

A ROMAN POTTERY KILN AT CANTERBURY.

BY GRAHAM WEBSTER.

DURING the month of April, 1939, work was carried out in the garden of the Municipal Offices, Canterbury, for the construction of a deep A.R.P. Control Room, involving the excavation of a hole 35 ft. by 24 ft. and 10 ft. deep.

The project was of an urgent nature, and as the excavation started before the design was approved, it was considered imprudent to execute the complete excavation in the first instance. The hole was sunk to the full dimensions to a depth of 5 ft. 6 ins. only and a smaller one made in the centre 20 ft. by 14 ft. to the maximum depth. It is important to realize this as the Kiln was entirely at the lower level. Subsequently the scheme was amended and the Control Room built at the higher level, i.e. on the first stage. The centre excavation was filled in and the Kiln preserved beneath the structure.

The Municipal Buildings were originally built as a private residence called Dagmar House in 1848. A map dated 1822 engraved by James Bingley shows that the site is occupied by a smaller building, and the maps of 1800,¹ 1795² and 1768³ show the area clear. Earlier plans are not so precise, but as far as can be judged the site seems to have been unoccupied.

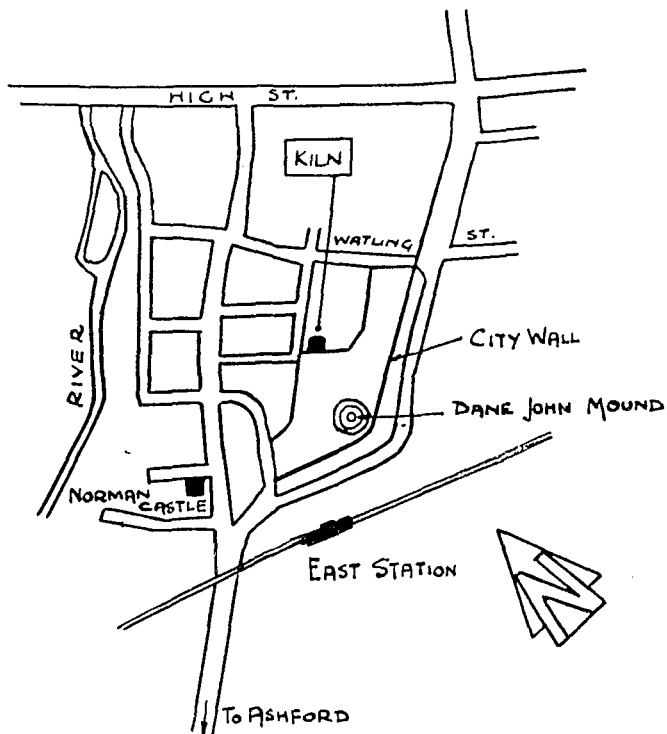
The work was carried out by Corporation workmen under the supervision of the City Surveyor, H. M. Enderby, M.I.M. and Cy.E. and, so far as was compatible with the urgent nature of the work, care was taken to preserve the large quantity of pottery found. Any observation and recording of stratification was, however, impossible and the

¹ Plan of the City and Suburbs of Canterbury (Royal Museum).

² Plan of the Ancient City of Canterbury 1777, corrected 1795 (Royal Museum).

³ Tho. Andrews and Mat. Wren (Royal Museum).

110 A ROMAN POTTERY KILN AT CANTERBURY.



SCALE



importance of the site was not realized until the Kiln was revealed.

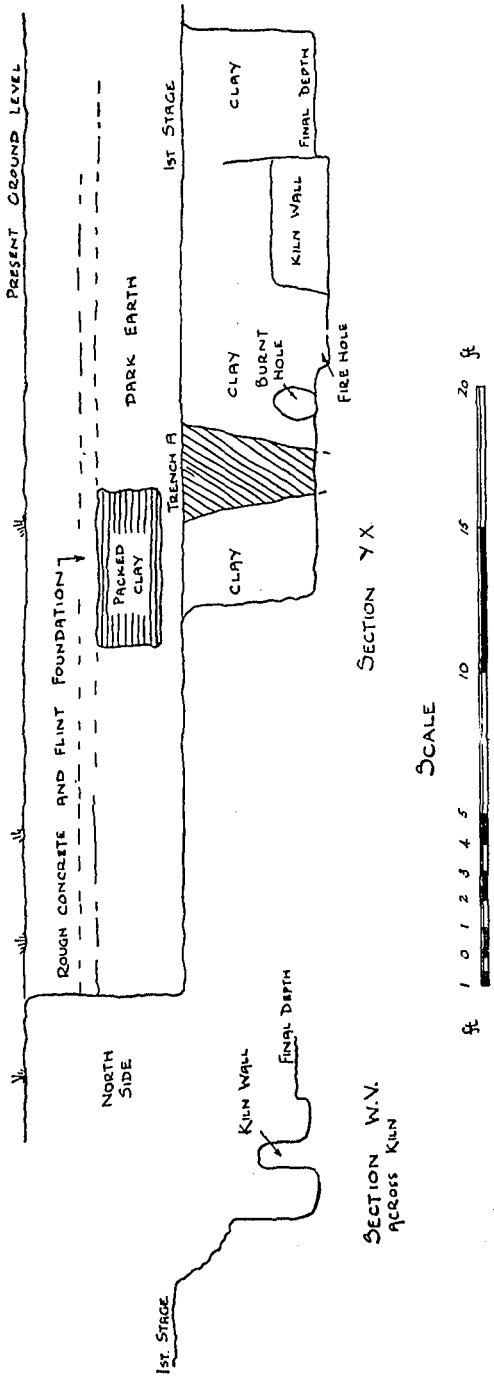
Roman pottery was first encountered at a depth of 5 ft. on the North side and consisted chiefly of flagon tops which became a feature of the site. On the completion of the first stage of the excavation nothing structural had been revealed, but there was a large accumulation of broken pottery which occurred chiefly in the North half of the hole and in a rubbish dump of oyster shells and sherds as shown in the plan. At this depth the natural undisturbed clay had not been reached.

The sinking of the next level showed that the first stage had been taken down to the top of the natural clay, and trenches A and B were revealed. The former was defined by a very sharp vertical cutting on the West side of the hole, and subsequently it was found to follow the line shown on the plan. It consisted of dark earth full of small pottery sherds. By sinking an iron bar into it from the finished level, the depth was computed at a further 3 ft. Trench B, on the other hand, was only 4 ft. deep below the first stage. It had a rough V-shaped section and appeared to run into trench A as indicated.

The brilliant red colouring in the clay first showed the presence of the kiln, but unfortunately the whole of one side was destroyed before the workmen could be stopped and less drastic methods of excavation used. As the remainder of the project could not be carried out at that time, opportunity was given for the remainder of the digging to be carried out by a few members of the Canterbury Archæological Society. A small portion of the dome of the kiln showing the wattle and daub construction had been left intact. In the centre of the kiln one foot above the top of the dividing wall was the complete skeleton of a dog.

