

http://kentarchaeology.org.uk/research/archaeologia-cantiana/

Kent Archaeological Society is a registered charity number 223382 © 2017 Kent Archaeological Society

A HOARD OF 'RADIATE' COINS FROM ALLINGTON

JOHN A. DAVIES, B.A.

This small hoard was found in 1907, at a location cited as 'near Allington Castle, between the railway and river (Medway)', near Maidstone. The coins are now in Maidstone Museum. The only previously published report is three lines in VCH (Kent), iii (1932), 144, describing the find of 'a small bulbous beaker (date 250–300 A.D.) which contained 22 "small brass" coins of Tetricus, several of which are barbarous (? Gaulish) copies'. Re-examination of this hoard has allowed a new assessment in the light of current research. The ceramic beaker, which remains intact, is discussed separately below.

The hoard contains five official coins of the period A.D. 268-276. The Central Empire is represented by just two, one of Claudius II (A.D. 268-70) and one of Florian (A.D. 276). The other three are coins of the Gallic Empire, all of Tetricus II. The remaining 17 coins are all barbarous radiates, copies of official coins of the period A.D. 260-74. A distinctive feature of the hoard is that these are copies of Gallic Empire types only. Several of the Tetricus I coins are extremely good, accurate copies, although others are more typically degraded and stylised types. Four of the coins have a reduced module of *minim* classification (under 12 mm. diameter). The composition of the Allington hoard is of interest in the wider context of the study of the barbarous radiate coinage.

A complete understanding of this 'unofficial' coinage still awaits more detailed research, but its historical context is secure. Debasement of the coinage in the third century reached its nadir under Gallienus and Claudius II, and it was the base metal antoniniani of this period that were copied in large numbers. Both Central Empire and Gallic Empire coins were copied, ranging from the late issues of Gallienus (notably his animal reverse types) and Claudius II,

JOHN A. DAVIES

through to Probus.¹ All Gallic Emperors were represented, but most common were copies of Tetricus I, followed by Tetricus II and Victorinus. This coinage circulated most profusely during the period between the fall of the Gallic Empire (A.D. 273) and the British Empire in A.D. 287, although some did continue in use much later.

The term 'barbarous radiate' embraces a wide range of copies, from closely copied counterfeit coins of correct size, as evidenced at Whitchurch,² to very poor stylised types and *minims* that would not have been mistaken for their prototypes. Mr. G.C. Boon has outlined a chronological scheme embracing a gradual decline in standard and in size.³ The best counterfeit types are placed contemporary with their prototypes, from A.D. 270–74, with a reduction in module occurring about A.D. 275. *Minims* are introduced in the scheme not before the reign of Probus, at about A.D. 276, continuing in production until A.D. 282–84.

CATALOGUE

Official coins

CENTRAL EMPIRE

Claudius II

1.	IMP CLAVDIVS AVG	MARS VLTOR	67
	Florian		
2.	IMP C FLORIANVS AVG	AEOVITAS AUG	25

IMP C FLORIANVS AVG AEQVITAS AUG 25

RIC

ELMER

GALLIC EMPIRE Tetricus II

3. C PIV ESV TETRICVS CAES SPES PVBLICA 769 4–5. Illegible

For evidence of Proban copies see H.B. Mattingly, 'A Hoard of barbarous Radiates from Goring-on-Sea', Sussex Arch. Coll., cv (1967), 56-7 and G.C. Boon, 'The Counterfeiter's Deposit' in G. Wainwright, Coygan Camp. (1967), 116-26.

^{&#}x27;The Counterfeiter's Deposit' in G. Wainwright, Coygan Camp, (1967), 116-26.

² G.C. Boon and P.A. Rahtz, 'Third-century Counterfeiting at Whitchurch, Somerset', Arch. Journ., cxxii (1966), 13-51.

³ G.C. Boon, op. cit., in note 1.

'RADIATE' COINS FROM ALLINGTON

Radiate Copies

GALLIC EMPIRE

Postumus

6. Salus Aug 17 mm. ↘

Victorinus

7. Salus Aug 16 mm. ≥

Tetricus I

8–11.	Pax Aug, vertical sceptre	15	mm. <	17 mm.	1
	-	17	mm. ↓	14 mm.	Ť
12.	Pax Aug, transverse sceptre	15	mm. 🗸		
13.	Laetitia Augg	15	mm. ↑		
14.	Salus Aug	17	mm. ↑		
15-16.	Illegible	15	mm. 10	5 mm.	

Tetricus II

17–18. Spes Aug 14 mm. ↓ 13 mm [™]

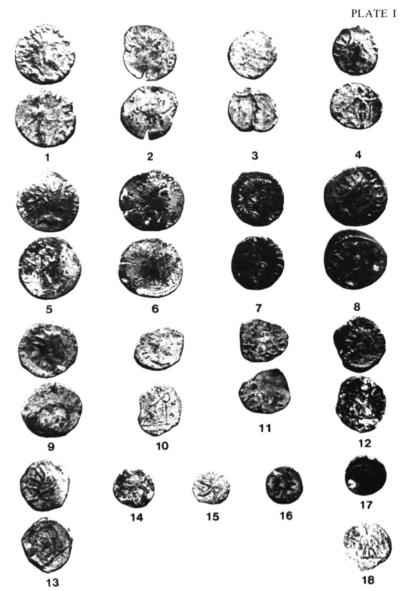
Illegible minims

19–22.	11 mm.	10 mm.	10 mm.	11 mm. \uparrow

22 TOTAL

The Allington hoard belongs to a group of over 110 Roman hoards which include radiate copies in varying proportions. Two-thirds of these hoards appear to have been deposited over a short span of about ten to fifteen years. The distribution of these hoards is mainly to the south and east of Britain, below a line drawn between the River Humber and the Gower Peninsula. Concentrations of hoards occur in East Anglia and in southern coastal parts, most notably around the Severn Estuary and the Sussex coast. There are two other published hoards from north Kent containing radiate copies. The Gillingham (1907) hoard contained 722 coins, but mainly fourth-century types, with just six radiate copies. The nearest and most comparable hoard is from Hollingbourne, now in

⁴ VCH (Kent), iii (1932), 155; Arch. Cant, xxviii (1909), xcii-xciv.



The radiate Copies from the Allington Hoard. No. 1 Postumus: Salus Aug; no. 2, Victorinus: Salus Aug; nos. 3-4, Tetricus II, both Spes Aug; nos 5-13, Tetricus I: 5, 6, 9-13, Pax Aug; 7, Laetitia Augg; 8, Salus Aug; nos. 14-17 *Minims*; no. 18 *Minim* from Silchester Hants.

'RADIATE' COINS FROM ALLINGTON

Maidstone Museum.⁵ Of 5,357 coins from Hollingbourne just 7 per cent are radiate copies but these 365 coins exhibit a similar range of types as are present at Allington despite the large numerical difference.

Hollingbourne, like Allington, has a lack of Central Empire copies, with just nine examples (2.5 per cent of the copies). The most common reverse type at Hollingbourne is Pax, forming 23.6 per cent of copies and at Allington it is 29.4 per cent. The other most common types represented at Hollingbourne are Tetrican Spes and Salus types (approximately 14 per cent each) which are similarly the second most common at Allington (both 11.8 per cent). These reverse types are also among the most common present on most sites and in hoards generally. A difference in the nature of the two hoards becomes apparent with the smaller coins, notably minims, of Allington which are absent from the larger hoard. The degree of wear on the Allington coins confirms that they represent a sample withdrawn from normal circulation, whilst the Hollingbourne hoard represents a selection of better coins, of larger module and high proportion of official coins, forming a store of wealth.

