XI

NOTES

1. A SOUTERRAIN AT MILFIELDHILL, NORTHUMBERLAND

NORTHUMBERLAND HAS not appeared so far in the literature relating to souterrains, the main concentrations of which in northern Britain lie well to the north of the Border counties. However, as in the case of another northern type of field-monument, the broch, a few examples have filtered down to the south of the Forth. Some half-a-dozen are widely dispersed over the counties of Midlothian, Lanarkshire, Roxburghshire, West Lothian and Berwickshire, probably as strays from an area of concentration in Aberdeenshire and Angus.¹

The most southerly of the known souterrains in south-east Scotland are those at Broomhouse in Berwickshire and Newstead in Roxburghshire, so that, if these are to be seen as marking an inroad from the north, an extension into the Till valley in north Northumberland need not be altogether unexpected, since the north-flowing Till is essentially a part of Greater Tweeddale. Indeed, the site now under consideration, which lies in the Till valley between South Flodden and Milfieldhill (NT 92803497), is at about the same latitude as the two souterrains at Newstead in Tweeddale and, as it happens, a newly discovered example at Ardeen, Ayrshire, on the west coast.²

The site was first noted, albeit as a sepulchral monument, by John Grey the noted agriculturist of the early nineteenth century. Before becoming the northern agent for Greenwich Hospital in 1833 he resided at Milfieldhill, where, we are told, his father before him had first cleared off the forests of wild broom from the Milfield Plain like some "backwood settler".³ Because of their interest in the new farming both John and his son George no doubt contributed to the erasure of monuments in this area but, by the same token, were also in a position to provide the indefatigable surveyor Henry MacLauchlan with information about many of the local antiquities. These were subsequently included by MacLauchlan in

¹ F. T. Wainwright, *The Souterrains of Southern Pictland* (1963) gives most of the earlier references.

² Discovery and Excavation in Scotland 1973, 16.

³ Or so it is recorded by John Grey's daughter, the well known social reformer Mrs. Josephine Butler. J. E. Butler, *Memoir of John Grey of Dilston* (1869).

his Additional Notes to his Survey of Roman Roads in Northumberland.⁴ Unhappily, this particular site was also recorded by MacLauchlan as an "ancient cemetery" and this attribution does not appear to have been questioned since.

The monument came to light in the course of ploughing and was described as a chamber built from stones, measuring 18 feet long by 8 feet wide and 6 feet high, lying beneath a flat tumulus. In its eastern angle was a "doorway with two stone door-posts communicating with the surface by a sloping path". The floor of the chamber was covered with a thick layer of soft, black earth, in this case attributed to the decomposition of human bodies. The only finds consisted of a substance having the appearance of charred wood and pieces of bone and teeth, some of the latter so large that "they could not have belonged to any animal less than a full-sized horse". Clearly no context can be inferred from these finds but the monument itself has many of the usual features of a souterrain. It was undoubtedly partly subterranean, and the flat tumulus, which probably encouraged the sepulchral attribution, will have been no more than the covering mound of material from the original excavation. For this there are good parallels elsewhere, sufficient at least to demonstrate that the position of some souterrains must have been visible on the surface from the outset and thus unlikely to have served as refuges, as sometimes suggested in the past. Stone door-checks are a common feature and in this instance the passageway leading off from the eastern angle of the chamber or expansion might also be taken to suggest that the approach, as often, was curved. Unfortunately no measurements were given for the length of the passageway itself and it must remain uncertain that the whole monument was uncovered. Mention of five or six stones, "7' high and 2' thick", standing against the south-west wall of the chamber create problems of interpretation. There are a few early records of souterrains divided into compartments but this is not usual and the references to such are sometimes vague and perhaps untrustworthy in interpretation. In this instance there was no record of upper corbelling or roofing slabs, although by analogy with the Aberdeenshire examples such might be assumed. Despite the reference to a substance akin to charred wood in the Milfieldhill chamber there is no direct evidence for timber roofing in the southern Scottish series, so that the large stones could have been from a stone roof or its supporting structure.

There can be no doubt about the precise location of the site. MacLauchlan deliberately delayed sending the presentation copy of his Additional Notes to this Society until he was in a position to include interleaved parts of the newly issued Ordnance Survey 6" maps which he carefully annotated.⁵ It lies in a well drained situation on the north slope of Whitton Hill at an altitude of forty-five metres O.D. and about seventy metres to the south of a small burn. When the field is not under crop, a slight scoop about twenty-five metres in diameter indicates the spot. And if further proof were needed, some very large slabs of moss-grown stone, quite unlike the normal land-stones, lie on the edge of the cultivated area directly to the north of the site, presumably where they were originally dumped by Grey's workmen. Unfortunately, as with many souterrains elsewhere, there is now no trace of a surface settlement, but one might wonder if the scooped area is too large to be simply the result of the unearthing of the sou-

⁴ H. MacLauchlan, Notes not included in the Memoirs on Roman Roads in Northumberland (1867), 28.
⁵ Ibid., interleaved letter to the Rev. Dr. Bruce, dated June,

^{1868.}

terrain itself. The location is eminently suitable for a non-defensive homestead, looking out on to the Milfield Plain.

