN SURREY

The three Roman brooches illustrated (fig 5) have recently been brought to Guildford Museum for identification.¹ Nos 1 and 2 were found c1975 by Mr Dodge on Ranmore Common, an area where no previous finds have been recorded. No 3 was found by Mr P. Alexander² in Rectory Lane, Great Bookham; apart from a coin of Tiberius at TQ 121 535,³ there are no known Roman finds nearby. The brooches have since been returned to the finders.

1 Found less than one inch from the surface at TQ 144 506

An enamelled 'trumpet' brooch of Collingwood and Richmond type R iv,⁴ which is distinguished by the absence of moulding on the back of the bow. The type was mainly produced during the first half of the 2nd century AD.

The brooch now measures 55 mm ($2\frac{3}{16}$ in) overall. It is in good condition, but lacks a small piece of the catchplate and the tip of the pin, and has been slightly damaged at the top left corner. Part of a loop for a chain is attached to the spring. Much of the enamelling survives: the background of the portion above the knob and the whole of that below are in red, with the semi-circular motifs in mid-blue and the lower pair of triangles apparently white; no enamel-survives in the upper triangles.

A close parallel comes from the Thames at London,⁵ but has lost its enamelling; it differs only slightly in the details of the grooving above the knob and round the trumpet. There are two other similar brooches from London⁶ and a third from Allington, Wilts.⁷

2 Found on the surface at TQ 129 509

A 'dolphin' brooch of Collingwood and Richmond type H, current from the mid-first to the mid-second century. The type is very common in Britain.

The brooch survives to a length of 55 mm ($2\frac{3}{16}$ in) overall. It is in fairly good condition, but lacks the foot, most of the pin and pierced catchplate, and part of the spring, and has slight abrasions on the bow. The bow is simple, with a grooved keel from the head to approximately halfway down. The arms each have an incised diagonal groove.