There is no die-linking between the two hoards, or with the small number of local site-finds present at Maidstone Museum. Neither is there internal die-linking at Allington although this is less surprising in so small a hoard. However, close comparison with Hollingbourne coins does reveal a very similar style of portraiture, especially with coins 5, 6, 7 and 8, on Plate I, which also compare well in size and

regular shape.

A further stylistic similarity involves the reverse of coin 17 on Plate I which is comparable to a very distinctive site find from Silchester, Hants. (Plate I, coin 18). Both are minims, lacking legend, showing a very stylised female figure who is holding a staff to the left. Such a link over a distance of 65 miles is not unusual in the light of die-links and style-links recorded by Professor H.B. Mattingly. It would suggest some aspect of minting in common. The absence of any die-linking reflects the overall profusion of this coinage and the range and diversity of types suggest widespread minting.

Most of the Allington radiate copies approach the average size of

⁵ R.A.G. Carson, 'Hollingbourne Treasure Trove', *Num. Chron.*, 7th series, i (1961), 211–23.

⁶ H.B. Mattingly, op. cit., in note 1, and 'The Lightwood Hoard and the Coinage of barbarous Radiates', North Staffs. Journ. of Field Studies, iii (1963), 19-36.

JOHN A. DAVIES

the official coins of this period, while the *minims* form a distinct group of their own (see Fig. 1). The die-axes are also distinctive. Within this unofficial coinage as a whole there was no overall attempt to emulate the 0° or 180° die-axis of the official coinage. In fact the arbitrary die-axes are a symptom which helps to diagnose coins as copies. However, in the nine coins of Tetricus I at Allington, only six of which are well enough preserved to record their die-axes, four are 0° and one is 180°. These include the best copies, four of which are very good. All of the other Allington coins have arbitrary die-axes.

This precision of die-axis, as well as diameter, good obverse portrait and well-engraved reverse, links coins 5, 6, 7, 8 and 9. Similarly numbers 10, 11 and 12 can be grouped together both by size and by their crude angular busts of Tetricus I; and numbers 10 and 11 also by their reverses. Such groupings would suggest a common mint, probably shared with part of the Hollingbourne hoard in the former case, on stylistic grounds.

With a total absence of archaeological evidence for manufacture in the south-east the nearest speculated unofficial mints are London, southern Sussex and at Richborough based on profusion of die-linking within and between hoards. Known axes of contact with Kent coins are shown by two hoard coins. One example from Hollingbourne links closely in style with another from the Newgate Street hoard London and with a stray find from the Verulamium Theatre. The second case involves a Richborough coin which links stylistically to the hoards from Calverton (Notts.) and Mill Road, Worthing. However, distinctive local features, as shown at Allington and in many other areas, suggest that these coins would have been struck on a local basis, resulting in the local styles and traits presented.

The date of the container (see below) is in keeping with the circulatory date of this coinage. All 22 coins display a degree of wear which would suggest a period of circulation before burial. It is

⁷ R. Merrifield, 'The Lime Street (1952) Hoard of barbarous Radiates', *Num. Chron.*, 6th series, xv (1955), 113-24.

⁸ H.B. Mattingly, op. cit., in note 1.

⁹ H. Mattingly and W.P.D. Stebbing, 'The Richborough Hoard of Radiates' *American Numismatic Soc.*, Notes and Monographs, lxxx (1938), 1–118. Internal dielinking is numerous enough to suggest some local minting.

¹⁰ H.B. Mattingly 'The Paternoster Row Hoard of barbarous Radiates' Num. Chron., 7th series, vii (1967), 66-7.

¹¹ H.B. Mattingly op. cit., in note 10.

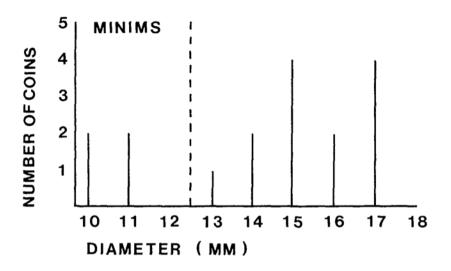


Fig. 1.

significant that the different sizes of coins present can be seen to have circulated together, all being withdrawn from circulation at the same time. This interesting hoard, comprised of coins of everyday use and of low intrinsic value, as opposed to a savings or treasure hoard, reflects the coinage circulating in the area at a date of c. A.D. 276–287. The absence of Proban minims and other later copies would suggest a date of about A.D. 280 and not the latter end of this period. The importance of his hoard is that it shows unofficial coins of varying quality and size, including minims, circulating together alongside the official coinage, as part of the same circulatory pool, in the period preceding the final phase and repression of radiate copies.¹²

¹² For evidence relating to a final repression of this coinage, see G.C. Boon, op. cit., in note 1, and 'A Roman Counterfeiter's Den', Proc. of the Univ. of Bristol Spelaeological Soc. (1972), 70-82. Also H.B. Mattingly 'The Sprotbrough Hoard of barbarous Radiates', Num. Chron., 141 (1982), 21-30.

JOHN A. DAVIES

ACKNOWLEDGEMENTS

Thanks are due to Mr. D.B. Kelly of Maidstone Museum for his encouragement in writing this paper and for making available to me the Hollingbourne hoard and other Kent coins for comparison. I should also like to thank Professor H.B. Mattingly for his invaluable comments on an earlier draft of this paper, although the author wishes to absolve him from the conclusions and emphases present in this work; and Julie Gardiner for her comments and help in preparation.

THE CONTAINER Richard J. Pollard, B.A.

The vessel is a 'bulbous beaker' with conical-restricting neck, everted rim, slightly angled shoulder and pedestal foot. It is in a wheel-thrown, medium-sandy grey ware with smoothed surfaces, possibly coated with a matt, pale, neutral slip (abraded). Form and fabric are exactly paralleled by Ospringe 57 and 11013 and by a vessel from Aylesford.14

The type is one of a variety of necked 'bulbous beaker' types manufactured in colour-coated, white and grey wares both in Britain and Gaul from the late second- to the fourth/early fifth centuries. Specific grey ware parallels in Britain include Oxfordshire, 15 ?New Forest¹⁶ and ?Colchester area¹⁷ products, but the Allington vessel is most likely to be a product of the lower Thames 'BB2/grey ware' industries. 18 Grey ware 'bulbous beakers' are widespread in Kent; the angled-shoulder, sandy ware type represented here may be dated to the third to mid-fourth centuries within this county, but later vessels may occur in other parts of Britain. The Allington vessel was thus interred during the floruit of its type.

Antiq. London, xxi, (1963). Form 395.

¹³ W. Whiting, W. Hawley and T. May, Excavations of the Roman Cemetery at Ospringe, Kent, Rep. Res. Comm. Soc. Antiq. London, viii (1931).

Unpublished; Maidstone Museum register, VII 1920.
 C.J. Young, Oxfordshire Roman Pottery, BAR 43, (1977). Form R30.
 M.G. Fulford, New Forest Roman Pottery, BAR 17, (1975). Grey Ware Type 2.

¹⁷ M.R. Hull, The Roman Potters' Kilns of Colchester, Rep. Res. Comm. Soc.

¹⁸ Cf. vessels from the pottery dump at Cooling, (inspection by kind permission of Mr. A. Miles); from Mucking, M.U. Jones and W.R. Rodwell 'The Romano-British Pottery Kilns at Mucking', Essex Arch. and Hist., series 3, v (1973), 13-47. Type R; and wasters from the Upchurch Marshes, I. Noël Hume 'Romano-British Potteries on the Upchurch Marshes', Arch. Cant., lxviii, (1954), 72-90, Fig. 3, nos. 4 and 5.