At a point near the firing hole, the workmen had previously found a complete black pot of coarse ware containing a white powdered substance; a Samian bowl, form 33, stamped PAVLIM., No. 65; a small biscuit-coloured pot, No. 57*a*; a small grey pot; and a highly glazed black carinated vase, No. 37. A foot above these was discovered

112 A ROMAN POTTERY KILN AT CANTERBURY.



the fragments of the barrel-shaped vessel, No. 64. This list of pottery which occurred in close proximity contains all the vessels found in anything approaching a complete state.

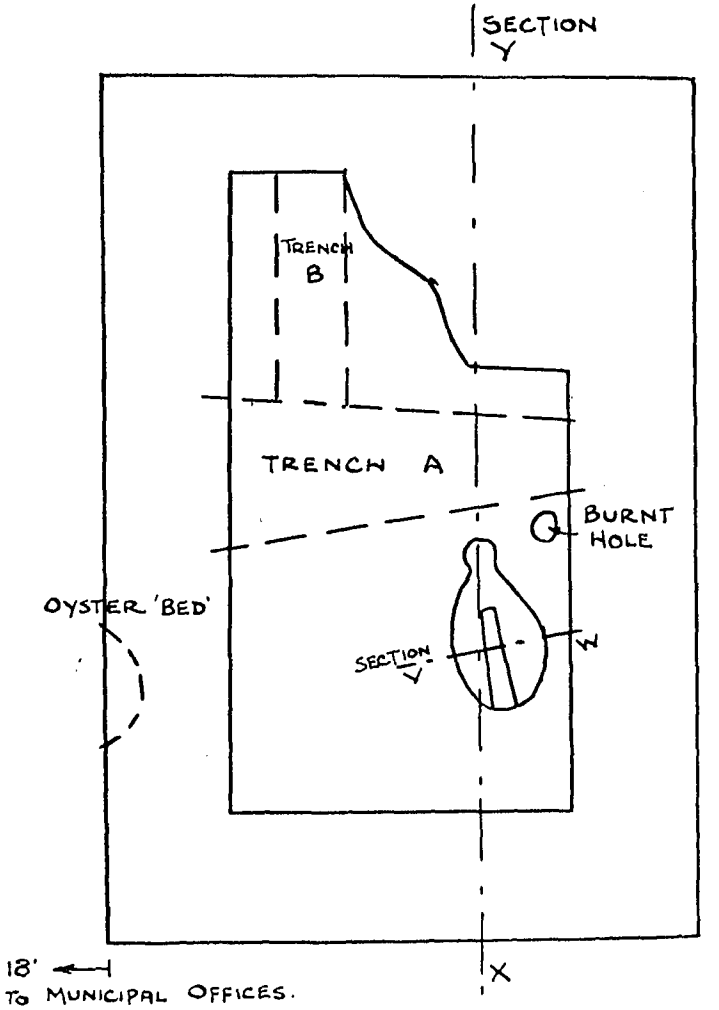
In the firing hole was found a quantity of black ash and charcoal; as would be expected this was confined to the firing hole, the floor being quite clean. The half now excavated was loosely filled with debris consisting of burnt sherds and daubs evidently from the collapse of the domed roof. The floor was found to be a few inches below the full excavation depth and the kiln thus revealed itself as a rough oval in shape, divided down the longer axis by a wall. The two axes were 5 ft. 6 ins. and 3 ft. 9 ins. The firing hole was in line with the wall and its centre a distance of 2 ft. from the end of it. The sides and floor of the kiln and sides and top of the wall had been smoothed with a plastered clay finish which had become hardened with the great heat it must have experienced. Beneath this hard grey-blue skin was the natural clay, red-colour but fading as one penetrated into the undisturbed loam.

A very noticeable feature on the side of the kiln was the change of colour at the level of the top of the division wall. There was no sharp line of demarcation but the distinct rapid change from greyish-blue to pink was clear evidence of the limit of the fire's influence. No evidence of kiln bar supports could be seen in the walls, and it seems, therefore, that the central wall took the entire support of the oven floor.

The small portion of daub already mentioned which formed part of the domed top was unfortunately destroyed before the kiln had been completely excavated, and the actual joint between the temporary and permanent structures was therefore never made visible. The top followed a line of lesser radius than the lower portion and this seems to indicate some form of corbelling.

An isolated circular hole, 14 inches in diameter, was found near the firing hole of the kiln. It was 18 inches deep and cut obliquely into the clay; the sides and bottom exhibited signs of strong burning, but its actual use is

114 A ROMAN POTTERY KILN AT CANTERBURY.



PLAN
SCALE "



problematical. Mr. Jessup suggested that it may have been a small ash pit or a depository for fire-irons.

The general importance of the kiln is the position of its site in relation to the Roman city. The area now covered by the Dane John gardens, the Gas Works, the Norman Castle and the ground between these has been considered by some authorities to have been outside the walls of the Roman city.¹ The evidence for this supposition lies in the number of burials found in this area. The Dane John mound is now considered to have been a Roman barrow,² and several other burials both of the inhumation and cremation type have been found in the vicinity within the city walls.³ By Roman law cemeteries and potters' kilns were placed outside the towns, although this was not infallible, as they have been found within the town areas of Great Chesterford, Essex⁴; Cambridge,⁵ and Caistor by Norwich.⁶ The inference is, therefore, that Roman Canterbury during the latter part of the occupation extended its boundaries and this supposition is upheld by the dates of the kiln pottery and also the fragmentary evidence of the burials; for none of these are later than the third century. Thus would Canterbury claim similarity with London, for Sir Christopher Wren found the remains of Roman pottery kilns under St. Paul's, the site of which was within the walls of the later Roman city.⁷ But there are yet to be discovered third and fourth century buildings above this earlier evidence. There is plenty of open space in this particular area and it is to be hoped that a more detailed archæological excavation will be undertaken to solve this vexed question.

In conclusion I should like to express my great indebtedness to Mr. R. F. Jessup, F.S.A., whose assistance has given strength and direction to an amateur's faltering steps.

¹ John Brent, F.S.A., *Canterbury in the Olden Time*.

² *Victoria County History, Kent*, III, p. 77.

³ *Arch. Cant.*, IV, p. 28.

⁴, ⁵ Fox, *Arch. Camb. Region*, p. 211.

⁶ Kendrick and Hawkes, *Archæology of England and Wales 1914-31*, p. 257.

⁷ *Roman London* (R.C.H.M.), pp. 30, 32, 48, 140.

OBJECTS DISCOVERED OTHER THAN POTTERY.

Coins (all found in the upper layers) :

1. Antoninianus. Radiate crown, indecipherable.
2. „ Tetricus the Younger, A.D. 270-273.
3. AE 4. Gratian, A.D. 375.

A fragment of iron resembling a key.

