

CHAPTER 5

THE PYRES AND BIERES

INTRODUCTION

The excavations produced no convincing evidence of pyre sites and so the location of these in relation to the burials and other funerary related deposits is unclear, though the presence of so much redeposited pyre debris must suggest that they were in the vicinity. Evidence for the pyres and the biers that were placed on them can, however, be gathered from the charcoal, the iron nails and the minerally preserved organics that some retain, and from a remarkable series of decorated bone veneers which seem likely to have decorated the biers. These categories of finds are discussed here.

CHARCOAL AND OTHER CHARRED PLANT REMAINS

By Gill Campbell

INTRODUCTION

This report is derived largely from the re-examination of material reported on by Carole Keepax (1978). Keepax's report, completed over 20 years ago, is a product of its time, and advances in identification criteria and methodology meant that re-examination of the material was justified. There was also a need to integrate the results with the wealth of information emerging from the more recent studies at Brougham. In addition to the re-examination of the material reported on by Keepax, charcoal from **198**, part of which was lifted in its entirety, and recently excavated in the laboratory by Jackie McKinley (see p. 305), was also studied.

The sample from **198** is the only one where the volume of material collected and its relationship to the context as a whole is known. The other samples, taken during the 1966 and 1967 excavations, appear to have consisted of concentrations of charcoal, or samples of single fragments (although the latter sometimes contain more than one type of wood). These samples are therefore not representative of the deposits as a whole and the amount of charcoal recovered is no indication of the amount present in the context (see p. 13). For this reason, the results from this investigation need to be treated with some caution. Detailed quantification of the charcoal fragments is inappropriate and interpretation relies on presence and absence data, although this in itself is incomplete.

The main purpose of the study was to determine the following:

The types of wood used in the cremation pyres.

Whether particular types of wood were associated with the cremations of a certain sex or age, or with status at death.

Whether the decorated bone veneers were associated with a particular type of wood or woods.

METHODS

All charcoal fragments were examined initially under a low-power dissecting microscope at magnifications up to $\times 40$ in order to determine the general structure and to aid fracturing in three planes (transverse, tangential and longitudinal). Identification took place using a high-power incident light microscope at magnifications between $\times 50$ and $\times 500$. Reference was made to the modern comparative collection held at the English Heritage Centre for Archaeology and to the identification criteria published in Schweingruber (1978) and Gale and Cutler (2000). Where whole branches or stems were recovered, annual rings were counted and the diameter measured where possible. An attempt was made to differentiate between narrow roundwood (less than 20mm) versus larger branches and mature timber.

The samples studied by Keepax had generally been bagged by taxon within each sample. Only a selection of fragments from each bag was examined since the original number of fragments and their size were unknown. The sample from 198, sample 199 6:E, was dry sieved through 4mm and 2mm sieves. Fifty per cent of the material $>4\text{mm}$ was sorted under a low-power dissecting microscope and all the charcoal fragments recovered were studied. A total of 6.25% of the 4–2mm fraction was sorted. For this fraction, only fragments of charcoal with transverse sections $>2\text{mm}^2$ were subject to detailed examination and identification wherever possible. The rest of this sample was scanned for plant remains other than charcoal but none were found.

RESULTS

The results from the 1966 and 1967 samples examined by Keepax are given in the appropriate places for each deposit in the Inventory (Chapter 4). In Keepax's original table (Keepax 1978) the taxa were given 'in approximate order of frequency of occurrence within the sample (taxa represented by similar quantities of charcoal are listed side by side)'. These estimates of relative frequency have been incorporated into the entries in Chapter 4 as follows. The most frequent taxon is indicated by the greatest number of 'x's. Where taxa are believed to be present in roughly equal proportions they are given equal numbers of 'x's. The symbol * is used where only a single taxon was identified in a sample. The identifications given are the present author's.

The results from 198, sample 199 6:E are presented in TABLE 4.2. Nomenclature for all the entries follows Stace (1997).

Taxa identified were *Alnus* sp. (alder), *Fraxinus* sp. (ash), *Betula* sp. (birch), *Corylus* sp. (hazel), *Quercus* sp. (oak), *Populus/Salix* sp. (poplar or willow), *Prunus* sp. (sloe, plum, cherry etc) and Pomoideae, which includes trees such as *Crataegus* sp. (hawthorn), *Malus* sp. (apple), *Sorbus* spp. (rowan, whitebeam and wild service). Most of the *Prunus* sp. could be identified as *P. padus* or *P. avium* based on ray width and vessel structure and arrangement (Gale and Cutler 2000, 200; Schweingruber 1978, 135). Fragments identified as ?*Tilia* sp. (lime) by Keepax were all reclassified as *Prunus avium* or *Prunus padus*. Rowena Gale helped with this identification and gave the following reasons why the material does not match *Tilia* sp. The vessels in transverse section are not angular in outline while the rays are not noded at the boundaries of the growth rings. Short uniseriate bands of parenchyma are also absent. In addition the vessel pitting, seen in longitudinal section, is too large and there is no evidence of groups of axial parenchyma in tangential section.

Fragments identified as *Carpinus* sp. (hornbeam) by Keepax proved to be either *Corylus* sp. (hazel) or *Alnus* sp. (alder) on the presence of scariform perforation plates and the size of the vessel pitting. Nearly all the charcoal came from trunk or branchwood.

In addition to charcoal fragments, a number of other charred plant remains were recovered. A sample from 183 contained a hazel nutshell fragment, and one from 37 contained three pieces of monocotyledon stem or roots.

DISCUSSION

Pyre wood versus pyre goods

Charcoal from cremation deposits, other than residual or intrusive material, will have one of two origins. The amount of wood needed to cremate a human body is believed to be of the

order of 300–500kg and will form the majority of the wood in the assemblage (McKinley 1994a, 80). The remainder will be derived from artefacts placed on the pyre ranging from coffins and biers to bowls and knife handles.

At Brougham, in the sample of pyre debris from **198**, birch and alder dominated the assemblage. These two woods also dominated the other samples (see TABLE 5.1). The results would indicate that birch and alder were used for pyre construction and formed the main fuel for cremation. This is further suggested by the results from **207**, interpreted as a deposit of pyre debris. A large fragment of a birch branch, minus its bark, was recovered from this context along with fragments of large branches of alder. The birch branch measured 60mm in diameter and was *c.* 33 years old.

Poplar or willow may also have been used for the cremation pyres, possibly as infilling. It is not associated with nails or with the bone veneers, suggesting that it may not be derived from pyre goods (TABLE 5.1). However, as poplar was used for veneers in the ancient Mediterranean, and archaeological records for willow include a funerary couch (Gale and Cutler 2000, 190, 236), an artefactual origin for these records cannot be ruled out.