J.D. OGILVIE, F.S.A.

With contributions by C.M. Johns, F.S.A. and R.J. Pollard, B.A.

In 1946, the Hammill Brick Co. were excavating clay from their quarry near the Prince of Wales, Woodnesborough, east Kent, (Fig. 1, A). This large clay-pit was irregularly quadrilateral with sides of between 250 and 270 m. The clay was removed to a maximum depth of 12 m. at the north corner, where the chalk was 13 m. below the surface, and to a minimum depth at the west corner where the chalk was only about 2 m. below the surface.

While the superficial layers of loam were being removed to expose the clay, a process taking several years, frequent shallow pits of darkened soil were found scattered over the whole area; these are said to have contained pottery fragments and bones. Unfortunately, these pits were not remarkable enough to have been reported.

A smaller quarry, about 800 m. to the south-east, had revealed a typical double trefoil 'dene-hole' chalk mine. This was described by Archibald and Stebbing. A second probable dene-hole had been revealed by the sinking of one of the firm's vehicles 900 m. to the south-west, but this had been hastily filled in without investigation.

When the removal of clay from the main quarry, A, had been nearly completed, a patch of dark earth, larger than usual and containing pottery sherds and bones, was exposed by the mechanical excavator. This dark soil was still being disturbed at a depth of 2 m. This aroused interest to the extent that Major Burchell, then at Broadstairs, was informed. He examined the site and then excavated it over the next two years. He finally came to the conclusion

¹ J. Archibald and W.P.D. Stebbing, 'A Dene-hole at Hammill', Arch. Cant., xlvii (1935), 211-218.

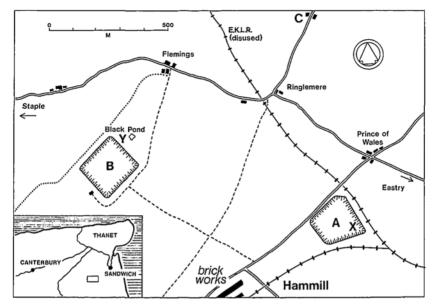


Fig. 1. Location Plan.

that it was a ritual shaft, 22 m. deep, with a large broken Romano-Belgic pot at the bottom.

Major Burchell, realising the importance of the shaft, the first of its type recorded in Britain, published a brief account, accompanied by a photograph of the pot, in *The Times*.² This was reprinted in the Annual Report of the Hammill Brick Co. for 1948, and again, without the photograph, in the *Archaeological Newsletter*.³ The only record in *Archaeologia Cantiana* states 'another dene-hole has been exposed in the Hammill brickyard'.⁴

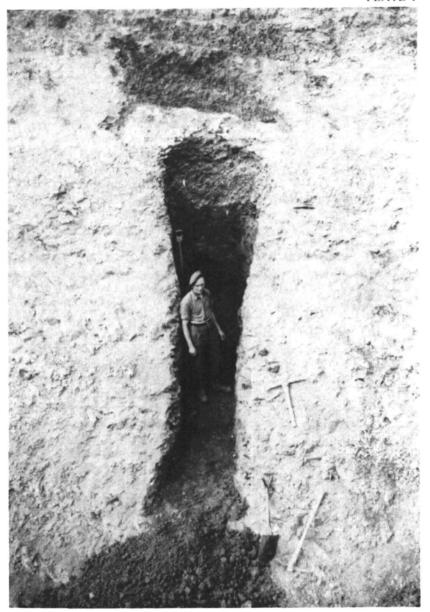
Major Burchell then gave an account of the shaft and his theories concerning it in a lecture to the Society of Antiquaries of London. This apparently had a mixed reception, doubts being cast on the reported facts and the conclusions derived therefrom. Possibly as a

² The Times, 2nd December, 1948.

³ Arch. Newsletter, 9 (Jan. 1949), 13.

⁴ Annual report for 1948, Arch. Cant., lii (1949), xlv.

PLATE I



Hammill: The Shaft.

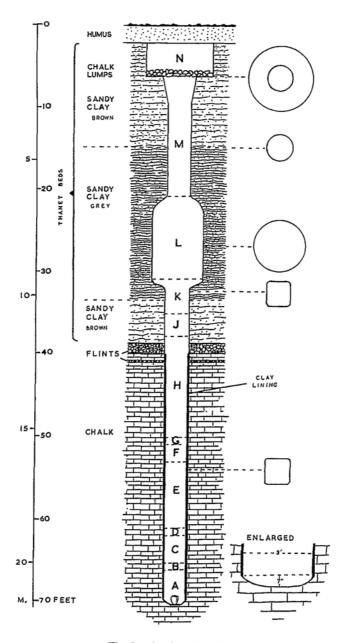


Fig. 2. Section through Shaft.

result of this, no detailed report was published, though the finds and some of the notes were eventually deposited at the British Museum. The diagrammatic drawing of the shaft, (Fig. 2), was reproduced by Anne Ross in her review of ritual pits and shafts,5 and she gave Major Burchell credit for his discovery. Copley's gazeteer.6 refers to a 'ritual shaft at Sandwich'.

In view of the reports of similar shafts in France and Germany, as for example at Holzhausen,7 and Paul Ashbee's further account of a shaft at Wilsford8 and his suggestion that some may have been missed, and that some may be found below pond-barrows, the writer decided that it would be justifiable to seek more information about the Hammill shaft while eye-witnesses of the dig might still be alive, so that a full account could be published.

Clear memories of the Society of Antiquaries lecture were provided by Professor Sheppard Frere; Mr. J. Hopkins, librarian to the Society; Mr. J.R. Burchell, son of the Major; and by Mr. G.V. Parker, formerly chairman of the Company. Vivid accounts of the excavation were obtained from Mr. Parker; Mr. L. Poupard, manager of the Company in 1946; and Mr. Sid Elvery, who drove the clay excavator nearby throughout the examination of the shaft.

THE SHAFT

The country round Hammill is gently undulating. To the south the chalk is only a few inches below the surface. To the north the chalk dips quickly to pass below the Wantsum Channel and re-appear in the Isle of Thanet. Hammill has varying depths of clay overlying the chalk, whereas, a mile to the north, the Ash-Woodnesborough ridge is composed of sand. The digging of clay in the quarry, (Fig. 1, A) has removed a gently sloping hillock. The highest point of this was at 28 m. O.D., which was 12 m. higher than the Prince of Wales crossroads. The mouth of the shaft, (Fig. 1, X), was 87 m. east of the summit, and 1.6 m. lower, at N.G.R. TR 562298.

The digging machine had removed a depth of about 2.5 m. of soil from one side of the shaft before Major Burchell examined the site,

⁵ Anne Ross, 'Shafts, Pits, Wells - Sanctuaries of the Belgic Britons?', in Coles and Simpson (eds.), Studies in ancient Europe, Leicester, 1968, 255-85. See also Anne Ross, Pagan Celtic Britain, London, 1967.

⁶ Copley, The Archaeology of South-east England, London, 1958, 126.

⁷ K. Schwarz, Jahresbericht der Bayerischen Bodendenkmalpflege, (1962), 22-77.

⁸ P. Ashbee, 'The Wilsford Shaft', Antiquity, xxxvii (1963), 116.

but he was able to assess the shape of the top of the shaft from his own observations and those of the workmen. He was also able to photograph it before it was destroyed. (Plate I).