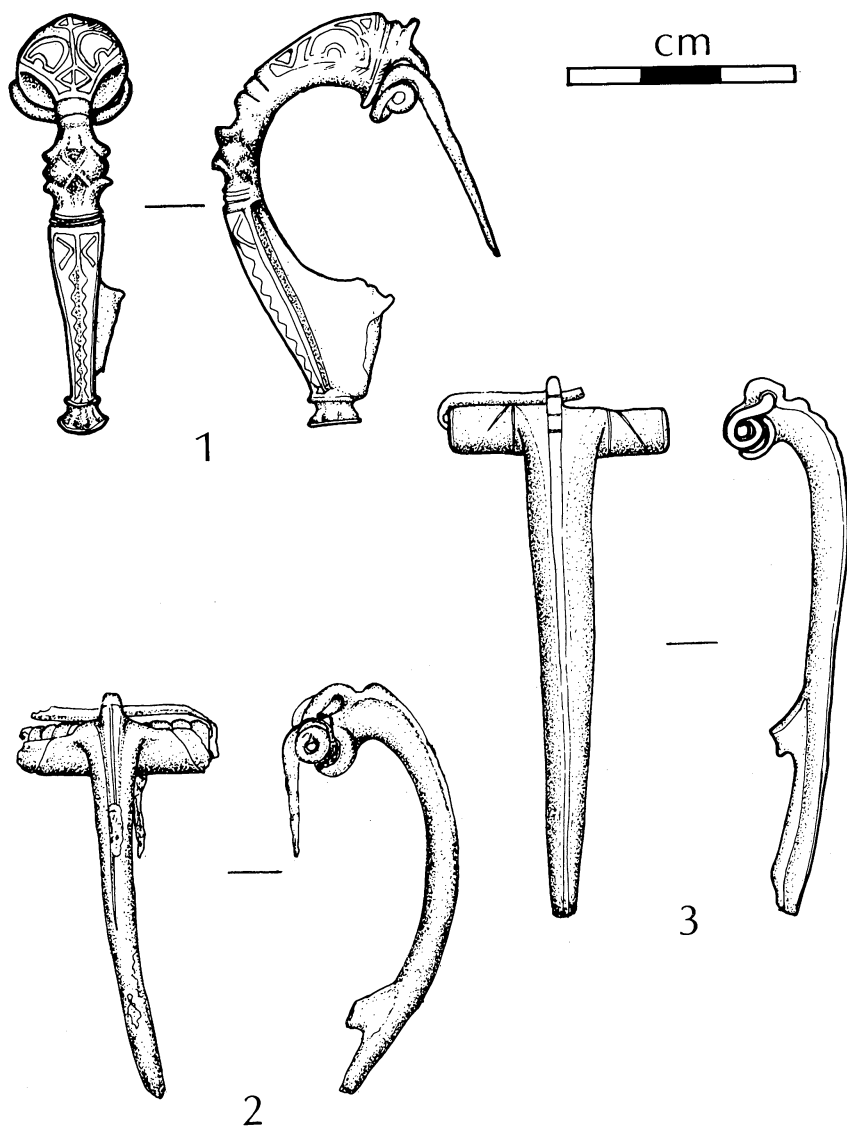


Fig 5 Roman brooches from Ranmore Common (nos 1 and 2) and Great Bookham (no 3). Scale 1:1

3 No detailed information of findspot

A 'dolphin' brooch of the same type as no 2.

The brooch measures 72 mm ($2\frac{3}{16}$ in) overall. It is in good condition, but lacks part of the spring, the pin and almost all the pierced catchplate. The original curve of the bow has been flattened just above the centre. The bow is simple, with a plain keel running the whole length; it has three notches at the head. The arms each have incised lines vertically beside the bow, and diagonally across.

Notes and References

- 1 We are grateful to Mr Dodge and Mr Alexander for making their finds available for study. We would also like to thank Dr Hugh Chapman and Mrs Jenny Hall of the Museum of London for access to the material in their collections, Dr David Bird, County Planning Department Archaeological Officer, who checked for records of earlier finds, and Matthew Alexander, Guildford Museum, for taking the photographs.
- 2 Mr Alexander, the finder, is no relation of the joint author.
- 3 *SyAC* 69, 190.
- 4 The type numbers are taken from R.G. Collingwood and I. Richmond, *The Archaeology of Roman Britain* (1969), chapter 15.
- 5 Museum of London accession no A.20228; *London in Roman Times* (London Museum Catalogue No 3, 1930), 96 and fig 28, no 29.
- 6 Museum of London accession nos 32.2/12 and 82.
- 7 We have assumed Wiltshire to be meant: D. Mackreth, *Roman Brooches* (Salisbury and South Wiltshire Museum, 1973), no 17.

MARY ALEXANDER AND JOANNA BIRD

'SMOKE DEFLECTORS' IN HALL HOUSES

Infilling was inserted between roof timbers to control smoke, either in a hall house, or in a house with a smoke bay. It appears that it often extended to the apex of the roof truss, usually at the 'high' end, or stopped at the collar at the 'low' end. It has also become generally assumed that gablets formed convenient outlets for smoke.

Oaktree Cottage, Dunsfold (TQ 002 360) has what appears to be a rare survival of partitioning combined with the use of a gablet. A similar example is at Lee Crouch, Shamley Green (TQ 028 444).

In the Dunsfold house infilling was inserted in the end-of-hall truss up to the collar, then from the collar the infilling was continued, not to the apex of the roof truss, but to the short 'collar' forming the lower edge of the gablet opening. An inclined trapezium shaped area of infilling was thus formed spanning the distance of some six feet from the collar to the gablet and closing the space up to the sloping sides of the roof. In this way smoke was conducted from the hall across to the gablet without spilling into the upper chamber of the end bay. (See fig 6.)

At Lee Crouch the 'deflector' exists intact, but with a minimum of soot covering, and with little evidence of infilling in the roof truss. At Oaktree Cottage the 'deflector' is also intact but heavily sooted on the upper surface, and much infilling remains in the roof truss.

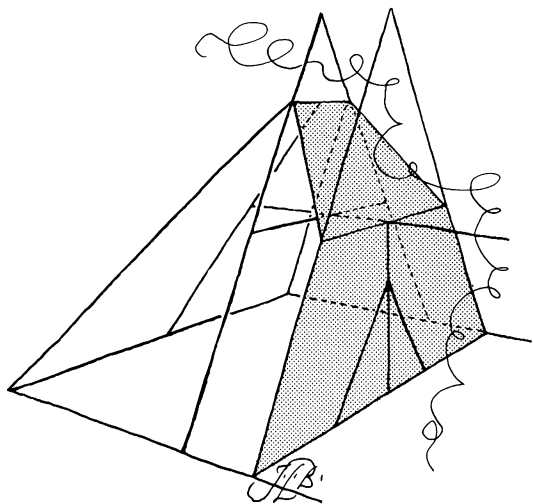


Fig 6 Diagram of 'smoke deflector'

Only two examples have been seen by the writer during the examination of scores of roofs, but this does not prove that the arrangement was unusual. The 'deflector' is an appendage very vulnerable to removal.