3 small pieces of pink mortar showing traces of red and green colour.

A flint pestle.

NOTE ON THE KILN STRUCTURE.

BY R. F. JESSUP, F.S.A.

THE kiln, of oval shape and working on the up-draught principle, is of Grimes' Type IV.¹ It consisted of a fire tunnel and fire pit, separated from the oven by a floor of clay bars and tiles. The kiln had a domed top of daub and clay mixed with potsherds, which would be renewed at each firing, and on analogy with other more perfect examples, a central opening in the dome by which the draught could be controlled by the use of some sort of covering. The firing tunnel is of rather more than average length, presumably to increase the draught.

As Mr. Webster has pointed out above, the oven floor had no support of any kind other than the central wall, and we have here a structure precisely similar to that found by the writer in kilns at Hoo Junction, Higham, Springhead and Southfleet,² in both of which the oven floor was most probably carried on a temporary wooden framework. The framework would disappear in the firing, with a consequent stiffening of the oven floor and its ultimate fusion with the clay walls of the kiln.

The Roman level at the time the kiln was built is difficult to ascertain, but it is certain that the firing floor and part of the oven were sunk below ground level in the usual way to provide a good draught, and security against the inadvertent cracking of the dome.

The Canterbury Archæological Society, and Mr. Webster and Mr. Higenbottam in particular, are to be congratulated on their examination of this discovery which, but for their immediate interest, would have suffered the unhappy fate of much of the structural material from Roman Canterbury.

¹ Castle Lyons Report, *Y Cymmrodor*, XLI, p. 53.

² *V.C.H. Kent*, III, p. 130.

CANTERBURY KILN SITE. THE POTTERY.

BY J. S. KIRKMAN, M.A.

FROM the circumstances which have been related in the earlier part of this report two questions arise. Firstly, can this unstratified collection of pottery be considered an entity, accumulated within a limited period and under similar conditions? Can the known types be used to date the new varieties? Secondly, what relation, other than circumstantial, has it or any part of it with the kiln found on the same site?

With some regret I have come to the conclusion that the first question must be answered in the negative. The fragments range in date from the latter part of the first to the latter part of the second century A.D. No. 32, and perhaps Nos. 37 and 38, are the only vessels which it is likely were deposited in an unbroken state. The first and third are not good chronological types. No. 37 is ascribed at Richborough to the first half of the second century. All that can be said about the new varieties is that they may be presumed to belong to the second century.

The collection, however, is of interest apart from the ornamental pieces. The mortaria fragments present so many examples for which I have been unable to find parallels that I have drawn the series *in toto*. They range from the Flavian period to the late second century, and should provide a fair sample of the types current in South-Eastern England. The other fully illustrated series, the amphoræ and flagon tops, cover the same period and include several new moulded varieties, particularly amongst the class of two-handled vessels.

No recognizable sherds were found actually in the kiln, but the complete Olla, No. 32, a fairly complete bowl of plain Samian Form 33 with the stamp PAVLIM and No. 65, were found immediately outside the jaws of the kiln and may safely be connected with it. The bowl may be compared

with O. & P. LI.12 and should be placed in the second quarter of the second century.

The stamped mortaria, Nos. 8-10, in view of the fact that the three impressions found were identical, and probably the mortaria bowl, No. 20, with stamp of similar pattern, I am prepared to assign to the kiln or other kilns in the same area, not necessarily in use at the same time. No. 9 at Richborough is dated A.D. 70-100.

The ribbed and flanged bowls, on the strength of a "waster", No. 23, and the flagon type, No. 48, on account of the number found, twenty-two, may also be ascribed to the factory. These are two common types of the late first and early second centuries. The bowls in the North do not come down later than about A.D. 120, but that need not necessarily be true of other parts of the country. Our specimens are all late varieties.

One would conclude accordingly that the industry was flourishing in the earlier part of the second century and came to an end in the second quarter, probably in the third or fourth decade. The case for the remainder must rest unproven, though in all probability many more of the mortaria and jug forms were made here.

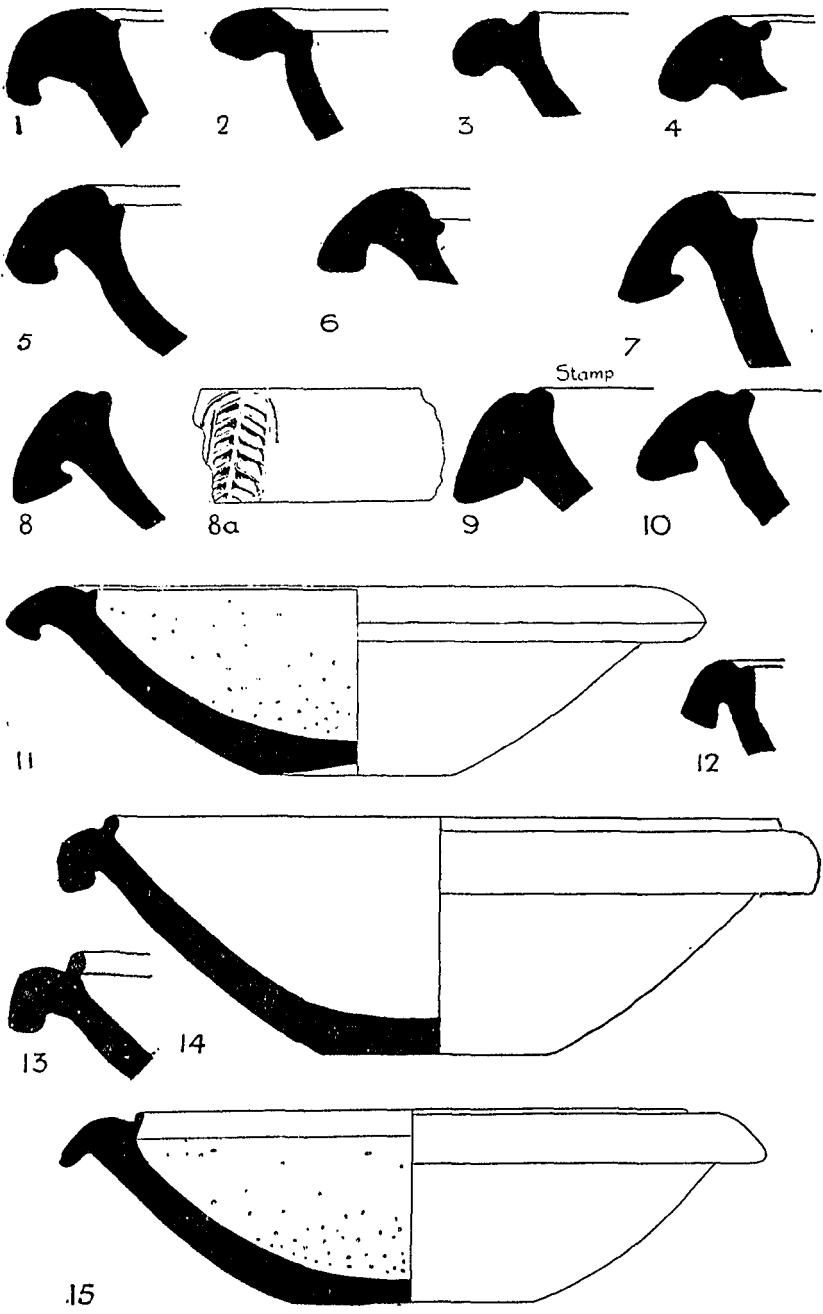
Of the fine cream-coloured wares, Nos. 62-64, there is little more to be said than what is written in the Register. The Jupiter Ammon head on No. 63 is in perfect preservation and of fine workmanship. They are unlikely to have been made in Britain and are probably imports from the Rhineland. They may be regarded as fair samples of the wealth of interesting material that lies beneath Canterbury waiting for some enlightened person or body to provide the relatively small sums required for excavation on sites that become temporarily available. What Dorchester is doing might well be done in Canterbury, and it would be worth doing. From what little this site has provided and from what is in the Museum at Canterbury there is ample evidence that Roman Canterbury was no backward country town existing in barbarous indifference to the great world outside, but a wealthy and progressive community interested in the luxuries from the more sophisticated world across the Channel.