The opening was in the form of a circular ante-chamber, with diameter of 2.5 m. and depth of 1.3 m., dug into the hard clay. This ante-chamber was filled with blackened soil, containing pottery and bone fragments. The whole of its floor was covered with a layer of chalk blocks, 0.3 m. deep.

Below the centre of the ante-chamber was the mouth of the shaft, circular and 1 m. in diameter. The shaft was filled, for a short distance, with dark soil, containing pottery fragments similar to those in the ante-chamber. When the soil was removed it was revealed that the shaft continued downwards until it reached a depth of 21.8 m. (71 ft. 6 in.). From about 7 m. to 9 m. the shaft expanded to a diameter of 2 m., (Fig. 2, L). Below this, the cross section was a 1 m. square with slightly concave sides and rounded corners. Chalk was reached at 12.3 m. and below this level it was found that the walls were 'carefully lined with clay'. The clay showed tool marking, clearly shown on a photograph in Major Burchell's records.

The bottom of the shaft was bowl shaped, and contained 'a complete Belgic jar broken into small pieces. Near it were fragments of two other vessels which were evidently not complete when destroyed.'

The exploration of the shaft was carried out by Major Burchell with the assistance of only one man, whom he brought with him from Broadstairs. The soil was dug by hand by one of them, while the other winched it to the surface with a bucket and rope. Access was by means of a series of 18-stale ladders, lashed together as the dig became deeper, and supported only by the base of the lowest one. No air supply was organised and no pumping was needed. No shuttering was used, and only a few planks were laid round the mouth to stop the edge breaking. 'A couple of pieces of corrugated iron were laid over the top while they left the site, to keep out the rain'. Although the depth of the shaft was decreased as the surrounding clay was removed by quarrying, the excavation must have been unreasonably dangerous. Mr. Elvery, driving his mechanical shovel nearby, was appalled by the risks being taken.

Measurements made by the Company in 1949, showed that in that year the highest level of water reached in the adjacent chalk was 4.3 m. O.D. and the lowest 3.3 m. The bottom of the shaft was above these levels at 6.5 m. O.D.

The drawing showing the section of the shaft (Fig. 2) must be regarded as diagrammatic. The eye-witnesses say that Major

Burchell did not personally measure the dimensions of the antechamber. They also say that the enlargement of the shaft at L was due to there having been a falling-in of the walls at some time.

THE INFILLING

The table (p. 00) from Major Burchell's notes, gives his description of the infilling soil as it was removed.

The infilling at the bulge, L, was of 'extremely sticky black earth'. This made Major Burchell suspect animal or human cremation, but expert analysis showed it to consist of 'decayed vegetable matter with only traces of animal residue'.

Animal bones and teeth were scarce. There were none below 13.6 m. and only a few isolated ones above. They included horse, sheep or goat, pig and bird. There are no records of small wild animal bones such as fox, weasel, rat or rabbit. Shells were rare — only two valves each, of oyster and mussel, between 4.8 and 13.7 m.

The pottery finds in the shaft are reported on by Mr. Richard J. Pollard of the Canterbury Archaeological Trust (Appendix 1). He dates the large pot at the bottom of the shaft, hand-made and 34.5 cm. tall, and the accompanying pieces of two other pots, to the second or third century A.D. Above this, for about 6 m., the infilling was free of pottery, while the rest of the shaft, except for the bulge at L, and the ante-chamber, contained a variety of sherds dating from the first century B.C. to the third century A.D.

TABLE OF LAYERS AND INFILLING

Layer	Thic	kness	Nature of infilling	
	m.	ft. in.		
N	1.3	4 3	1 m. of black clayey earth above a 0.3 m. layer of chalk blocks sealing shaft.	
M	4.57	15 0		
L	3.12	10 3	Extremely black and sticky earth with much vivianite and carbon. Thin streaks of grey clay at intervals.	
K	1.3	4 3	Black clayey earth, with small lumps of sandy clay – getting rapidly less black towards base.	
1	0.69	2 3	Friable brownish clayey earth with small lumps of sandy clay and considerable quantity of small chalk lumps and pellets.	
H	3.93	12 11	As layer J, but with more chalk.	
G F	0.08	4	Chalk lumps and pellets.	
F	0.73	2 5	As layer H.	
Е	2.49	8 2	Slate-coloured clayey earth with lumps of slate-coloured sandy clay (from middle sandy clay).	

J.D. OGILVIE

D	0.1		4	Brownish sandy clay in very small pieces (from upper and
				lower sandy clay).
C	1.78	5	10	Small lumps of slate-coloured sandy clay in slate-coloured
				clayey earth.
В	0.23		9	Large lumps of slate-coloured sandy clay.
Α	0.67	2	2	As layer C.

THE SUBSIDIARY PIT

About three metres north of the shaft, a saucer-shaped pit was found. It was oval, with a maximum width of 13 m. and a depth of 1.5 m. It was filled with dark soil, containing pottery and tile fragments, bones and flints. There is no record of any stratification.

Among the contents were the following:

- 1. Part of a pipe-clay figurine of Venus, listed by Dr. Frank Jenkins, and described by him as made of the finest quality white pipe-clay and therefore it is virtually certain that it was a product of the central Gaulish officinae centred on Toulon-sur-Allier and may be dated to c. 130-150 A.D.
- 2. Samian pottery sherds, reported on by Miss Catherine Johns (Appendix 2).
- 3. Coarse pottery sherds reported on by Mr. Pollard (Appendix 1).
- 4. Animal bones and teeth, including 'twelve horses' teeth in a cluster . . . from at least two animals . . . with no trace of any bones forming the two skulls'.
- 5. Fragments of bronze handle.
- Flints, including 'a double-ended pounder' and 'six struck flakes in mint condition'.

THE BLACK POND SITE

In 1981, the writer examined the other large quarry of the Brick Company, about 1 km. west of the Hammill clay-pit (Fig. 1, B). Weathering of the clay had resulted in the appearance of soil discolourations near the north corner (Fig 1, Y) which had not been seen on previous searches. Surface excavations of this nearly vertical face revealed cross-sections of two V-ditches, containing consider-

⁹ F. Jenkins, 'The Cult of the "Pseudo-Venus" in Kent', Arch. Cant., lxxii (1958), 71.

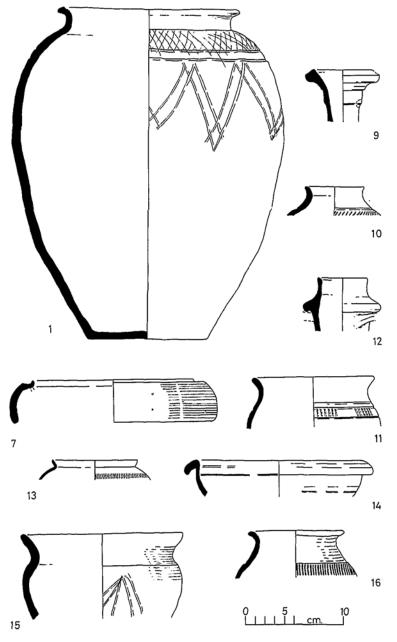


Fig. 3. Pottery (1/4).

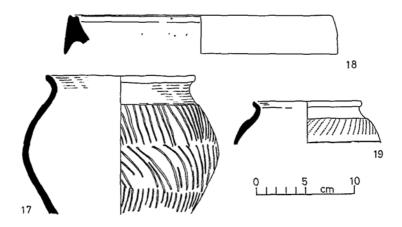


Fig. 4. Pottery (1/4).

able quantities of Belgic pottery. Mr. Pollard has provisionally dated these sherds to a period including the first century B.C. and the first half of the first century A.D.