JOHN L. BAKER

BEDDLESTEAD FARM, CHELSHAM

Beddlestead Farm is situated near the Kent border of Surrey, one mile south-east of Chelsham (TQ 398 577).

Two Anglo-Saxon land charters in the British Library relating to land between West Wickham and Lewisham, and Edenbridge, mention a place called 'Bipplesteyde' in 862 and later in 987. Granville Leveson-Gower (*SyAC* 6) relates 'Bipplesteyde' with Beddlestead. References are in Kemble, *Codex Diplomaticus* Cat. 287 and 657. It is therefore possible that a house on the site is mentioned in both charters.

It is also mentioned in 1235, 1241, 1255, 1278, 1325 and 1342 in the Assize Rolls in the Public Record Office; and in 1401 (*SyAC* 3, 137) it was owned by John Uvedale and let to Robert Kynesolde and was part of Titsey Manor. The earliest existing building now on the site is of Wealden type c1450, and it is of high quality.

The hall was of two bays; both 'ends' of the house were jettied at the front, but not at the rear. The 'high end', to the east, is missing. The 'low end', which survives, was not jettied at the side. However the existence of an original jetty at the front can be easily traced.

The two hall bays are of unequal length, that at the 'low end' being very much smaller than at the other. This is compensated for by the positioning of the cross-passage in the 'low end', the upper room of which overshoots it.

The positions of the two door openings into the 'low end' can be identified; also the partition that divided the 'low end' longitudinally into two rooms.

The roof is of crown-post construction. The centre truss over the hall has a cambered tie-beam with massive solid braces, and the crown-post is of the rebated type.

There are foundations outside the house which might indicate the position of a detached kitchen.

At around 1550 an early conversion was made to the hall when a ceiling and brick chimney were inserted. There is no evidence of an intermediate smoke-bay stage. The inserted ceiling is of very high quality.

The original 'high end' of the house has disappeared and is now replaced by a small section with a roof type (butt-side purlins not in line) dateable to the late 17th or early 18th century. Beyond this is a wing of early 19th century date which was added at a similar time as the encasing of the old house in a complete 'shell' of flint walls.

The mortar used in this walling is of a type in use before the introduction of 'hard' cements. To help prevent erosion of the mortar joints garreting was done with small flint chips.

About 1900 there appears to have been some repair and restoration.

JOHN L. BAKER

DR WILLIS' VISITATION 1724-25

In Volume 39 of the *Surrey Archaeological Collections* (pp 82-103) H.E. Malden, published posthumously 'Answers made to the Visitation Articles of Dr Willis, The Bishop of Winchester, from the parishes in Surrey, excluding the Peculiars of Canterbury, 1724-25, abridged and annotated, from the MS. formerly at Farnham Castle and now in the Cathedral Library, Winchester'. The original manuscript appears to have been transferred subsequently to Wolvesey Palace, Winchester, and is now in Hampshire Record Office. In the course of correspondence with C.R. Davey, Deputy County Archivist of Hampshire, it has emerged that Malden did not publish the whole of the information which it contained.

Mr Davey writes: 'The abstracts as printed are quite selective. I checked two entries for Addington and Abinger. Addington adds the name of the curate (Robert Talbot, MA), the estimated size of the parish in acres, the average numbers of marriages, births and deaths, and the name of the next post town (Croydon). Abinger is even less fully covered. The original gives the size of the parish, the estimated population (about 60 families and about eight to a family), the name of the curate (William Vaughan), and the nearest post town (Dorking). It adds that there are no schools 'that are endowed', a qualification which in Hampshire has seemed to indicate the existence of at least elementary dames' schools, and gives the name of one of the gentry as 'Ronzier', not 'Rouzier'.