In contrast, the close association of ash charcoal with finds of decorated bone veneers (see TABLE 5.1) would suggest that the ash charcoal in the assemblages is derived from pyre goods. Furthermore, it would indicate strongly that at least some of these veneers were from artefacts made of ash wood. It is interesting to note that ash wood was used for making beds in the ancient Mediterranean (Gale and Cutler 2000, 120).

At least one of the records of oak is likely to represent the remains of a pyre good, a seven-year-old oak stake from **217**. The small fragments of oak in **114** which produced a large number of pyre goods, may also be the remains of an object placed on the fire. Oak does tend to show some association with nails (see TABLE 5.1) but since these nails might have been derived from grave goods, or from pyre goods, or indeed from reused building material (Gale 1997), the significance of this remains uncertain. The presence of mineralised oak and possibly ash wood in association with nails (see p. 272) shows that objects, possibly coffins or boxes, made of these woods were placed in the graves. Thus it is possible that these woods may also have been used for similar objects, e.g. biers or coffins placed on the pyres, though the evidence remains inconclusive.

TABLE 5.1: PRESENCE OF TAXA (BY NUMBER WITH % IN PARENTHESES) AND THE ASSOCIATION OF EACH TAXA WITH PYRE GOODS AND HUMAN BONE (* PROBABLY AN ARTEFACT PLACED ON THE PYRE).

Taxon	Number of contexts	With nails	With veneers	With veneers and nails	With female bone	With male bone	With immature bone
<i>Quercus</i> sp.	7(10%)	2(8%)	1*(50%)	1(8%)	1(14%)	2(25%)	–
<i>Betula</i> sp.	47(68%)	19(79%)	–	8(61%)	7(100%)	4(50%)	7(87%)
<i>Alnus</i> sp.	31(45%)	11(46%)	1(50%)	8(61%)	4(57%)	6(75%)	2(25%)
<i>Corylus</i> sp.	7(10%)	2(8%)	–	2(15%)	–	1(14%)	1(12%)
<i>Populus/Salix</i> sp.	4(6%)	–	–	1(8%)	–	–	–
<i>Prunus</i> spp.	6(9%)	3(12%)	–	1(8%)	–	2(25%)	–
Pomoideae	4(6%)	–	–	–	–	–	–
<i>Fraxinus</i> sp.	10(14%)	2(8%)	1(50%)	3(38%)	1(43%)	1(12%)	1(12%)
Total	69	24	2	13	7	8	8

Similarly, *Prunus* spp. and hazel may represent either the remains of fuel or pyre goods. The latter is associated with finds of nails, but the recovery of large fragments of branch wood or trunk wood of *Prunus avium* or *Prunus padus* in some contexts and similar large fragments of hazel from **264** would suggest that both hazel and *Prunus* spp. were used for fuel.

The status of Pomoideae is very uncertain. It was found in four contexts, one of these is of unknown origin, while a second sample was from a deposit that may have been re-excavated (**247**). These records may therefore represent contamination of material of unknown date. A

third record, of possible narrow roundwood (164), might suggest the remains of an artefact. The fourth record comes from 207, interpreted as a deposit of pyre debris.

Choice of fuel used for cremation

The use of birch and alder as the main fuel for the cremation pyres at Brougham provides a marked contrast with results from other sites of this period. Kreuz (2000, 48, table 5.2) summarised the data from eleven European sites of Roman date and showed that beech and oak are the most frequent taxa recorded. However, beech charcoal is relatively rare in cremation deposits of all periods in Britain with oak, hazel, ash, Pomoideae and *Prunus* spp. generally being recovered (Murphy 2001, 13; Smith forthcoming).

Oak has a higher calorific value than most other European woods (Gale and Cutler 2000, 205) and makes excellent fuel. Ash, beech, members of the subfamily Pomoideae, hazel and *Prunus* species are also good fuel woods (Gale 1997, 82). Thus, it is not surprising that these taxa are often found in cremation-related deposits.

In contrast, birch provides a short-lived intense heat (Gale and Cutler 2000, 50), while alder is difficult to ignite and burns slowly providing relatively little heat (Gale 1997, 82). Willow and poplar are also regarded as poor fuels (Gale 1997, 82; Gale and Cutler 2000, 236). In addition, while these woods do make good quality charcoal, the use of charcoal for the purposes of cremation seems unlikely since an oxidising fire is required (Gale 1997; Gale and Cutler 2000).

In terms of the choice of wood used for cremation, however, the local availability of particular types of wood and access to woodland will play an important part (Kreuz 2000; Campbell forthcoming). The use of birch and alder at Brougham may well be a reflection of this. It is possible to envisage local woodland similar to W7 *Alnus glutinosa* – *Fraxinus excelsior* – *Lysmachia nemorum* woodland (Rodwell 1998, 102) growing on the wet alluvial soils and boulder clay at Brougham. Such woodland may have consisted mainly of alder, with birch and *Prunus padus* (bird cherry) locally common. Ash and oak would also have been present but possibly not in large numbers. Hazel, willow and hawthorn could have formed the understorey.

In such a situation, ash and oak may have been reserved for building purposes, woodworking and domestic fuel. Cremators may have had to rely on the combined use of alder (locally common but slow burning) with birch (guaranteed to get the pyre off to a good start) for cremation pyres.

Use of particular types of wood as a reflection of gender or status

TABLE 5.1 would indicate that alder wood is more closely associated with deposits producing male bone while birch is more common in deposits containing bone from females or juveniles. This might reflect the practicalities of cremation, with larger bodies, i.e. males, requiring more time for cremation, and a slower burning fuel, than smaller bodies, i.e. children and females. However, the nature of the samples means that it is difficult to be certain that this pattern is genuine rather than the result of sampling bias.

There is also a possible association of *Prunus* spp. with male cremations (see TABLE 5.1). One of these contexts also contained the remains of a horse placed on the pyre, suggesting that the deceased was of high status, at least in death. It is tempting to suggest that bird cherry wood may have been used where the deceased was of high importance or where the mourners desired to put on a good show. However given the small numbers involved further evidence from additional sites is needed. The reference in *Germania* 27 by Tacitus to important men being cremated using particular types of wood may be relevant here (see Gale 1997; Kreuz 2000). Bird cherry and other *Prunus* species would be a good choice since during burning sweet smelling gum in these woods gives off a pleasant odour (Edlin 1969) and, as Gale (1997) has suggested, would mask less pleasant smells.