Crop-markings on the field immediately to the north, visible from ground level, suggested the presence of a settlement site. One small trench was dug and this confirmed the extension of the ditches. It was subsequently reported that, while digging clay from near this corner of the quarry, the machine had uncovered a small area, just below the top soil, which contained much broken pottery, with overlying bones, some of which were probably human.

It is intended to investigate this site further when farm procedures allow. It will be of interest to see whether there is a settlement there comparable with the German Viereckschanze, the rectilinear entrenchments of late pre-Roman Iron Age date associated with ritual shafts.

DISCUSSION

There are three obvious theories for the nature of the shaft:

- a chalk pit
- 2. a well for water supply
- a ritual shaft.

- 1. It seems unlikely to be a chalk pit. Although Pliny states that the Celts dug shafts up to 100 ft. deep to obtain chalk for agricultural use, 10 he describes these as 'having a narrower mouth expanding in the interior'. The amount of labour involved in digging the Hammill shaft would have been quite disproportionate to the quantity of chalk obtained. The district round Hammill is rich in examples of the more efficient type of chalk well, the double trefoil 'dene-hole'. Some of these were in use into the nineteenth century.
- 2. If it was a well dug for water supply, then there are some unusual features. It seems odd that a site should have been chosen a few metres from the summit of a hill. The shaft must have been quite difficult and dangerous to dig, and therefore it seems it would have been more logical to place it at a lower point where the water table might be more easily reached. The borings by the Company, already mentioned, show that, at least in 1949, the water table at its highest point was 2 m. below the bottom of the shaft. Major Burchell obtained an opinion from consulting engineers specialising in the geology of wells. They reported that 'in all probability the discovered shaft never contained water, and was excavated for other reasons. Had the overlying Thanet sands yielded water in more than mere trickles, the shaft could never have been carried to a depth of 70 feet without some stout supporting lining . . . nor would clay lining have survived seepage. At Ringleton, (Fig. 1, C), within 1 km., are surface springs which feed the origin of the Durlock stream.

If, despite these facts, the shaft had been a successful well, then the positioning of the three similar pots at the bottom is difficult to explain. Lost pitchers would surely show a wider variety of sherds and a less formally arranged collection.

It could be postulated that the shaft represented a failed effort to find water, with the pots at the bottom signifying a sacrifice made to propitiate the gods in the hope either that water would appear, or that the next shaft might be more successful. This could be comparable with the ritual assembly found in a failed flint mine in Norfolk.¹¹

3. The third possibility, that the shaft was dug primarily for ritual purposes, seems to be the most likely, though it should be remembered that a distinction should be drawn between the use for religious purposes of pre-existing sources such as wells, springs, rivers and ponds, and the deliberate construction of a site.

¹⁰ Pliny, Natural History, xvii, 4.

¹¹ Rainbird Clarke, East Anglia, London (1960), 53.

The secondary use of existing features is well documented, 12 and is supported by archaeological evidence from prehistoric, classical and modern times – from the numerous examples of the ancient deposition of votive objects in lakes and springs to the continued practice of throwing coins in the fountain and present-day river baptismal procedures.

The primary construction of ritual sites is also clearly defined, as in the ritual shafts in temple buildings at Jordan Hill, Som., ¹³ and the shafts associated with the late Iron Age entrenchments, (*Viereckschanze*), in France and Germany, ¹⁴ which have been sufficiently established as a type to justify a distribution map. ¹⁵

Difficulties arise when an attempt is made, in border-line cases, to establish the difference between primary and secondary ritual function, and the final decision is often largely based on circumstantial evidence. A study of the list of probable primary shafts in this country by Anne Ross, 16 together with perusal of the original excavation reports, will produce examples of certain features which, from their frequencies and their peculiarities, will give strong presumptive evidence for their ritual significance.

The frequency of bones of dogs is significant. The Upchurch puppy burials, ¹⁷ with the uncharred skeletons placed in 'ollae' along with charcoal from twigs, and their burial in a systematic geometrical arrangement, is echoed by the frequency of dog remains in shafts and wells. The Warbank, Keston, dogs ¹⁸ were cremated and covered with charcoal and placed at the bottom of the shaft, which was associated with the temple and *sarcophagi*. Dog skulls were often found without the bodies, or severed from the adjacent skeletons, as at Ewell, Surrey. ¹⁹ In one of the Newstead, Roxburghs., shafts, ²⁰ there were the severed heads of five dogs, and at Asthall, Oxon., ²¹ five skeletons of 'terrier-like' dogs were in a

¹² As, for example, in S. Piggott, ancient Europe, Edinburgh, 1965, 230-1.

¹³ Quoted by Anne Ross in Studies in ancient Europe, as in note 5, 266.

<sup>K. Schwarz, op. cit. in note 7.
K. Schwarz, op. cit. in note 7, 74.</sup>

¹⁶ Anne Ross, Studies in ancient Europe, as in note 5.

¹⁷ I. and A. Noël Hume, 'Roman Pottery from Upchurch Marshes', Arch. Cant., lxiv (1951), 170.

¹⁸ Nancy Piercy Fox, 'The Ritual Shaft at Warbank, Keston', Arch. Cant., lxxxii (1967), 184-191.

¹⁹ H.W. Diamond, 'Account of Wells or Pits, containing Roman Remains, discovered at Ewell in Surrey', Archaeologia, xxxii (1847), 451.

²⁰ J. Curle, A Roman Frontier Post, Glasgow (1911), 122.

²¹ P.M.M. Cook, 'A Roman Site at Asthall, Oxfordshire', Oxoniensia, xx (1955), 29.

pottery-free layer.

Horse skulls are common. They frequently occur alone, but sometimes only a jaw bone or part of one is present. At Heywood, Wilts., 22 a horse's skull had a hole pierced in the cheek bone and was associated with four human skulls. Skulls of goats occur occasionally.

Horses' teeth appear in deliberate congregations. At Minnis Bay,²³ a group was found below a circular slab of sandstone; at Bekesbourne, 24 in a shaft, twelve feet deep, which was carefully lined with a stout oak structure, the flat stone pegged to the bottom of the shaft supported 'horses teeth arranged in a circle' and at many others, including the Hammill pit, horses' teeth are mentioned sufficiently often to be significant.

Significant also is the frequent occurrence of oak, in a wide range of sizes and shapes, from small chips and twigs, to stakes pointed at both ends,25 and beams and whole trunks. Planks may be used to line the shaft, as at Ashill, Norfolk,26 as well as at Bekesbourne. Of particular interest are the large beams placed vertically at the bottom of shafts, as at Le Bernard, Vendée. 27 These are sometimes mounted or packed in clay as at Swanwick, Hants.²⁸ At Ardleigh, Essex,²⁹ great trouble had obviously been taken to line and completely encase a hollow trunk with clay. In the case of smaller pits it should be noted that Pliny30 refers to oak poles being driven into the bottom of dung-pits to keep away the snakes.

Hazel nuts and branches are frequent. At Ashill, Norfolk³¹ the excavator noted that the nuts found nearer the surface were more mature than the lower ones. From the grading of the maturity he was able to postulate that the shaft had been filled throughout one summer season.

Written sources draw attention to the fact that certain birds are associated with prognostic ritual. Skeletons of complete birds, and

²² The Wiltshire Arch. and Nat. Hist. Mag., xxxvi (1910), 465.