The use of the word 'abridgement', therefore, does not imply, as the user

might have assumed, that merely common form or 'padding' was omitted from his published transcript, and users of that text for any parish would be well advised to consult Hampshire Record Office regarding the contents of the original.

D. ROBINSON

ICEHOUSE AT LYTHE HILL, HASLEMERE

An unusually well-preserved example of a 19th century icehouse has been examined by the Haslemere Group of the SyAS. It is situated in woodland on the NE slope of a ridge of Hythe Beds greensand, about 200 metres SSW of Lythe Hill House (TQ 9138 3179). This house was built in 1868–70, replacing an earlier building of about 1800, known as Denbigh House. It is not known which of these two houses the icehouse was intended to serve.

The cavity of the icehouse is roughly egg-shaped, with the pointed end downwards. The greater part is sunk in the ground, but the dome-shaped roof had evidently been constructed above ground level, and subsequently covered with sub-soil. It is 5.5 m high with a maximum diameter of 3.1 m, built of brick throughout, and when examined was remarkably dry. The lower part of the cavity contained a broken ladder, and much rubbish (including bracken-fronds, which may have been used for insulation). When the rubbish had been cleared, a flat brick floor was revealed, 1.2 m in diameter. The central part of this floor consists of a cement slab, 0.6 m square, in the middle of which there is a circular opening, 0.3 m in diameter, leading to a soakaway about 0.6 m deep.

The cavity is entered through a horizontal passage, the roof of which is level with the top of the dome. The passage is 2.0 m high, 1.1 m wide, and 1.85 m long. At the inner end there is a brick cill, 0.6 m high. There had evidently been a door above this cill, and another at the outer end of the passage, but both had been removed. The entrance to the passage faces NE.

The most unusual feature of this icehouse is the forecourt, which is partly sunk into the hillside outside the entrance to the horizontal passage. It is roughly triangular, the sides measuring 8.0 by 6.7 by 5.8m. The soil of the hillside is held back by dry walls of the local sandstone, which are about 2.1m high by the entrance to the passage, and taper towards ground level at the opposite corner, where there is an opening to the exterior about 1.0m wide. The forecourt has a well-constructed brick floor. We had not found an account of any similar feature associated with the icehouses studied by Yorke¹ in the Midlands, or by Penny² in Dorset, or among the designs for icehouses proposed by Cobbett³ or by Loudon.⁴ It may have been used as a place for breaking up ice before loading it into the cavity.

The bricks used in the construction of the icehouse are uniform, red, without frogs, and measure 22.9 by 10.2 by 6.35cm. They seem to belong to Harley's⁵ group 5.1, and so could have been made during the nineteenth or late eighteenth centuries. They do not show obvious scratch marks, suggesting that the icehouse had not been much used and might have been built more as a status symbol than for utility.

Plans, photographs, and a map showing the relation of the icehouse to the

main building, the contours and the nearby pond have been lodged with the SyAS.

References

- 1 Yorke, F.W.B. 'Icehouses.' *Trans Anc Mon Soc New Ser.* 4 (1956), 123–32
- 2 Penny, A. 'Icehouses in Dorset.' *Dorset Nat Hist & Archaeol Soc* 86 (1964), 203–30
- 3 Cobbett, W. *Cottage economy*. 1926 edition, 183–91
- 4 Loudon, J.C. *Encyclopaedia of cottage farm and villa architecture*. 1857 edition, 363–66
- 5 Harley, L.S. 'A typology of brick.' *J Brit Archaeol Soc* 37 (1974), 63–83

W.R. TROTTER, E.B. TROTTER AND W. HUDSON

EEL TRAP AT NEWARK, RIPLEY

From early times eels taken from English rivers have provided an important source of food. The illuminated Luttrell Psalter of the early 14th century shows eel traps in a mill race feeding an overshot wheel.

It is surprising to find that the method of catching eels in large numbers is not now generally known. The remains of a large eel trap exists at Newark, (see fig 7), almost certainly on the site of the monastic one, and is indicated on a plan in the late Captain Pearce's paper on Newark Priory (*SyAC* 40, 17).