The drawings are all quarter-size and the abbreviated references are to Ostwald's Eunesma Colour Album published by Winsor & Newton, London, based on Professor Ostwald's Colour Solid and to Moh's Scale of Hardnesses. Wherever possible, references have been made to Richborough and to Ospringe Cemetery in preference to more distant sites.

I am indebted for assistance with the plates to Mr. G. C. Dunning, Mr. G. Webster and Miss A. Stiebel, and to Mr. R. F. Jessup for generous help.

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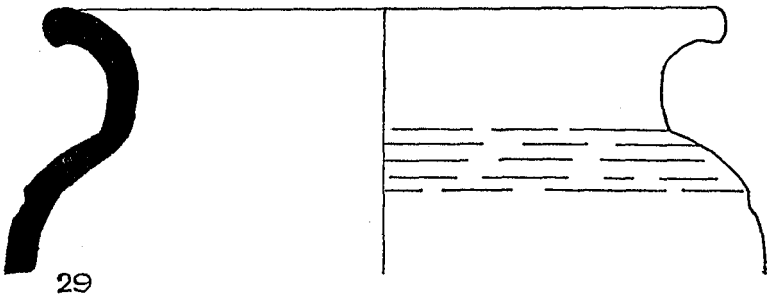
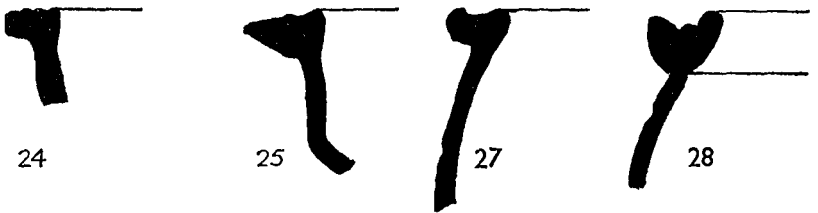
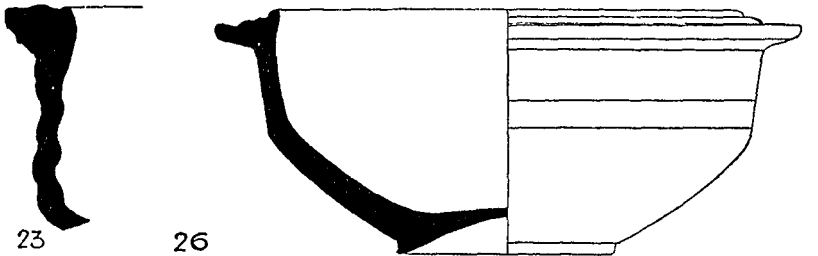
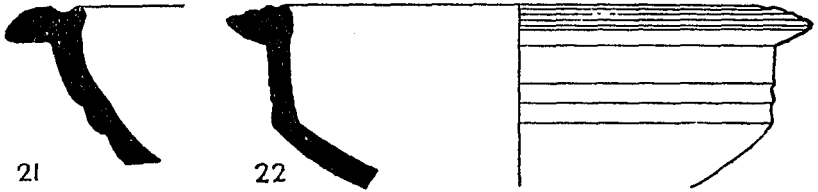
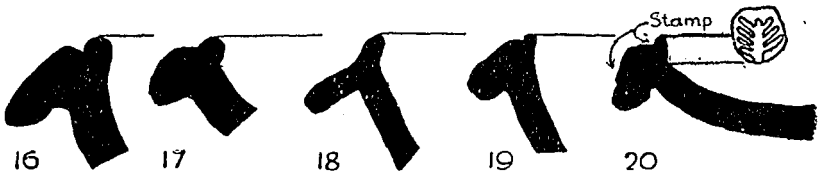
Figs. $\frac{1}{4}$ actual size.

CANTERBURY KILN SITE. SHERD REGISTER.

BY J. S. KIRKMAN, M.A.