Other charred plant remains

Plant remains other than charcoal were very scarce. The find of a single hazel nutshell fragment in a deposit interpreted as a possible memorial is interesting (183). It might represent part of the remains of a memorial feast.

CONCLUSION

The results from Brougham indicate that birch and alder were the main woods used for cremation pyres, with *Prunus* spp., hazel and willow or poplar probably being employed to a lesser extent. This would appear to reflect the use of local woodland growing on the damp soils close to the site. It seems likely that decorated bone veneers were mounted on ash wood.

THE IRON NAILS

By Quita Mould

Iron nails were found in a minimum of 149 of the deposits thought to be associated with the cremation cemetery and in three of the long cists where they may have been part of residual material, i.e. approximately half of all the deposits had nails. The nails had flat heads and square or rectangular shanks, and all fall into type 1b of Manning's classification (1985, 134, fig. 132). The nails from the burials were notable, however, in that many were particularly small in size.

Measurement of complete examples allowed two principal categories of nail to be distinguished: small and medium. For the purposes of this study small nails were considered to have a head length less than 13mm and shank lengths less than 36mm (though very small examples with shanks of 16mm in length could be frequently recognised). Medium nails had head lengths between 13–22mm and shanks usually less than 70mm in length (though a small number were in excess of this to a maximum of 102mm). A third category of larger nails could be distinguished (five examples found singly in separate deposits) with head lengths measuring between 25–30mm, but these are likely to represent the larger end of the medium nail category.

These two distinct size groups were recorded in a minimum of 43 of the deposits (30%). Detailed examination of the cremated remains recovered small nails from a minimum of 37 deposits. The recovery of nails amongst the cremated bone indicates that the nails had been placed on the pyre in these particular cases. Nails from a further seven deposits showed signs of being burnt. Thus in *c.* one third of the deposits containing nails, the nails may be considered to have come from an item or items that had been burnt with the body on the pyre.

Accurate quantification of nails recovered from individual deposits was hindered by the generally fragmentary nature of the nails themselves. Only examples with heads were quantified while the presence of broken nail shanks was also noted, so that figures quoted represent a minimum count only. Ten nails or fewer were recovered from the majority of the deposits, not surprising in view of the salvage conditions under which the excavations were conducted. Twenty or more were recovered from 13 deposits with more than 60 being recognisable in **114**, **198**, **227** and **273**. Interestingly the half of **198** excavated from a block under laboratory conditions produced 97 small nails and may provide a more accurate reflection of the original numbers deposited.

The particularly small size of the smallest nails suggests that they served a decorative purpose either securing upholstery to a wooden frame, holding bone inlay in place on the wooden carcass of a box or performing a decorative function in their own right on a box or casket. The medium-sized nails are likely to have been used in the structure of the wooden object or objects. It was notable that the minerally preserved remains of wood that were observed occurred only on the nails of medium size (see p. 272).

It is possible that the nails found within the Brougham cremations derive from an upholstered wooden bier on which the deceased was carried to the funerary pyre and subsequently burnt. What is thought to be an undisturbed funeral pyre was found in the area of the Beckfoot cemetery on the Cumberland coast in an eroding cliff to the south of the fort (Bellhouse 1955, 51–2). Three sides of an oak bed frame, almost burnt away, were seen in the

cliff. Nails with charred oak wood (likely to be minerally preserved) still attached were recognised, some nails were *in situ*, 'big ones c. 2ins' were noted at the corners of the frame and short ones with large flat heads were seen along the frame. In contrast, however, the smaller nails at Brougham did not have noticeably large heads but very small heads. Substantial oak coffins or biers would not use such small nails in their construction, and the size of nails recovered suggests the presence of upholstered items or more delicate wooden items (boxes etc).

A number of nails of medium size had the minerally preserved remains of wood attached, on occasion the grain pattern visible lay in two opposing directions indicating jointing. In the initial stage of analysis the wood remains present on nails from a number of burials were identified as oak (*Quercus* sp.) by Carol Keepax (Keepax 1978). Recently, the minerally preserved wood has been examined by Jacqui Watson (English Heritage) and the results of her investigations are presented below.

WOOD PRESERVED BY IRON NAILS

By Jacqui Watson

During her initial examination of the metalwork from Brougham in the 1980s, Quita Mould noted that many of the nails had wood preserved on them. In several cases it could be seen that the wood grain was aligned in different directions, indicating that two pieces of wood had been nailed together. This report aims to identify the wood species preserved on these nails and see if it is possible to make any comments on the original carpentry they represent. Unfortunately not all of the nails in her list could be located at this time (2001), but a sufficiently representative sample was examined and the observations are presented in TABLE 5.2.

The nails fall into two different groups based on their size, which is probably indicative of the size of the original construction:

1. Large nails used to join relatively thick planks of wood, 20–30mm, and usually employing radial split timber or quarter-sawn timber. Oak or ash is preserved on these examples.
2. Smaller nails were probably used for small casket construction, with sides between 17–23mm thick. Various woods seem to be present, but not easily identifiable with the exception of beech or lime in 282.

Oak and ash were frequently used for coffins and other structural carpentry, and the use of boards between 20–25mm thick adds to this assumption. Beech was commonly used for small casket construction, for example cremation chests found at Godmanchester, Cambs (Watson forthcoming), and Westhampnett, West Sussex (Montague and Watson 1997). The evidence from this site seems to point to the biers and coffins being made from oak or ash and smaller caskets from beech, with birch and alder used for pyre fuel (see above p. 269).

Only small groups of nails have been recovered from each burial, not enough to make a single structure or casket so that they possibly represent just one corner. This is similar to a single corner of a small casket being retrieved from a sieved whole earth sample from grave 20392 from Westhampnett, West Sussex. There is not a complete set of fittings for any of these boxes, biers or coffins, so it has not been possible to suggest how they were constructed. Corner joins seem to be butt joints, but one cannot tell if they were originally rebated as there are no fittings that were originally attached to the sides for comparison.

Surprisingly there is no evidence for any of the small caskets being covered with leather, although this may be due to the conditions on site being unsuitable for the preservation of this material. To date most of the small boxes found in Roman cemeteries, some containing cremations, were covered in leather with copper-alloy straps and decoration applied on top (Watson 1997; Montague and Watson 1997; Watson forthcoming).