Formerly a large culvert existed under the north/south Pyrford to Ripley road which allowed a now derelict and sometimes empty pool adjacent to the road on the east side to be kept filled to a level controlled by the sluice gates in the main River Wey on the west side of the highway. At any time when eels were needed, and especially when the moon was full or after heavy rain, when eels would be moving in large numbers, the sluices in the main weir would be shut as far as practice allowed and a sizeable flow of the river diverted under the roadway and into the eel pool, carrying with it the eels in their urge to move down stream.

The water in the eel pool passed through a sluice gate with sophisticated gearing dated 1818 by Sharp into a small brick bay with parallel sides, floored with a strong iron grating supported on girders at an inclined plane, and sealed by a further iron grating at the far end. The water passed through on its way, the eels were stranded on the grating and in their struggles eventually wriggled through an opening in the brick wall into a more secure prison consisting of another grilled compartment with running water which, in turn, was connected to a deeper well or pit where they could be kept alive for a few days prior to consumption.

The lower courses of the brickwork of the Eel Trap appear to be contemporary with the iron sluice gate and gearing, or earlier. The upper courses may have been reset, and a rustic inscription dated 1909 in wet cement bearing four names, some of which are still names in the local building industry, confirms this.

The authors are privileged to know the custodian of the Eel Trap at Fullerton Mill, Hants, which is of similar construction and still annually takes many hundreds of eels from the River Test. Eels are still caught at Fiddleford and Sturminster Mills on the Dorset Stour.

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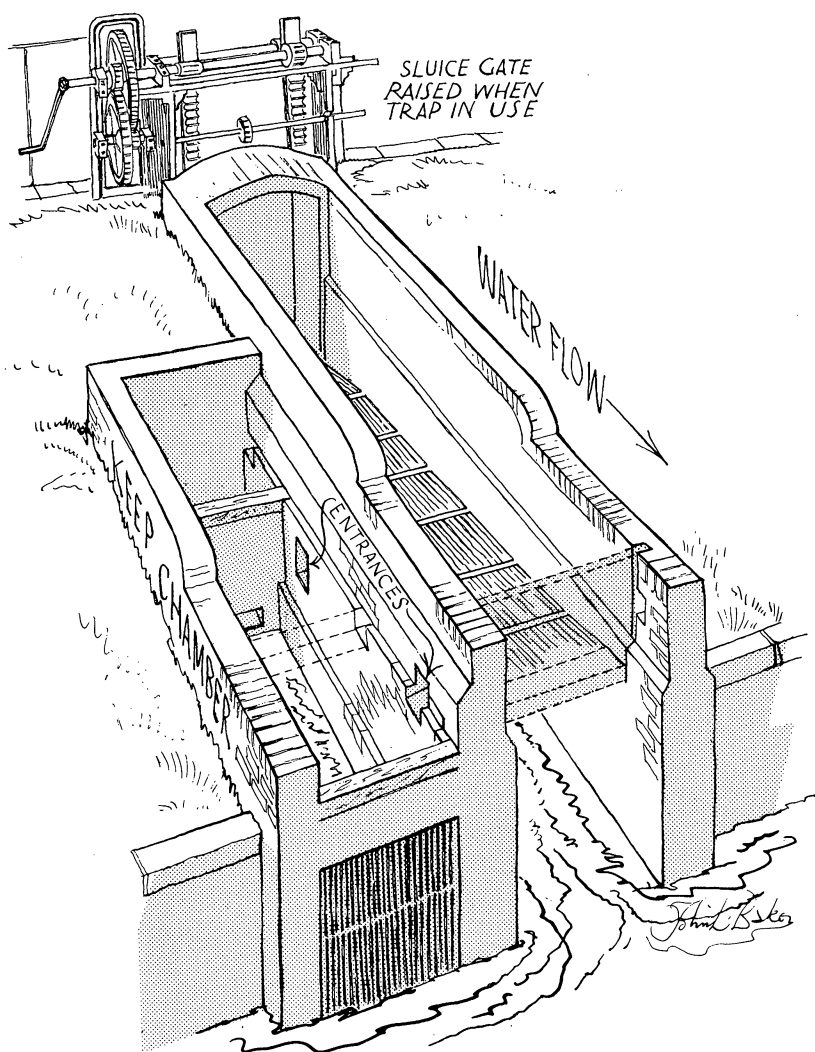


Fig 7 Eel trap at Newark