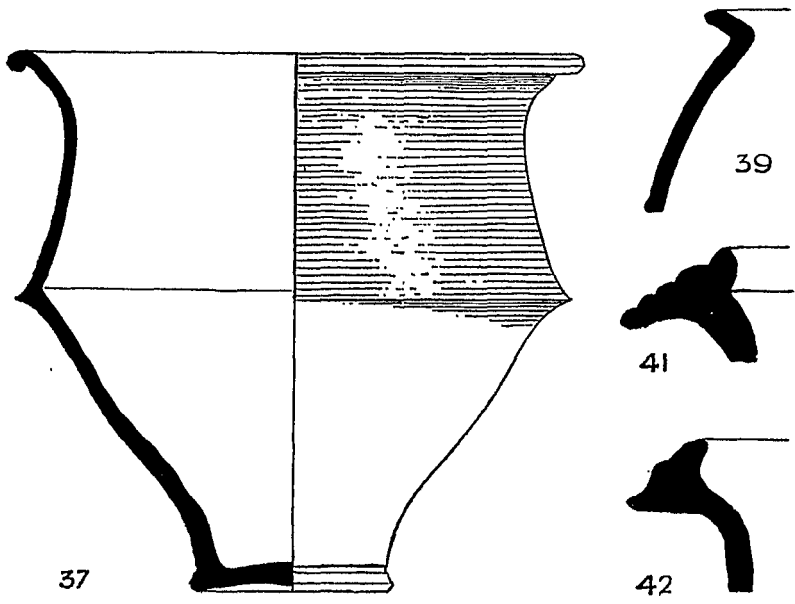
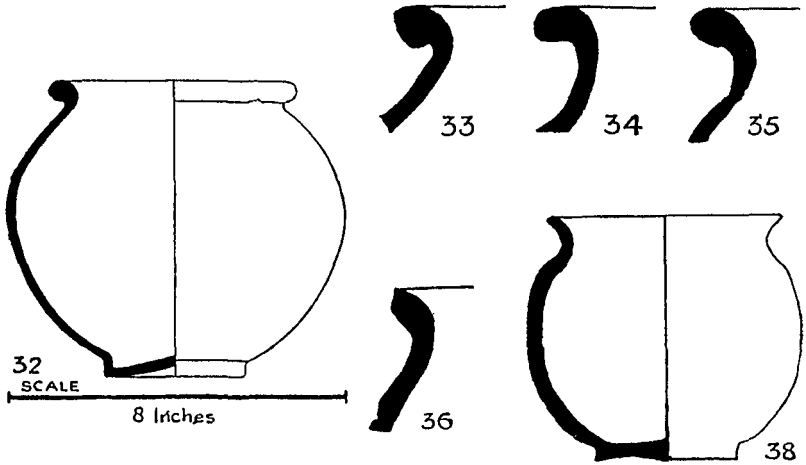
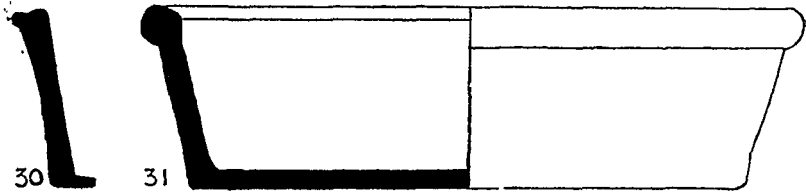
No.	Description, Colour and Ost. ¹	Coat, Surface and Ost. ¹	Moh. ²	Note.	Reference.
ROUGH HOUSEHOLD POTTERY.					
<i>MORTARIA, all studded with grits on the inside of the bowl.</i>					
1	Cream clay, grits on rim	Cream coat, 2 ea	4		Chesterholm 58, Flavian.
2	Grey clay, hand baked,	Cream coat, 2 ea	5		Richborough 354. A.D. 40-60.
3	Buff clay, 2 ge	Buff coat, 3 ea	5		Barnwell Mort. 9.9. Late second or early third century.
4	Grey clay, 0 e	Cream coat, 1 ea	5		Bushe-Fox 98. Late second century.
5	Buff clay, 2 ge	Cream coat, 2 ea	5		Bushe-Fox 110. A.D. 180-270
6	Buff clay	Buff clay coat, 3 ea	4		Barnwell Mort. 9.11, undated.
7	Greenish gault clay, 22 ca		4		Balmuldy XL, Mort. 1.
8	Grey clay, 1 ge	Yellow coat, 1 ec	4	Fir tree stamp on flange	"Herring-bone or conventional leaf." Second century.
9	Yellow clay, 4 ga	Cream coat, 2 ea	4	Same stamp	Richborough 358. A.D. 70-100.
10	Yellow clay, 4 ga	Cream coat, 2 ea	4	Same stamp	Richborough 358. A.D. 70-100.
11	Grey clay, 0 i, fired bright red	Buff coat, 3 gc	4		Nos. 12-14 are similar to Hardknot 24, first half of second century, and Birdswald 1-3, Hadrian
12	Grey clay, 2 ge	Buff coat, 1 ca	5		
13	Grey clay, 2 ge	Buff coat, 1 ca	4		
14	Grey clay, 2 ge, no surface grits	Buff coat, 1 ca	5		

¹ Etnesma Colour Album.² Moh's Scale of Hardnesses.



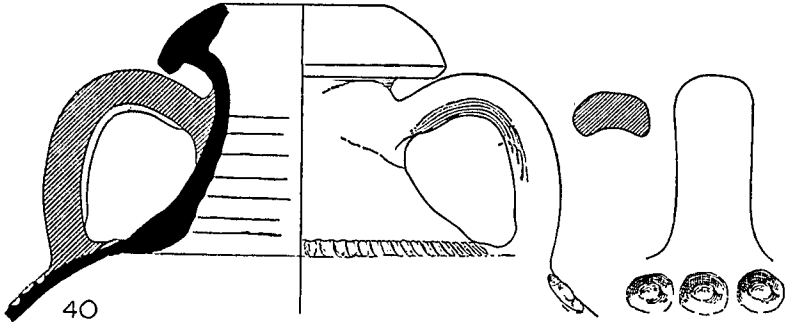
Figs. $\frac{1}{4}$ actual size.

No.	Description, Colour and Ost.	Coat, Surface and Ost.	Moh.	Note.	Reference.
15	Yellow clay, 3 gc	Cream coat, 2 ec	5		Richborough 359. A.D. 90-140.
16	Yellow clay, 3 ga	Cream coat, 3 ea	4		
17	Grey clay, 3 ec		5		
18	Grey clay, 0 g, fired brick red	Grey coat, 0 e	6		
<i>MORTARIA BOWLS.</i>					
19	Pink clay, 3 ea, friable		4		
20	Pink clay, 5 ia	Cream coat, 2 ea	5	Stamp similar to Nos. 8-10	
21	Red clay, 5 lc. Decorated on outside with wide, shallow grooving	Buff coat, 3 gc	5		
<i>RIBBED FLANGE BOWLS.</i>					
22	Red clay, 5 le	Grey coat, 0 i	7		Limestone Bank Turret, Pl. III, 3. Flavian-Trajan.
23	Grey clay, 0 g	Buff coat, 3 ga	8	Scorched and twisted by faulty firing	
24	Red clay, 6 ne. Traces of reddish paint outside, 6 le	Buff coat on inside, 3 gc	4		Caerhun 146. Late Flavian.
25	Grey clay, 0 i	Darker grey coat, 0 n			Caerleon Amph. 10, early second century.
26	Red clay, 4 ga		5		Nos. 27 and 28 have a similar character to Verulamium 42. First half of second century.
27	Buff clay, 4 le	Hard baked grey coat, 0 i	6		
28	Grey clay, 0 i		5		