TABLE 5.2: IRON NAILS RETAINING EVIDENCE OF MINERALLY PRESERVED WOOD

Deposit number	Comments
82	Iron nail shank with iron preserved wood, not oak.
167	Three nails which probably represent one corner of a nailed coffin, made from <i>Quercus</i> sp. (Oak) planks of radial split timber 21–2mm thick.
215	Wood is preserved on one broken nail shank, it appears to be a ring porous wood, possibly <i>Fraxinus</i> sp. (ash), but there is no indication of the type of timber reduction or the thickness of the planks or boards used.
227	Several broken nails with iron preserved wood, indicating the use of radial surface oak boards, <i>Quercus</i> sp. One example suggests that they were around 30mm thick.
228	Most of these small nails have fragments of charcoal or iron preserved wood on the shanks – probably a ring porous wood. These small nails are often used for small box construction. On the top of the shank and heads of some nails are fragments of bone, mostly cancellous tissue rather than the compact bone used for decorative plaques – probably cremated human bone.
268	1. One nail originally used to join two pieces of wood together. The nail has been put through an oblique tangential surface, c. 28mm thick and into the cross section of another board. 2. Four nails where the wood is so degraded it really only amounts to a colour change in the soil/corrosion, but this area is at a consistent depth of 23–4mm and probably represents the thickness of one board nailed to another.
282	1. Group of medium sized nails with iron preserved wood. They were used to join together two radial surface boards between 17–25mm thick. Wood probably <i>Fagus</i> sp. (beech) or <i>Tilia</i> sp. (lime). 2. Three small nails also with wood and must have belonged to a smaller construction than group 1.
325	1. One nail with wood on lower part of shank – uniseriate rays. 2. One nail with charcoal fragments preserved on the shank. The grain alignment of the charcoal could mean that the fragments were part of a board.

BONE AND ANTLER VENEER

By S. Greep

INTRODUCTION

Perhaps the most interesting and remarkable group of finds from the cemetery at Brougham are the large numbers of decorated pieces of bone and antler. Although isolated graves have been found previously containing comparable pieces (see below), the Brougham collection is the largest by far. At least 92 deposits (32% of the total) produced examples of these finds and considerably in excess of 1000 fragments were found.

If the same pyre sites were used for subsequent cremations, the assemblage of veneer in individual deposits need not necessarily have been derived from the same object, especially if the pyre site was not fully cleared after each cremation. That joining fragments of veneer were recovered from deposits 123 and 154 and that many of the circle-decorated plaques (type F below) may well come from the same or a small number of similar items, supports this interpretation. The small fragmentary nature of many of the veneer finds makes assessment of further joining fragments difficult. This matter is further considered on p. 438.

FUNCTION OF THE BROUGHAM MATERIAL

Similar pieces to the Brougham finds are well recorded from Roman Britain. They are usually referred to as 'inlay' and assumed to have decorated the sides of wooden boxes or caskets.

The term 'veneer' is preferred here to inlay since it is clear from other finds that such pieces were usually glued or 'pegged' into place (e.g. Cunliffe 1968, pl. 61) *onto* the surface rather than inlaid *into* the wood. Many of the Brougham pieces, however, present something of a problem since they are quite thick (up to 7mm). By way of comparison it may be noted that a large group of veneer fragments from Gloucester (Hassall and Rhodes 1974, fig. 28, 36) averaged only 2mm in thickness. None demonstrate any evidence of having been pegged into position. It is hard to believe that they stood so proud of the object to which they were applied and it is possible that they were indeed inlaid. A recent find of part of a wooden door from Shiptonthorpe was inlaid with bone veneers of diamond and triangular shape with their surfaces flush with that of the wood (Halkon and Millett 2003, 309), and a similar technique may have been used here.

All of the pieces recovered show evidence of having been burnt – presumably through having been placed in the cremation pyre. The function of this material is capable of two main interpretations, either as the remains of boxes or caskets or as the surviving elements from funerary biers.

The practice of small boxes accompanying burials is not uncommon (e.g. Borrill 1981, 304–21) particularly in the South-East, but the caskets were rarely (if ever) placed on the pyre but served as 'accessory vessels' to the burial itself. In no one case at Brougham can it be shown that a complete decorative arrangement (i.e. the entire collection from a single box) is present in a deposit. It is, therefore, far more likely that the veneers were derived from a series of funerary biers or couches. Although the Brougham examples are now very distorted and fragmentary through being on the funerary pyre, there is enough evidence from elsewhere to show that originally they would have been waxed, painted and inlaid.

Funerary couches are well recorded from early Roman contexts. Most recently I have discussed these earlier finds in the context of a rich burial from Folly Lane, Verulamium (Greep 1999). An early grave at Colchester contained the remains of a funerary couch (*cf.* Nicholls 1979 for the type) but the veneer is of a rather different character than the Brougham finds (*cf.* May 1930, pl. lxxv, 251–2 for the associated grave goods). Veneers attached to these early couches were elaborate affairs and the tradition, always rare in Britain, seems to have not outlasted the Flavian period. It is not possible, however, to argue for a continuity of tradition between these early examples and the funerary biers represented by the Brougham pieces.

Although most of the Brougham pieces find individual parallels elsewhere, examples of veneers contemporary with the Brougham pieces in funerary contexts are rare. The best parallel comes from a recently found cremation at Birdoswald (Wilmott *et al.* forthcoming). Here it is also convincingly argued that the veneer derives from funeral furniture. Other more comparable finds of veneer have been found in cremations at Usk (a single example of Brougham type B2.2: Manning *et al.* 1995, 273, no. 1) and at Owslebury (Collis 1977, fig. 11, where the finds included pieces of Brougham types A7.1, A7.7, B2.1 and B2.4). Whether the Brougham and Birdoswald (and possibly Usk) examples represent a military tradition of the third century is, of course, difficult to say. What can be noted is that whatever the veneers decorated was part of the funerary ritual of adults. As can be clearly seen in TABLE 5.3 they do not occur in any deposits which only contain the remains of infants and young children and proportionally they are rare in those of immature individuals.

Parallels may be quoted for the majority of the Brougham forms from non-funerary contexts elsewhere in Britain (see type series examples). These may have decorated a wide variety of objects of a domestic nature and their association in funerary contexts at Brougham need not be reflected elsewhere.

veneer in Roman Britain

Large amounts of veneer have been recorded from Britain previously. Almost 20 years ago the writer was able to catalogue over 2300 individual pieces (Greep 1983a) which included a number of large groups. This number has already risen considerably. The most significant groups, at Canterbury (Greep 1995, 1141, nos 992–4, fig. 502), Droitwich (Barfield 1977), Great Casterton (Rutland Museum, unpublished), Gloucester (Hassall and Rhodes 1974, fig. 28, 36),

TABLE 5.3: BONE VENEERS BY PHASE AND AGE

	Phase 1	Phase 2	Phase 3	Phase 3b	Unphased	Total
Adult	5	13	8	3	8	37
Male	1	5	3	3	5	17
Female	3	2	5	1	2	13
Double	2	2	1	–	1	6
Immature	1	1	1	–	–	3
Uncertain	5	5	1	1	4	16
Total	17	28	19	8	20	92

Richborough (two groups: Bushe-Fox 1949, pl. 57; Cunliffe 1968, pls 61–2), South Shields (Greep forthcoming a) and Piddington (Greep forthcoming b), are all from non-funerary contexts. Where these examples are datable they seem to be from later third or fourth-century contexts. While there is some overlap in terms of decorative design with the Brougham examples where it appears likely that the third-century series represent decoration from funerary furniture, the majority of finds from Roman Britain are from decorated caskets or other items of domestic furniture.