²³ P.H.G. Powell-Cotton and G.F. Pinfold, 'The Beck Find at Minnis Bay', Arch. Cant., li (1939), 191.

²⁴ J. Brent, 'Ancient sepulchral Shaft at Bekesbourne', Arch. Cant., ii (1859), 43.

²⁵ Diamond, op. cit., in note 19, 452.

²⁶ G.E. Fox, 'Roman Norfolk', Arch. Journ., xlvi (1889), 352; and Norfolk Arch., viii (1879), 224-230.

²⁷ Schwarz, op. cit., in note 7, 65; Stuart Piggott, The Druids, London (1975), 75. ²⁸ C.F. Fox, 'The Bronze Age Pit at Swanwick, Hants.', Antiq. Journ., x (1930),

²⁹ Colchester Arch. Group Quarterly Bulletin, viii (1965), 30.

³⁰ Pliny, Natural History, xvii, 8.

³¹ Anne Ross, Studies in ancient Europe, as in note 5, 258.

of their legs and heads, listed in Anne Ross's series of shafts, wells and pits, include cock, raven, crow, buzzard, starling and crane. The Jordan Hill, Som., shaft within a Romano-British temple, 32 contained eleven separate layers, each with bird skeletons.

The description of the pottery found in shafts is usually carefully recorded by the excavators. It covers a wide range dating from the Bronze Age to the present day. Although the accurate assessment of the date and source of individual items may not be of much value in determining the diagnosis of ritual use, the study of multiple items can have two valuable functions. First, the relative ages of the different layers of the filling can provide evidence of the date of the digging and of the periods of the infilling of the shaft. Second, the arrangement of the pottery is often an important factor in determining that the shaft has been used for ritual purposes. Typical examples of the latter are seen at Ewell, Surrey;33 at Ashill, Norfolk,³⁴ where whole urns were arranged symmetrically in layers; at Bekesbourne,35 with vessels arranged symmetrically at the base; at Great Chesterford, Essex,36 where 45 shafts showed whole pots deposited at intervals; and at several shafts, including Hammill, where the arrangement of the pots suggests that they have been deliberately placed at the bottom.

It is impossible to give an exact date for the construction of the Hammill shaft and for its infilling. From Mr. Pollard's examination of the pottery, and from Major Burchell's description of the layers of soil around and in the shaft, it would appear that the shaft was dug and the pottery placed at the bottom at some time in the second or third centuries A.D.; that a fall of clay from the bulge (L) occurred soon afterwards; and that the rest of the shaft was then filled with soil from the adjacent occupied area. It is unlikely that the shaft was open for long at any stage of the infilling because there was no evidence of the collections of rubbish or wild animal remains or silting that are usually found in open shafts.

The carefully applied clay lining is difficult to explain. It is a fairly common occurrence, as for example at Cadbury Castle, Devon.³⁷

³² Anne Ross, ibid., 266.

³³ Diamond, op. cit., in note 19, 451-5.

³⁴ G.E. Fox, 'Roman Norfolk', Arch. Journ., xlvi (1889), 352.

Brent, op. cit., in note 24, 43.
 R.C. Neville, 'Notices of certain Shafts, containing Remains of the Roman Period, discovered at the Roman Station at Chesterford, Essex', Arch. Journ., xii

<sup>(1855), 124.

37</sup> C. Tucker, 'An Account of the Discovery of Roman Remains in the British Hill-fortress called 'Cadbury Castle', near Tiverton, Devon', Arch. Journ., v (1848), 195.

The 'mint' condition of the tool marks at Hammill rules out long exposure to water, and one is therefore left with the alternative theories of ritual significance or of a constructional device to prevent chalk falls during the excavation of the deeper parts.

The absence of exact records of the ante-chamber unfortunately precludes any conclusive theories as to its original structure and function, except to suggest that it might have been a definite sealing attempt. The Vendée shafts,³⁸ appear to have elaborate capping structures, but there is no definite evidence of this at Hammill. At its simplest it could merely be a closure with a layer of chalk blocks which have then settled, leaving a depression that has subsequently been filled with rubbish.

The possibility that the Hammill shaft was a Belgic ritual structure established as late as the third century A.D. may seem strange when one realises its position in a highly Romanised area, only 4.5 km. from Richborough, 7 km. from the coast, and 1 km. from the Richborough–Dover road. Professor Piggott however accepts the dating of similar sites in this country up to the fourth century A.D.³⁹

The ritual significance of the Hammill shaft, although it cannot be categorically established, is likely because of the negative evidence of its function as a well; its similarity to the *Viereckschanze* shafts; the positioning of the pots; the deliberate infilling; and the suggestive evidence of ritual findings in the nearby pit, (horses' teeth and clay figurine).

ACKNOWLEDGEMENTS

I would like to thank all those individuals mentioned in this report who have helped to collect the evidence; Mr. W.J. Thomas, present manager of the Company, for allowing access to reports and plans; Messrs. T. and M. Coleman for access to their land; Mr. Richard J. Pollard of the Canterbury Archaeological trust for his reports on the coarse pottery; and Miss Catherine Johns, F.S.A., of the British Museum for her unstinted help and advice with the records and specimens in her care.

The original excavator, who died in 1979, apparently did not achieve obituary notices in the archaeological journals, despite his many other investigations and reports. I hope this account will help to alleviate the omission and serve as a record of Major J.P.T. Burchell, M.C., F.S.A., D.L.S.

³⁸ Schwarz, op. cit., in note 7, 65.

³⁹ Stuart Piggott, The Druids, London (1975), 75.

J.D. OGILVIE

APPENDIX I

The pottery, excluding samian.

Richard J. Pollard

I. The shaft

Sherds from two or three vessels found at the bottom of the shaft can be isolated (nos. 1–3). A small additional number of sherds were marked with the depths of location, measured from the chalk surface in the ante-chamber, by Major Burchell. These are described in detail below. The remaining pottery known to have come from the shaft is discussed briefly at the end of this section.

The vessels from the bottom:

No. 1 (Fig. 3). This vessel was discovered in a broken but complete state. It is in a grey fabric fire-scorched in parts on the exterior, tempered with abundant grey and black grog plus sparse indigenous chalk, flint and quartz inclusions. The ware is hard, and the vessel was hand-made, possibly using the coil technique, resulting in a very uneven surface. Two zones of decoration, incised on the shoulder and tooled on the upper body, are separated by a pair of grooves. Fabric and form both fall within the 'Belgic' ceramic tradition of east Kent, but on analogy with Canterbury material the decorative scheme would appear to place the pot's production in the second to third centuries rather than the first century A.D. (cf. Macpherson-Grant 1980, nos. 1 and 2, and Pollard forthcoming). The vessel was illustrated by Ross (1968, Plate XII, top left).

Nos. 2 and 3 (not illustrated). Seventy sherds are recorded as having been found in association with no. 1. These are in an identical fabric to the latter, reconstruction suggesting that two vessels, of identical form and decoration to no. 1, are represented, but that these were not complete at the time of deposition. A further rim-sherd of this type was recovered at a point 32 ft. below the chalk surface (no. 8 here).

This type of storage jar was often used as a cinerary urn at Canterbury, but occurrences in domestic contexts in the city indicate that it was not solely a 'ritual' type. The deposition of perhaps three such pots at the bottom of the shaft need not have any ritual significance concomitant with their type, therefore.

50 ft.: no. 4 (not illustrated). A body sherd of a biconical or carinated vessel in fine gray micaceous ware, probably Flavian to Hadrianic date.