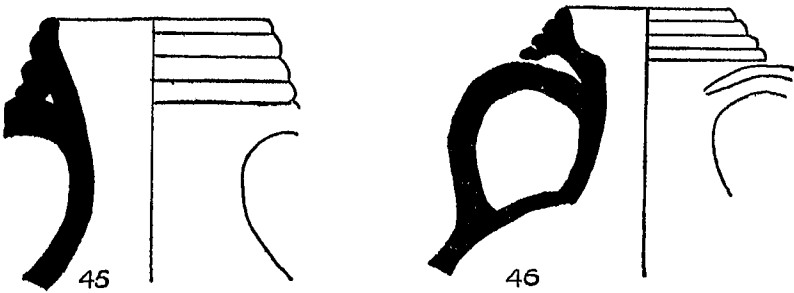
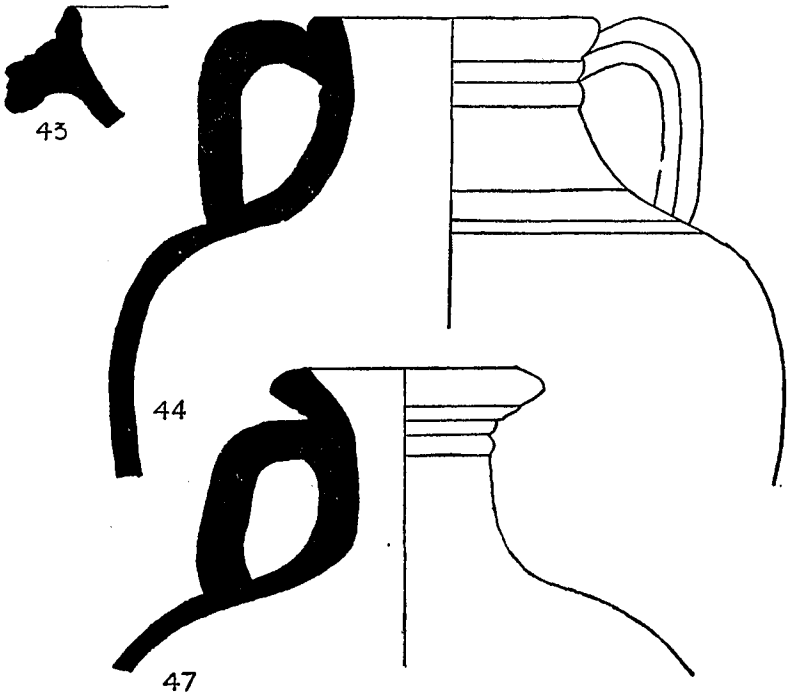


Figs. 33 actual size.

No.	Description, Colour and Ost.	Coat, Surface and Ost.	Moh.	Note.	Reference.
<i>LARGE BOWL.</i>					
29	Coarse grey clay, 0 i. Bur-nished round lip and on outside	Black coat, 0 l	5		Ospringe 13. Ass. with late second or early third century beaker.
<i>DISHES.</i>					
30	Grey clay, ge. Fired red		5		
31	Grey clay, 0 i	Cream coat, 2 ec	5		
<i>OLLAE.</i>					
32	Grey clay, 0 c	Darker grey coat, 0 n	6	Complete	Richborough 267, A.D. 75, 100.
33	Brown clay, 5 ie	Grey coat, 0 l	5		Nos. 33-35 are first century types not continuing beyond about A.D. 120.
34	Grey clay, 0 e	Grey coat, 0 g	5		
35	Red clay, 6 lc	Grey coat, 0 g	5		
36	Grey clay, 0 e		6		
37	Grey clay, 0 g, shiny black burnished surface on lip and upper part of vessel to just below carination		5	Probably intact when deposited	Richborough 77. First half of second century.
38	Pink clay, 4 gc, sporadic burnishing		4	Probably intact when deposited	
<i>BEAKER.</i>					
39	Fine grey clay, 0 e, with lighter surface and rectangular groups of small clay studs common on poppy-head beakers		4		

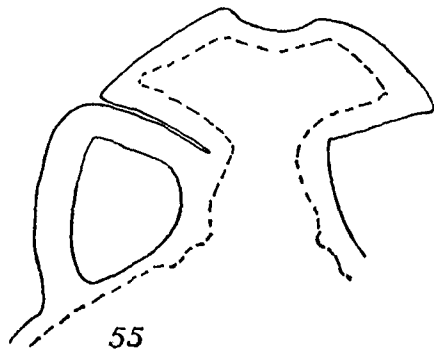
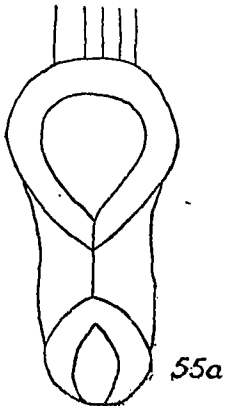
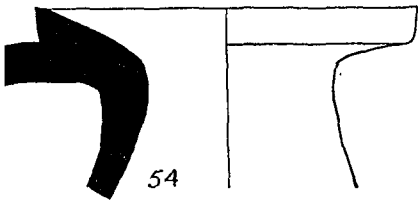
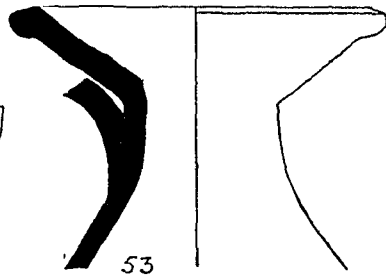
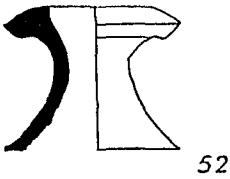
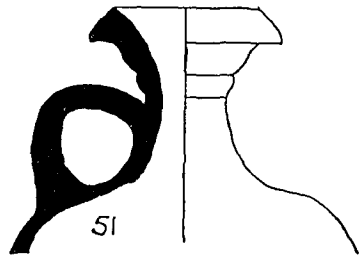
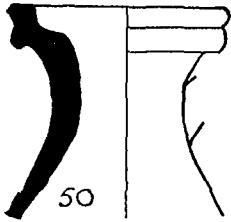
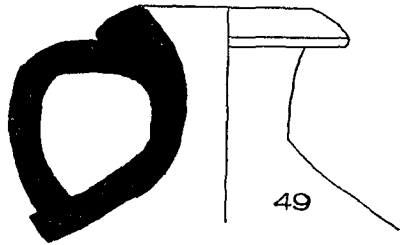
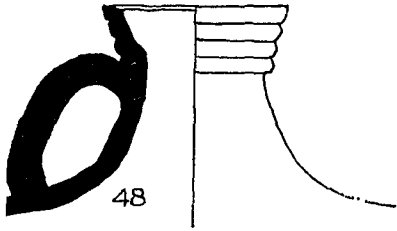


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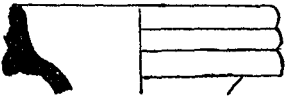
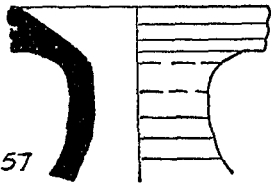
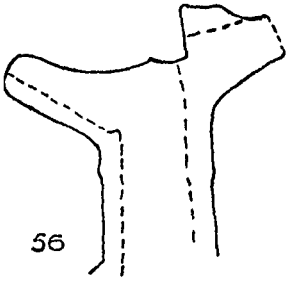


Figs. 45 actual size, except Fig. 40.