Taken together with the evidence of early Roman finds noted above it is therefore possible to divide the veneer from Roman Britain into three broad groups.

Veneer decorating funerary couches of the first century A.D. (and earlier elsewhere).

The group represented by the Brougham and Birdoswald material.

The majority of British pieces utilised in decorating boxes and other items of furniture in the later third and fourth century, continuing into the post-Roman period.

Perhaps the best collection to illustrate the likely decorative arrangement of later Roman veneer comes from a cremation of the pagan-Saxon period at Caister by Norwich (Myres and Green 1973, fig. 27) where most of the elements from a single box seem to have survived.

THE BROUGHAM TYPOLOGY

The finds of veneer from Brougham cover a wide range both in terms of shape and decorative motifs (see below). While it is possible to parallel many individual elements with pieces from other sites, the whole of the Brougham assemblage is not comparable. This is not surprising in view of the fact that the overwhelming majority of objects in bone and antler were undoubtedly of local manufacture during the Roman period. The Brougham finds therefore represent, not unnaturally, the repertoire of a local craftsman/workshop operating during the third century.

For ease of reference and comparison the decorated veneer from Brougham has been divided into seven major types or, more exactly, 52 sub-groups based on shape and decorative traits. This is not intended to be a definitive typology of veneer forms from Britain and should not be viewed as such – it covers only those forms found at Brougham – but it should enable comparison internally as well as with veneer from other British sites. Attribution of pieces to specific groups is made difficult by the fact that all had been thoroughly burnt and smashed. Only a minute fraction of the veneer remains complete. In the light of this no attempt at quantification has been made but the presence of the different types identified is summarised in TABLE 5.4. FIGURES 5.1–5.4 illustrate the main variants of each group though with each of these further minor variants can be expected to occur. A selection of the larger fragments found in 1966 is shown in FIG. 5.5.

A. Strips. These are the most common forms of veneer not only at Brougham but at all sites. Ends may be straight or angled, the later ends serving as corners in rectangular designs (e.g. Myres and Green 1973, fig. 27, pls xx, xxi).

Type A1. Plain strips. These display no indication of being unfinished and may simply represent plain areas in the overall design. Plain strips are recorded from a number of other sites (e.g. Crummy 1983, fig. 87, 2153) and occur in the large groups from Richborough (Bushe-

TABLE 5.4: OCCURRENCE OF BONE VENEER TYPES BY PHASE

Type	Phase 1	Phase 2	Phases 3 and 3b	Total no. of deposits	Type	Phase 1	Phase 2	Phases 3 and 3b	Total no. of deposits
A1	3	7	5	15	A7.6	—	—	1	1
A1.1	1	—	5	6	A7.7	—	1	—	1
A2	5	5	2	12	A8.1	—	2	—	2
A2.1	1	1	2	4	A8.2	—	1	—	1
A2.2	—	3	2	5	A8.3	1	1	1	3
A3.1	2	1	2	5	A9	1	—	—	1
A3.2	1	3	1	5	B1.1	1	9	8	18
A3.3	—	—	2	2	B2	1	3	—	4
A4	1	4	5	10	B2.2	2	3	3	8
A4.1	2	5	5	12	B2.4	—	—	2	2
A4.2	2	2	3	7	B3	—	2	1	3
A4.3	2	2	—	4	B3.1	—	1	—	1
A4.4	2	1	2	5	C1.1	1	2	1	4
A4.5	—	1	—	1	C1.2	—	1	—	1
A5.1	1	1	2	4	C1.3	—	—	1	1
A5.2	—	1	—	1	C1.5	—	—	1	1
A5.3	1	1	4	6	C2	—	1	3	4
A5.4	3	3	5	11	C2.1	—	5	6	11
A5.5	1	2	5	8	C3	—	—	1	1
A5.6	—	3	—	3	D	—	2	—	2
A6.1	—	—	1	1	D1.1	1	3	—	4
A6.2	1	—	1	2	D1.2	—	—	2	2
A6.3	—	—	2	2	D1.3	—	1	—	1
A6.4	—	—	1	1	D2.2	1	—	—	1
A7	2	1	1	4	E1.1	1	—	1	2
A7.1	4	7	6	17	E2.1	5	9	9	23
A7.2	2	—	—	2	E2.2	1	—	2	3
A7.3	—	—	1	1	E2.4	—	—	1	1
A7.4	—	1	—	1	F	2	4	3	9
A7.5	1	1	—	2	G	—	—	1	1

Fox 1949, pl. lviii, 276i), Great Casterton (Rutland Museum, unpublished) and Gloucester (Hassall and Rhodes 1974, fig. 28, 36viii). Such pieces may originally have been painted, as of course could all the veneer recovered, in order to enhance their decorative qualities.

Type A2. Grooved strips. These were rare at Brougham but are the most common veneer form elsewhere (e.g. Hassall and Rhodes 1974, fig. 28, 36vii). Waste from the manufacture of grooved strips is recorded from a number of sites (e.g. Crummy 1983, fig. 87, 2159; Allason-Jones and Milet 1984, 89, no. 623).

Type A3. Straight grooved strips. These, like the A2 grooved strips are rare at Brougham and are unrecorded elsewhere.

Type A4–5. Angled and opposing-angled grooved strips. A common Brougham type rare elsewhere and presumably one of the Brougham workshop's standard local products.

Type A6. Cross decorated. These are rare at Brougham and elsewhere but a number of strips similar to Brougham type A6.2 are represented in the assemblages from Gloucester (Hassall and Rhodes 1974, fig. 28, 36v) and Great Casterton (Rutland Museum, unpublished) noted above.

Type A7. Ring-and-dot decorated. These were relatively common at Brougham and occur at a number of other sites throughout Britain, both in large groups as at Richborough (Bushe-Fox 1949, pl. cviii, 276L), Gloucester (Hassall and Rhodes 1974, fig. 28, 36ii) and Great Casterton (Rutland Museum, unpublished) and as isolated examples (e.g. Allason-Jones and Milet 1984, 60, no. 232–4).