42 ft.: no. 5 (not illustrated). A plain body sherd in grog-

tempered ware.

36 ft.: no. 6 (not illustrated). A rod-section handle of an amphora, probably a south Spanish 'Dressel 20'.

32 ft.: no. 7 (Fig. 3). Orange coarse sand-tempered hard wheel-thrown fabric, probably a Canterbury product on fabric grounds. A hemispherical bowl with high mounted flange, facet-burnished externally, dateable in this ware (and probably other wares also) to within the late-first to late-second centuries (cf. Marsh 1978, Type 37, and Marsh and Tyers 1978, Type IV.B1).

32 ft.: no. 8 (not illustrated). See description of nos. 1-3 above.

28 ft.: no. 9 (Fig. 3). Buff medium sand-tempered hard wheel-thrown ware, source probably as no. 7. A one-handled flagon (the scar of the lost handle is visible) of Flavian to early-Antonine date, comparable to Bushe-Fox (1949), no. 374.

12 ft. 6 in.: no. 10 (fig. 3). Grey/buff grog-tempered ware, a beaker with furrowed decoration 'Belgic tradition', probably first century A.D.

10 ft. 6 in.: no. 11 (Fig. 3). Ware as no. 4. A necked bowl with tooled decoration between grooves (cf. Bushe-Fox 1926, no. 27). A Flavian to mid-Antonine date is probable.

5 ft.: no. 12 (Fig. 3). Fine pink ware with sparse red-brown inclusions, coated with an abraded orange-red slip, probably originally mottled. A German source, possibly Trier, has been proposed for this type (Bird 1981), a two-handled flagon (Bushe-Fox 1949, no. 379) of third- to early fourth-century date. The majority of British find-spots of this type lie in Kent and London-Southwark (Bird 1981), but examples elsewhere include one from Hemel Hempstead, Herts., (Neal 1974, fig. 111, no. 403).

The distribution of the sherds described above is thus restricted to the lowermost, uppermost, and middle strata recorded by Burchell (Fig. 2, layers A, H, J, K, and M). The occurrence of the first-century no. 10 at such a high level, in conjunction with the dating of the lower pieces, implies deliberate backfilling with material containing residual pottery. That pottery occurs at all nullifies the hypothesis that the shaft was filled solely by the collapse of its walls, though the archaeologically sterile layers A–E (assuming vessels 1–3 to have been deposited while the shaft remained open) could have resulted from the collapse of the walls surrounding layer L.

The remainder of the pottery known to have come from the shaft is small in quantity, and similar in the ranges of fabrics and dates to that described above. It includes an Oxfordshire red colour-coated ware bowl (Young 1977, Form C 51, derived from the samian form Dr. 38, dated to c. A.D. 240-400+); thickly everted 'Belgic' grogtempered storage-jar rims and a comb-stabbed shoulder (cf. Jenkins

1950, fig. 10, no. 22); the flanged rim of a carinated bowl in grey sandy wheel-thrown ware (cf. MacPherson-Grant 1982, nos. 239–240); the shoulder of a poppy-head beaker in fine grey ware with barbotine dot panels; the rim of a bowl in fine orange micaceous ware (cf. Cunliffe 1968, no. 601); and the following pieces:

No. 13 (Fig. 3). Fine orange micaceous ware with white slip. Shouldered or globular beaker, rouletted (cf. Bushe-Fox 1932, nos. 279–280, in fine grey ware), of Flavian or Flavian to Hadrianic date, respectively.

No. 14 (Fig. 3). Ware as no. 4. Hemispherical bowl with incised turning-marks, dateable from the Flavian to the early-Antonine period.

No. 15 (Fig. 3). Ware as no. 1. An S-bowl, facet-burnished on the shoulder and upper body, this partly overlaid by a tooled motif, probably a chevron (as Cunliffe 1968, no. 558, from a Vespasianic level). Broadly late first century B.C. to third century A.D.

II. The ante-chamber

The small number of sherds that can be determined to have derived from the fill of the ante-chamber date from within the late first century B.C. to the early second century A.D., although, as a group, a first-century A.D. date is most appropriate on analogy with Canterbury and Richborough. Two sherds, one from the shaft-fill and one from the ante-chamber, are noted as conjoining (British Museum Register 1949-2-1-8; not examined by the present author), suggesting that the final back-filling of the former and the filling of the latter *may* have been contemporary, using the same rubbish deposit. It will be noted that Major Burchell equated the soil structure of layers M and N.

The ante-chamber pottery includes 'Belgic' grog-tempered beadrim jars and everted-rim storage-jars; a large 'pulley-rim' flagon rim (cf. Bushe-Fox 1926, no. 39) in greenish-white fine sandy ware; a biconical-beaker body sherd in fine grey micaceous ware; the neck of a two-handled flagon in grog-tempered ware, grey internally and orange-buff externally, illustrated by Ross (Plate XII, bottom), and quite a common east Kent type of the Claudian to Vespasianic period (see Pollard 1983, for discussion, and Jenkins 1950, fig. 12, no. 40, for a more complete profile).

The following pieces are illustrated:

No. 16 (Fig. 3). Coarse sandy reduced hand-made ware, a jar or beaker with facet-burnished neck and furrowed shoulder. This ware is generally similar to that from the Stuppington Lane kiln site at Canterbury (Bennett *et al.* 1980), although the forms of this and no.

17 below were not part of the range of products associated with this kiln site. A date in the mid- to late-first century A.D. can be proposed for this and the following vessel on form-fabric grounds (see also Pollard 1983).

No. 17 (Fig. 4). Ware as no. 16. A jar with smoothed neck and furrowed body, closely paralleled at Richborough (Bushe-Fox 1949, no. 383, from the pre-Flavian pit (82), and illustrated by Ross (1968, Plate XII, top right). Date as no. 16 above.

III. The pit

The bulk of the provenanced sherds come from this feature. The assemblage covers a wider range of fabrics and forms than do those from the shaft and ante-chamber, although its date range is similar to that of the former, being broadly of the first to third/early fourth centuries A.D. All of the wares present in the two groups described above occur in the pit, with the exception of the? Trier 'mottled' ware. The following additional pieces can be recorded:

Fine buff-white mortaria of low-bead-and-hooked flange (Hull 1963, Type 496) and 'hammer-head' (cf. Hull 1963, Type 501, and Hartley 1982, no. 5) forms;

Sandy oxidised ware level-bead-and-hooked-flange mortarium (cf. Hull 1963, fig. 68, no. 9) and ring-neck and 'pulley-rim' flagons, probably of Canterbury origin;

Sandy white ware half-round-flange mortarium of Neronian to Flavian date (Hartley 1977, fig. 2.1, Type 1), and 'Hofheim' collar-rim flagon (as Bushe-Fox 1926, no. 66);

BB2 dishes and plain and decorated pie-dishes;

An S-bowl, fabric and decoration as no. 1 above, rim missing (cf. Birchall 1965, no. 41, ungrouped from the Swarling cemetery);

Fine sandy grey to white ware, a beaker neck probably of Gallo-Belgic butt-beaker, or from a ? north Gaulish bulbous-beaker of late-second to third-century date (Gillam 1970, Type 42). The latter type has been recorded on several sites in Kent, and more sparsely on the east coast of Britain (Pollard 1982/1983), but would appear to have been a rare import.

No. 18 (Fig. 4). Fine sandy black/pink-buff ware with white slip and white flint trituration grit. A 'hammerhead' mortarium, probably an east Kent product, of the late-second and third centuries (Hartley 1982, Fabric 2B).