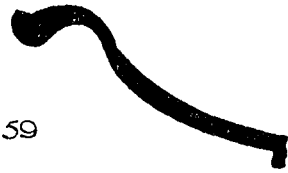
No.	Description, Colour and Ost.	Coat, Surface and Ost.	Moh.	Note.	Reference.
<i>AMPHORA AND TWO-HANDLED JARS.</i>					
40	Bright red clay, 5 na, incised and stamped decoration		6		
41	Buff clay, 4 ic		5		
42	Greyish clay, 2 ge, unevenly fired		5		
43	Buff clay, 3 ie		5		
44	Red clay, 5 ne, two ribbed handles, girth grooves at level of base of handles	Yellow coat, 3 gc	5		
45	Red clay, 5 ia, 4-ribbed handles	Cream coat, 2 ea	5		Perhaps analogous to Os- pringe 543, second half of second century. Ilkley, Fig. 43, II, undated.
46	Grey clay, 0 e, fired red, 4-ribbed handles		5		
<i>JUGS OR FLAGONS.</i>					
47	Orange clay, 4 ga, 4-ribbed handles	Yellow coat, 3 gc	4		Balmuildy, XLIII, 3, Flav- ian-Trajan.
48	Yellow clay, 3 ea, fired red, 4-ribbed handles		5		Richborough 36. Mid-late first century.
49	Grey clay, 2 ge	Grey coat, 2 ec	5		Richborough 204, A.D. 70- 100.
50	Grey clay, 0 g	Buff coat, 2 ig	7		Richborough 143 and Cor- bridge 98. First century type derived from Belgic bottle.
51	Buff clay, 3 ga, fine paste, thumb groove handle	Buff coat, 3 ga	5		Perhaps analogous to Os- pringe 549. Early third century.
52	Pink clay, 5 ia		5		Sigillata form, Ospringe 309. A.D. 175-250.



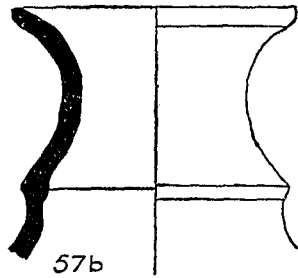
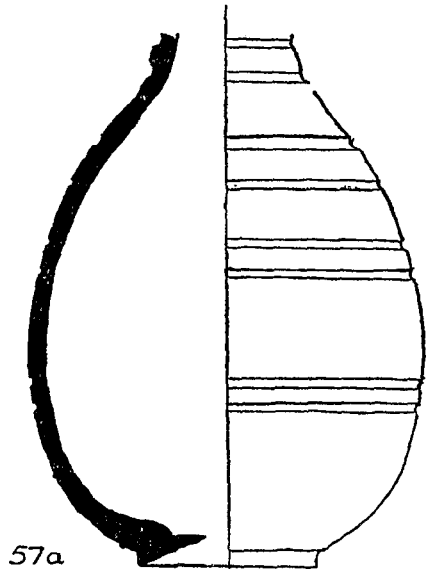
No.	Description, Colour and Ost.	Coat, Surface and Ost.	Moh.	Note.	Reference.
<i>PITCHERS.</i>					
53	Yellow clay, 4 1e, fired grey	Grey coat, 0 1	4		Balmuidy, XLIII, 6.
54	Brown clay, 5 1g, thumb groove handle	Buff coat (?) 3 ga	4		
<i>SPOUTED JUGS.</i>					
55	Grey clay, 0 e. Cream coloured blotches, 2 ea, on outside. Figure-of-eight mouth bright red. Open mouth	Buff coat (?) 3 ea	6		Richborough 207. A.D. 50-80.
56	Orange clay, 4 1a, fired bright red. Open mouth		4		
<i>BOTTLES.</i>					
57	Yellow clay, 3 ga, unevenly fired	Yellow coat, 3 ga	5		
57a	Brown clay, burnished, 4 1c		4	(?) Drilled hole in bottom	
57b	Brown clay, burnished, 4 1e		4		
58	Grey clay, 2 1g	Cream coat, 5 ea	5		Ospringe 648, and analogous to Ospringe 543. Second half of second century.
<i>DECORATED AND FINER WARES.</i>					
59	Bowl, highly burnished, with ring base. Grey clay, 0 1	Red coat, 6 ne	4		
60	Bowl, highly burnished, with grooved and rouletted flange. Red clay, 6 1c	Red coat, 4 1c	5	And similar bowl of grey clay, grey-black surface. Imitation of Dragendorff 36	Ospringe 4. Unstratified.



58



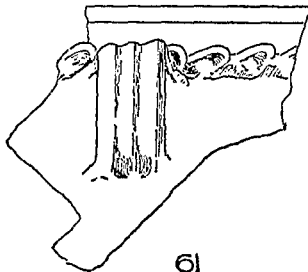
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57b



60



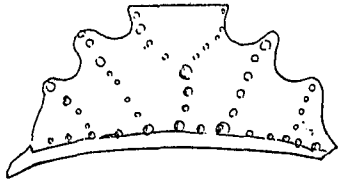
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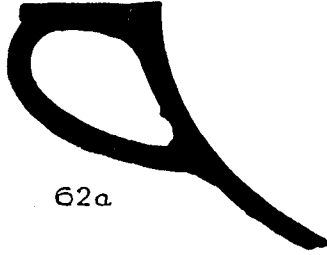
61a

Figs. $\frac{1}{4}$ actual size.

No. Description, Colour and Ost.	Coat, Surface and Ost.	Moh.	Note.	Reference.
61 Olla with frill under lip and presumably four three-ribbed handles. Fine pink clay, 4 gc	Cream coat, 2 ea	4		Richborough 65. Unstratified.
62 Wide bowl, 9-2" diameter, with handles and wide band at level of base of handles. Serrated plate above handles decorated with red clay studs, 5 mg. Cream clay, 2 ea	Cream coat, 2 ea	6		
63 Moulded Jupiter Ammon head and rim of bowl. Cream clay, 2 ec	Cream coat, 3 ea	4		
64 Barrel-shaped jug on horizontal axis with two handles and feet of clay studs, decorated with pattern of strokes and circles in sepia, 5 ne to black. Fine white clay, 0 a	Cream coat, 3 ea	9	Probably an imitation of a glass vessel and imported from the Rhineland	See additional notes.
65 Form 33 Lezoux ware with stamp PAVINE		SAMIAN.		O. & P. L.1.12 from Margidunum. Trajan-Hadrian. Second quarter of second century.