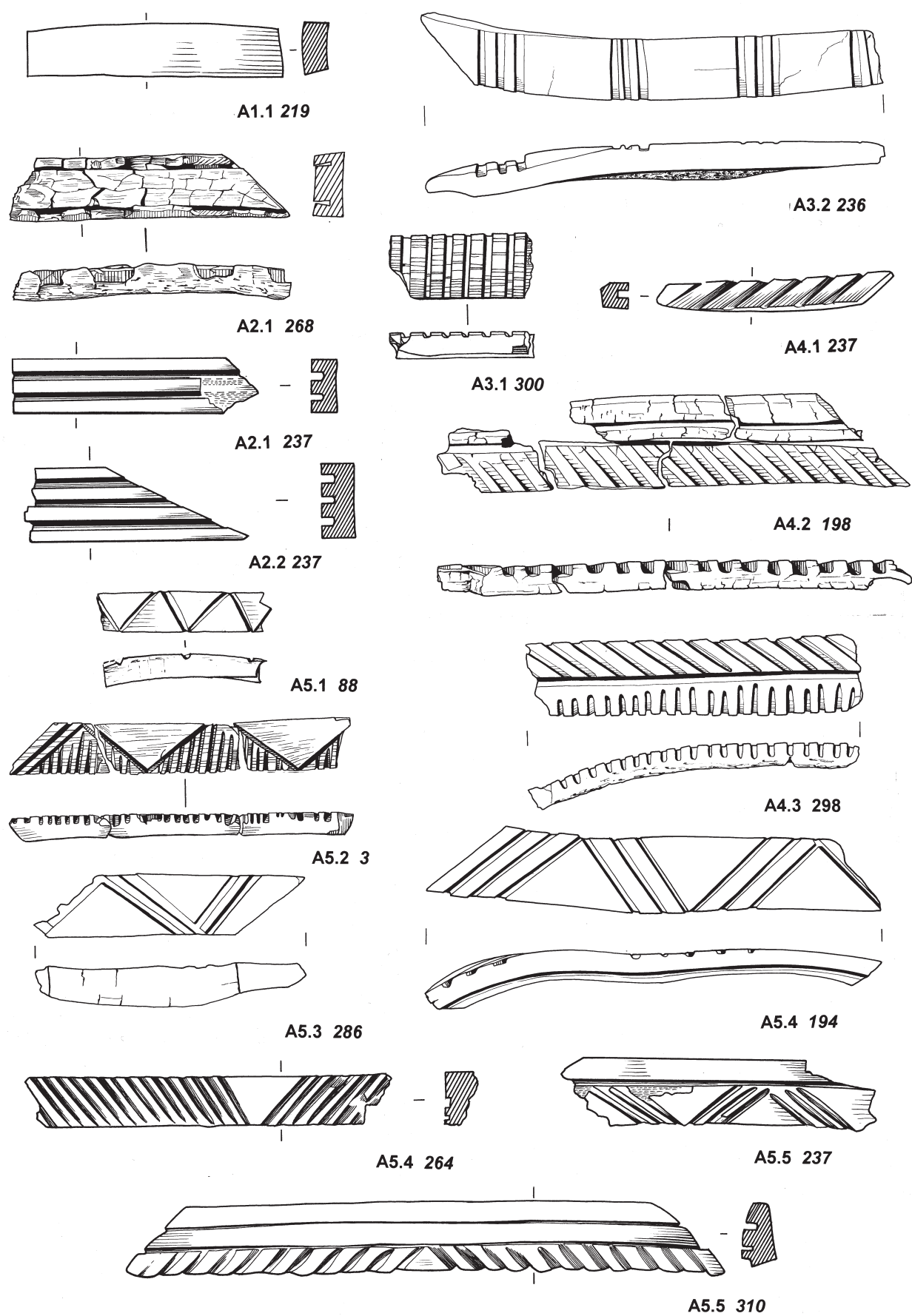


FIG. 5.1 Bone veneer types A1–A5 (deposit numbers in italics).