No. 19 (Fig. 4). Medium sandy reduced wheel-thrown ware. A beaker with comb-stabbed shoulder, and a burnished line or lines below. This type is represented by several examples from Richborough (e.g. Bushe-Fox 1926, no. 47, and Bushe-Fox 1932, no.

249) but is extremely rare elsewhere in Kent and London-Southwark (Pollard 1982/1983, 1983). These may be imports from Colchester (Hull 1958, Type 108), but local production for the east Kent market cannot be ruled out. Flavian to Trajanic date in Kent.

The pit group is characteristic of assemblages of this period in north-east Kent in terms of the ranges of wares represented (cf. MacPherson Grant 1982, Pollard 1983, Wilson 1983), though sandy grey wares of Canterbury type are quantitatively under-represented. The colour-coated wares are also lacking, only Oxfordshire red colour-coated ware (Young 1977, Form C51/52) being attested from the feature, and typical late-third to fourth-century wares are also absent. However, some or all of the sherds in section IV below may have come from the pit, and these would go some way to 'normalising' the composition of the assemblage.

IV. Unprovenanced pottery

There exists a residue of material which, owing to an absence or indistinction of context-marking, cannot with confidence be ascribed to any one feature. It is possible that this came from the pit, as the British Museum Register records that some pottery from this feature was marked in pencil (which may have become abraded), whilst that from other features appears to have all been marked in ink by Major Burchell. The material falls within the ranges described in the foregoing sections, with the addition of the following pieces which are of intrinsic interest:

Fine white ware with brown colour-coat, Nene Valley or Rhineland source, a rouletted bag-beaker bodysherd of the mid-second to mid-third centuries:

BB1, a dish (Gillam 1970, Type 329), and a jar rim possibly the 'oversailing' type (Gillam 1970, Type 147);

Grog-tempered hand-made ware, late Roman (late-third to (early) fifth centuries in east Kent: Pollard 1982, 1982/1983), a dish.

References

Bennett et al. 1980: P. Bennett, N.C. MacPherson-Grant and P. Blockley, 'Four Minor Sites excavated by the Canterbury Archaeological Trust, 1978-79', Arch. Cant., xcvi (1980), 267-304.

Birchall 1965: A. Birchall, 'The Aylesford-Swarling Culture: the Problem of the Belgae reconsidered', PPS, xxxi (1965), 241–367.

Bird 1981: J. Bird, 'Ğerman (?) Flagons from Roman Sites', Kent Arch. Rev., 1xiii (1981), 55.

Blockley and Day 1983: K. Blockley and M. Day, 'The Marlowe Car Park and associated Excavations', The Archaeology of

- Canterbury, v, forthcoming.
- Bushe-Fox 1926: J.P. Bushe-Fox, First Report on the Excavation of the Roman Fort at Richborough, Kent, vi, Oxford (1926).
- Bushe-Fox 1932: J.P. Bushe-Fox, Third Report on the Excavation of the Roman Fort at Richborough, Kent, Oxford (1932).
- Bushe-Fox 1949: J.P. Bushe-Fox, Fourth Report on the Excavation of the Roman Fort at Richborough, Kent, Oxford (1949).
- Curliffe 1968: B.W. Cunliffe (ed.), Fifth Report on the Excavation of the Roman Fort at Richborough, Kent, Oxford (1968).
- Gillam 1970: J.P. Gillam, Types of Roman Coarse Pottery Vessels in Northern Britain, 3rd ed., Newcastle-upon-Tyne (1970).
- Hartley 1977: K.F. Hartley, 'Two major Potteries producing Mortaria in the first Century A.D.', in J. Dore and K.T. Greene (eds.), Roman Pottery Studies in Britain and Beyond, BAR 30, Oxford (1977), 5-18.
- Hartley 1982: K.F. Hartley, 'The Mortaria', in P. Bennett, S.S. Frere and S. Stow, *Excavations at Canterbury Castle, The Archaeology of Canterbury*, I, Maidstone (1982), 150-8.
- Hull 1958: M.R. Hull, Roman Colchester, Oxford (1958).
- Hull 1963: M.R. Hull, The Roman Potters' Kilns at Colchester, Oxford 1963.
- Jenkins 1950: F. Jenkins, 'Canterbury. Excavations in Burgate Street, 1946-8', Arch. Cant., Ixiii (1950), 82-118.
- MacPherson-Grant 1980: N.C. MacPherson-Grant, 'The Pottery from the Wincheap Cremations', in Bennett et al. (1980), 291-3.
- MacPherson-Grant 1982: N.C. MacPherson-Grant, 'The Coarse Wares', in P. Bennett, S.S. Frere and S. Stow, Excavations at Canterbury Castle, The Archaeology of Canterbury, I, Maidstone (1982) 97-123, 133-49.
- Marsh 1978: G. Marsh, 'Early second century Fine Wares in the London Area', in P.A. Arthur and G. Marsh (eds.), Early Fine Wares in Roman Britain, Oxford (1978), 119-224.
- Marsh and Tyers 1978: G. Marsh and P.A. Tyers, 'The Roman Pottery from Southwark', in J. Bird, A.H. Graham, H.L. Sheldon P. Townsend (eds.), Southwark Excavations 1972–74, London and Middlesex Arch. Soc., Surrey Arch. Soc. Joint Publ. I, London (1978), 533–82.
- Neal 1974: D.S. Neal, The Excavations of the Roman Villa at Gadebridge Park, Hemel Hempstead 1963-8, London (1974).
- Pollard 1982/3: R.J. Pollard, *The Roman Pottery of Kent*, thesis to be submitted for Ph.D. University of Reading (in 1982 or 1983).
- Pollard 1983: R.J. Pollard, 'The Late Iron Age and Roman Pottery from the Marlowe Car Park Excavations', in Blockley and Day 1983.

J.D. OGILVIE

Ross 1968: A. Ross, 'Shafts, Pits, Wells - Sanctuaries of the Belgic Britons?', in J.M. Coles and D.D.A. Simpson (eds.), *Studies in ancient Europe*, Leicester (1968), 235-85.

Wilson 1983: M.G. Wilson, 'The Pottery from the Excavations of the Canterbury Excavation Committee', in Blockley and Day 1983.

Young 1977: C.J. Young, Oxfordshire Roman Pottery, BAR 43, Oxford (1977).

APPENDIX II

Samian Pottery from the Hammill subsidiary pit.

Catherine M. Johns

Registered material

B.N	M.	ref.	no.

1949 6-1	2.	Dr.37	South Gaulish. Late Flavian	
	2	D= 27	Control Coulish Antonina	

3.	Dr.37	Central	Gaulish.	Antonine
1	Dr 37	Central	Gaulich	Antonina

7. Dr.18/31 Central Gaulish.

8. Dr.27 Central Gaulish. Hadrianic/Antonine

9. 18/31 R Central Gaulish. HABILIS M, Antonine

10. Dr.33 ?South Gaulish. OF RVFIN, Flavian/ Trajanic

11. Dr.33 Central Gaulish. SEVERVS F, Antonine

12. Walters 80 VIC . . ., late Antonine

Unregistered

The earliest sherds are Flavian – late Dr. 29s, two sherds of Dr. 15/17. The latest are late Antonine, e.g. 12 above (Walters 80) and an unregistered fragment of a Walters 79.

Decorated ware: 1 sherd possibly Germanus, probably a late Dr. 29. 1 Dr. 37 rim of Martres-de-Veyre ware, Trajanic. Otherwise, some late South Gaulish and a lot of standard Central Gaulish, Cinnamus, Paternus II, etc.