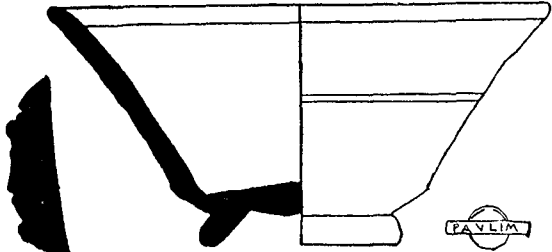
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62a

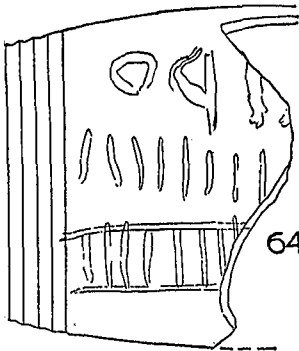


63

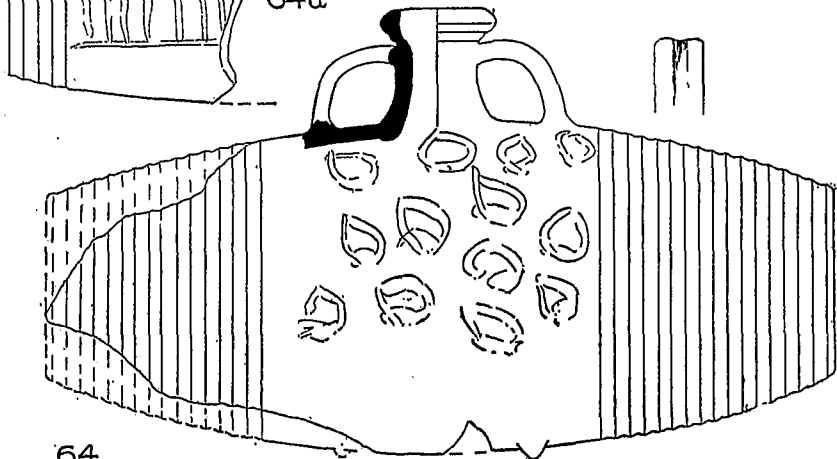


65

65a



64a



64

SCALE 10 1/2 Inches

Figs. 1/4 actual size, except Figs. 64 and 64a.

ADDITIONAL NOTES ON THE KILN POTTERY.

Since the compilation of the sherd register an attempt has been made to trace parallels of the horizontal barrel-shaped vessel No. 64. It appears that no example of this type has ever been found in Britain before. There are, however, a number of Continental vessels of a similar type but generally of inferior technique. Mr. M. R. Hull, the Curator of the Colchester and Essex Museum, has supplied the following references from F. Behn's *Römische Keramik*.

1. Horizontal barrel; neck has two handles, no feet, red clay, dirty green glaze. Dunapentele, Hungary (where made). Third-fourth century. BEHN Type 399, H. 15, L. 14, W. 12 cm.
2. Horizontal barrel; neck has two handles, four wart-like feet. BEHN Type 400 (with reference to Holder, *Formen der Römischen Thongefässe*, Pls. 10, 11).
3. Horizontal barrel; neck has two handles, four small feet (=Lindenschmidt, *Röm-Germ. Cent.-Mus. Mainz*, Pl. XXV, 12), yellowish clay, dark red coating. BEHN Type 401, H. 17·5, L. 17·5, W. 12·5 cm. (Bingerbrück).
4. Horizontal barrel; neck without handles. Near Kärlich (Bonn Mus.). Oelmann, *Niederbieber*, p. 49, No. 24. Brown-marbled ware. (Three other references given under this description.) (Presumably late third century.)
5. Horizontal askos or wine-skin with pointed ends, central neck with two handles, white clay, yellow-green glaze. Köln. BEHN Type 402, H. 9, L. 12, W. 7·5 cm.
6. As last, in glass. Kisa, *Das Glas im Altertume*, p. 116; Bonn Jahrb. 114-5, p. 376, Abb. 8d.
7. Yellow clay with rose-red painting, divided internally into three compartments each with separate spout.

Cordons in middle and at each end. Grooved foot-ring. Speyer, No. 1298. Cf. Harster, *Katal. d. Histor. Abt. Mus. Speyer*, p. 54. "Cult vessel?" Weisenau fabric (?). BEHN Type 403, H. 19·5, L. 27·5, D. 17 cm.

From these examples Mr. Hull deduces that the Canterbury vessel is of Cologne ware and of approximately the Constantinian age. But this does not agree with the date fixed by the associated pottery from the kiln. Indeed the evidence is overwhelmingly in favour of fixing it in the first half of the second century.

Further evidence inclines towards the earlier date when the vertical axis types are considered. Barrel-shaped vessels of this type are uncommon but not rare in this country. One has actually been found in Canterbury and is described and illustrated in *Arch. Cant.* IV, pp. 28ff. by Brent. The writer is giving an account of his excavations at St. Sepulchre's on the site of a Roman cemetery, and speaks of a vessel of black clay of extremely fragile texture and scarcely thicker than stiff cardboard and of a curious barrel shape. The vessels closely associated with this find are clearly of the late first or early second century.

Other examples are given by Grimes in *Y Cymmrodor*, Vol. XLI, p. 157, No. 118, in a description of the Holt potteries. The vessel illustrated here is very similar to that drawn by Brent. Grimes also mentions the same types "occurring at Chester, in undated deposits, in some cases in mica-coated ware, a technique generally regarded as not outlasting the early part of the second century".

Finally F. Oelmann in *Die Keramik des Kastells Niederbieber* illustrates a similar type and says, "This wooden barrel shape was made in glass in the first century (Niessen Coll. Nos. 93-4 and Loescheches, Introduction, s. XIV). The pottery has evolved from this shape and is found in a fine white shaded ware with orange-red paintings, probably made towards the end of the first century and beginning of the second at Köln. In their manifold shapes these vessels are closely connected with the glass and metal

models. The fine red marbled ware of Mainz which belongs to the same period apparently imitates the metal shape."

It should be noted that "the fine white shaded ware with orange-red paintings" is fairly descriptive of the Canterbury vessel.

From a close study of these types the dating evidence is not as conflicting as it first appears. The vertical axis types definitely belong to the late first and early second centuries while the horizontal axis types, given above, come at least a century later.

In style and technique the Canterbury vessel is far more closely allied to the former types. The Continental examples are, on the whole, tending towards the grotesque and degenerate in common with pottery in general at the later period. It can be held, therefore, that the presence of the vessel in question is not inconsistent with the rest of the kiln pottery. Until new evidence is brought to light, the Canterbury vessel must be regarded as an early example of a type made in the Rhineland and destined to a life of one to two hundred years.

The technique of the vessel is so far in advance of anything else found on the site that it is unlikely that it was made at this kiln, but was imported with several other pots and decorative reliefs such as the Jupiter Ammon head.

The exact purpose of this vessel on this site is a matter of conjecture. It is hardly the type a potter would be expected to use at his work or even at his meals. Had he used it as a model one would reasonably expect to find at least a trace of one of his unsuccessful attempts in the large dump of rejects. Perhaps it was a special order? The solution may be found when the rest of this interesting site is explored.

G.A.W.