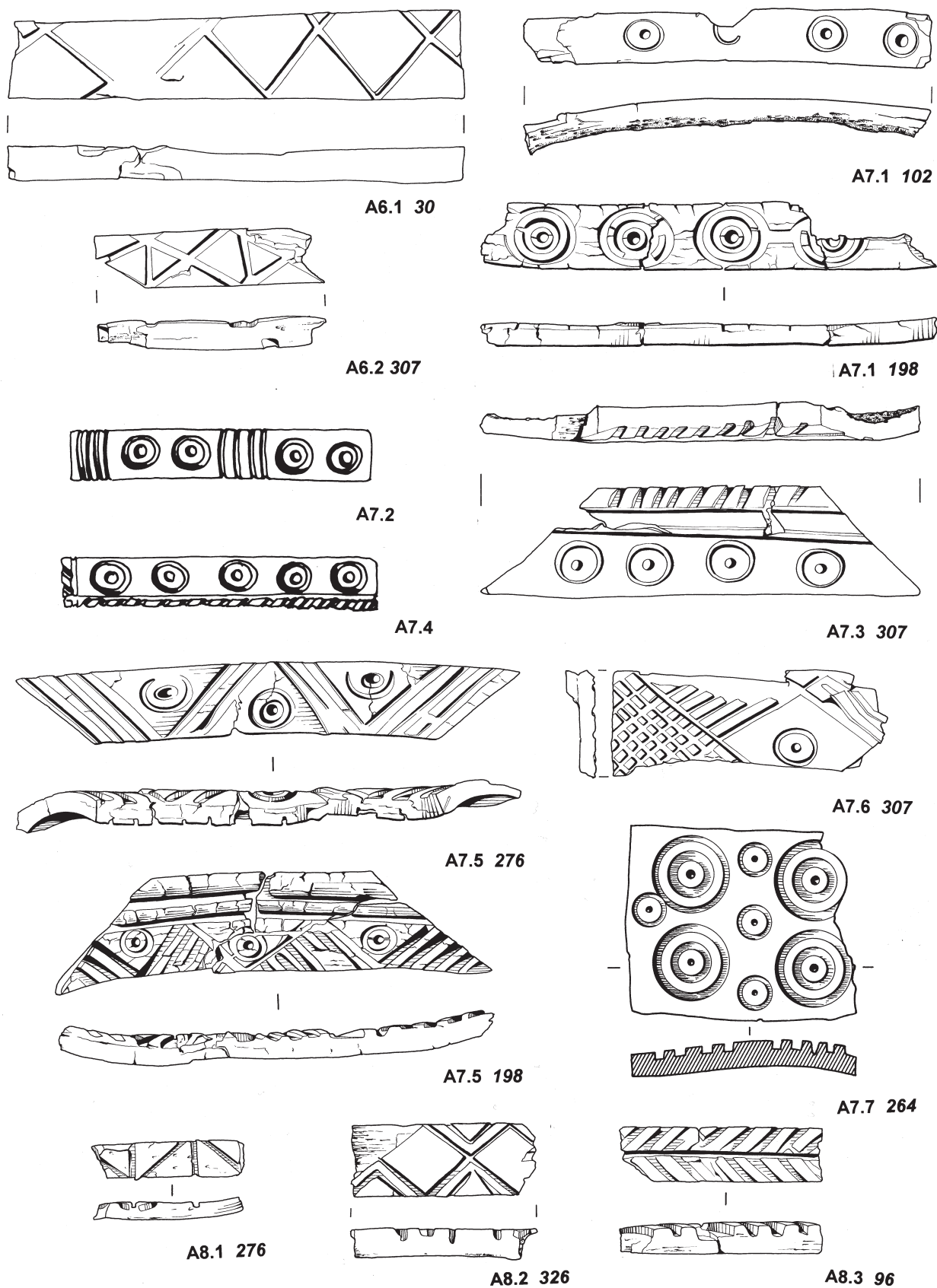


FIG. 5.2 Bone veneer types A6–A8; A7.2 and A7.4 reconstructions based on small fragments (deposit numbers in italics).

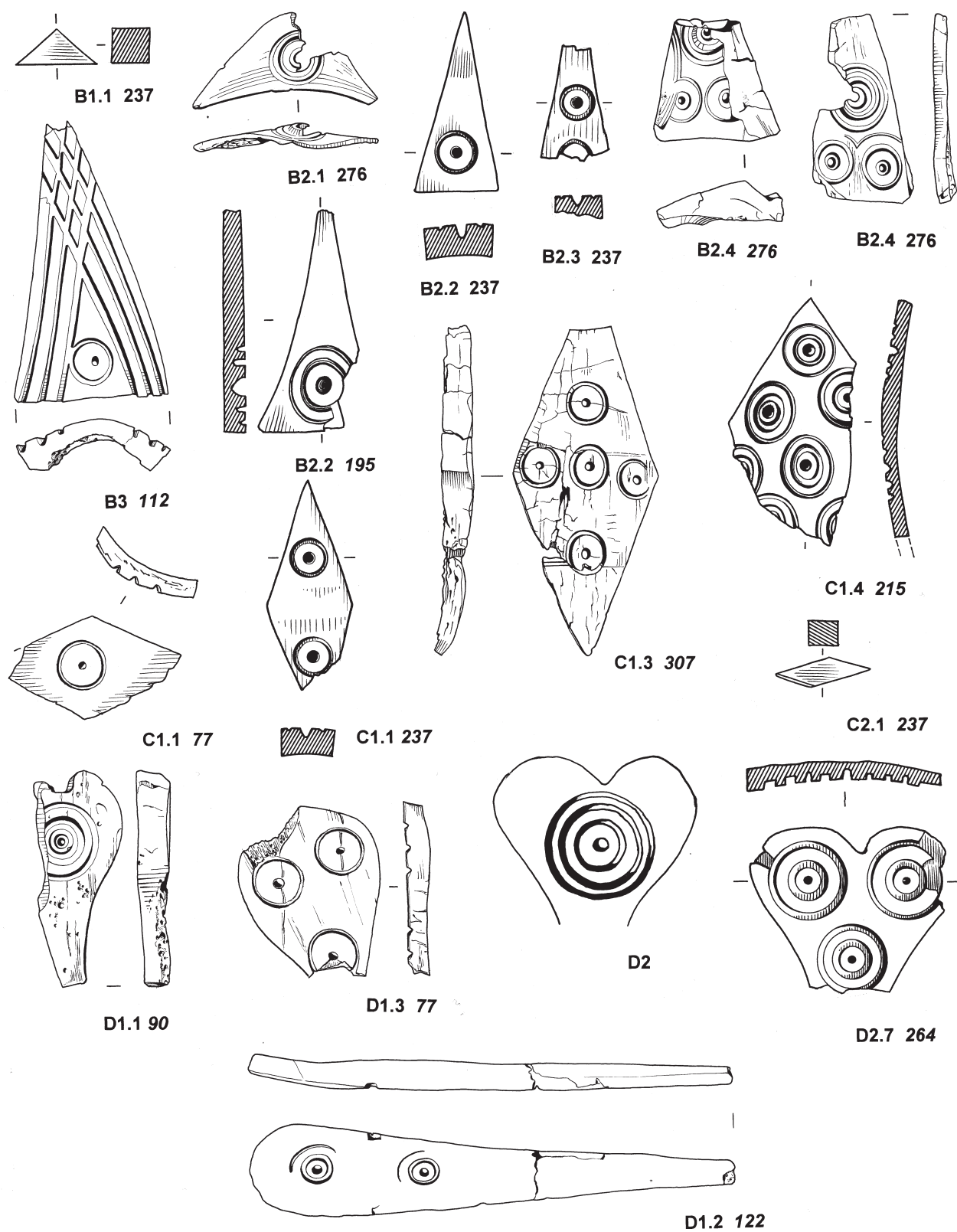


FIG. 5.3 Bone veneer types B-D; D2.1 reconstruction based on fragments (deposit numbers in italics).

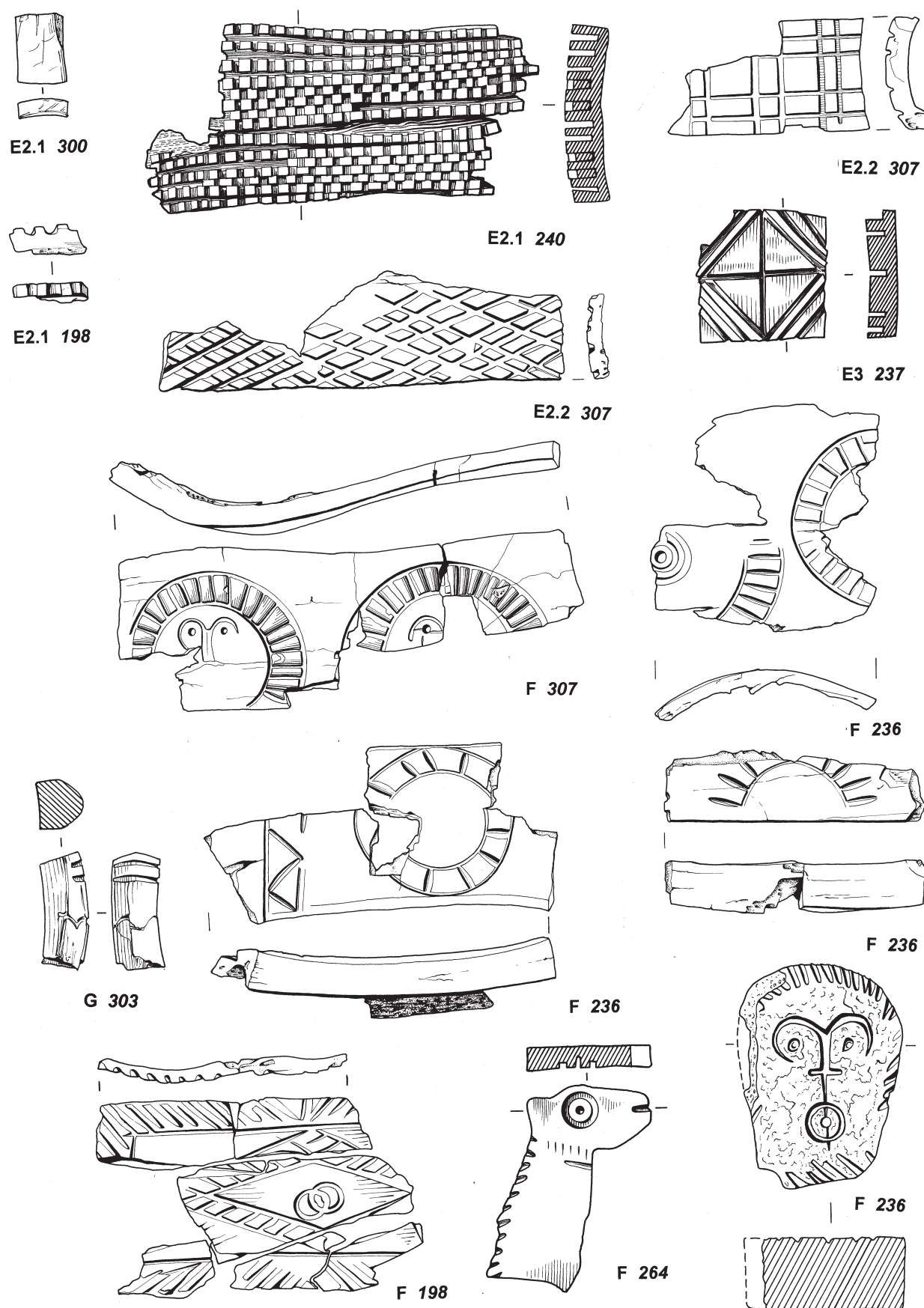


FIG. 5.4 Bone veneer types E-G (deposit numbers in italics).

Type A8. The small number of miscellaneous strips from Brougham find few direct parallels though a larger variant of type A8.1 occurs at Richborough (Fortress House, London, unpublished) and Gloucester (Hassall and Rhodes 1974, fig. 28, 36iv).

Type B. Triangles. Like strip veneer triangular fragments are common. Many of the Brougham elements are paralleled at Richborough (e.g. Bushe-Fox 1949, pl. lvii, 276h) and Gloucester (Hassall and Rhodes 1974, fig. 28, 36xviii etc) though the larger B3 outlined triangles seem to represent a local Brougham element. The rare B4 groove-decorated triangle is more common elsewhere (e.g. Allason-Jones and Miket 1984, 61, no. 231). Triangles presumably fitted into the corners of rectangular designs. (See now Halkon and Millett 2003, 309.)

Type C. Diamonds. These are not found in large numbers in any of the Brougham graves. Likewise although diamond shapes are found elsewhere they are always as isolated examples. None are present in any of the large groups of veneer recorded from other sites and it is difficult to see where they fitted into overall designs. (See now Halkon and Millett 2003, 309.)

The Brougham C2.1 small, plain diamonds find many parallels (e.g. Wheeler and Wheeler 1932, pl. 23, 147; Cunliffe 1964, fig. 24, 14, fig. 66, 3).

Type D. Spatulate shapes. As with type C diamonds these occur only as isolated examples both at Brougham and elsewhere. Examples from Aldborough (Bishop 1996, fig. 50, 607–8), Cirencester (Corinium Museum, unpublished) and Wroxeter (unpublished excavations) of Brougham type D1.1 have the grooves of the central ring-and-dot inlaid with a black, wax-based substance, but there is no trace of a similar material in any of the Brougham pieces (*cf.* Schmid 1968, for a discussion of the form of inlay).

It is difficult to see where these spatulate shapes fit into overall designs of veneer especially since they have no straight edges.



FIG. 5.5 A selection of veneers and antler cylinder from cremation burial 264.

Type E. Squares and rectangles. The only recurring form in this group are those of type E2.1. These consist of rectangles with deeply incised, parallel grooves, the upstanding ridges between being cut into a crenellated pattern. Narrow crenellated strips (c. 2mm wide) were made separately and inserted into the channels resulting in an offset chequerboard pattern. It is difficult to see how these pieces fitted into the overall designs since their decoration, being deeply incised, is of rather a different character to the other veneer from Brougham. Deeply incised decorated squares are recorded from a number of other sites (e.g. Wheeler and Wheeler 1932, pl. 23B, 156) as are type E1 plain squares (Lydney Museum, unpublished) but neither are particularly common. The E2.1 design with its elaborate multi-piece construction would have demanded skill and time to manufacture. The implications of this are further considered on p. 000.

Type F. Decorative and figural plaques. The circle designs found on most of the Brougham pieces are not paralleled elsewhere. The horse seen on the plaque from **264**, however, is similar to a piece from South Shields (Allason-Jones and Milet 1984, 55, no. 129).

Although no actual joins have been found the similarity of many of the Brougham plaques suggests that some of the finds from individual graves may have belonged either to the same, or similarly decorated furniture.

Plaque veneer is rarely found in Britain. The best indication as to how the Brougham plaques may have been arranged is to be seen in one of the groups from Richborough (Bushe-Fox 1949, pl. lviii, 276) in which the large plates of decorated bone were clearly used in association with type A strips.

Type G. Borders. A single example of veneer with D-shaped section was recovered from Brougham. These pieces are known from a number of other sites and seem to have served as raised borders (e.g. Myres and Green 1973, fig. 27, and pls xx, xxi for the arrangement, and Greenfield 1971, fig. xvi for a Roman example).