Although no firm context can be given for this souterrain a reasonable if not very specific occasion might be envisaged sometime after the abandonment of the Antonine frontier in Scotland. Some of the souterrains in Aberdeenshire, Angus and the southern Scottish counties are certainly of the Roman period or later. Mr. R. B. K. Stevenson⁶ has tentatively related this south-eastern spread of souterrains, together with the southerly trail of other northern types, to the Caledonian alliance, the Maeatae of history, and the troubles which overtook the northern frontier in the later second century A.D.⁷

GEORGE JOBEY

2. A BEAKER BURIAL FROM NORTH HAZELRIGG, NORTHUMBERLAND

In JULY 1973 Mr. W. Waugh reported the discovery of a cist-burial near to North Hazelrigg, encountered during ploughing in the previous year. He had recovered pottery from the cist, some fragments of which were retained by himself, whilst part of another vessel was deposited with the Hetton Estates Office. I am indebted to both parties for permission to examine the pottery and to visit the site of the discovery.

The cist had already been covered over by plough-soil at the time of inspection so that it was not then possible to carry out further field-investigation. Nevertheless, part of a large capstone still protruded from the tilth where it had been removed to one side of the cist, so that the position is assured at NU 06053345. It lies on the 500 foot contour line in the southeast corner of Quarry Hill Field, the highest cultivable area on the west slope of Dancing Green Hill, at a point thirty metres in from the southern boundary fence and fifteen from the eastern. Immediately to the east the tabular outcrops of the Fell Sandstone crags rise abruptly above the gentle slope and would have denied the construction of a sunken cist at greater altitude, although clearly they provided the material for its construction. To the south-west there is a spacious view as far as the Cheviot massif beyond the west bank of the River Till.

From Mr. Waugh's information the cist appears to have been aligned NW to SE and to have consisted of a large capstone, four stone side panels and a bottom stone; the interior measurements were of the order of two feet by two feet six inches. One vessel was recorded as having

⁶ R. B. K. Stevenson in *The Iron Age in North Britain* (ed. A. L. F. Rivet, 1964), 35.

⁷Although not necessarily related to this turbulent period, the hoard of Roman coins from the not too distant Camp Hill, Mindrum (NT 825325) comes to mind as a possible deposit of the same time. Another interleaved note in this particular copy of MacLauchlan's. Additional Notes probably gives the only correct record of these silver coins still remaining in 1861 from the six hundred or more said to be in a bronze vase ploughed up in 1826. From MacLauchlan's outline drawing the bronze vessel is almost certainly a tall Roman bronze jug or amphora with part of the neck and mouth missing, possibly of 1st/3rd century date (e.g. M. H. P. Den Boesterd, Collec-

tions in the Rijksmuseum G. M. Kam at Nijmegen, V, plates XI, XII). In Richardson's Table Book of 1843 (vol. III, 327) it is stated that the hoard included coins of Julius Caesar and Vespasian. MacLauchlan examined twenty-seven coins and listed them as follows:

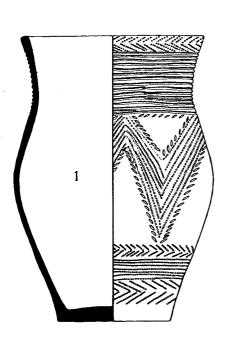
"Mark Antony 1, Vespasian 2, Titus 2, Domitian 1, Nerva 3, Trajan 4, Hadrian 5, Antoninus 6, Faustina Senr. 1, Aurelius Antonius 1, Faustina Junr. 1."

Unfortunately no issues are given and, in any event, one cannot be sure that the remaining identifiable coins were representative of the much larger but by then already dispersed hoard

been recovered from each corner at the south-east end so that the pottery itself may be treated as a closed find. There were no indications of there having been an overlying mound or cairn. No skeletal remains were found, but the generally destructive effect of the acid Fell Sandstone soils upon all but cremated material could account for this.

The fragmentary remains of the vessels are in a very poor state of preservation, so much so that in places the outer surfaces have completely disappeared. I am indebted to Mr. T. Newman for accomplishing the difficult reconstructions, at least to that stage which allows accurate drawings to be made, and to Miss M. Hurrell for the illustrations. In the event, three vessels were found to be represented amongst the surviving sherds so that the position of the third vessel within the cist, a miniature beaker, is not known.

Beaker 1 (fig. 1, 1) stands 225 mm high, is reddish brown in surface colouring and has a liberal sprinkling of Fell Sandstone grits in the core. The grooves in the neck have been lightly but firmly scored with a blunt instrument, as have the fringes on the body decoration. The remainder of the decoration is comb-impressed. In general the overall decoration is close to that on a Northern British/North Rhine beaker from Edenmouth in nearby Roxburghshire.⁸ The multiple outlined triangles with fringes also occur on one of two NB/NR beakers from the



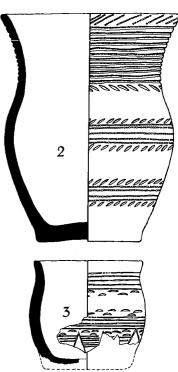


Fig. 1. Beakers $(\frac{1}{3})$

⁸ D. L. Clarke, *Beaker Pottery of Great Britain and Ireland*, vol. 2, fig. 301. For convenience the group titles therein are retained.

same cist at Borewell Farm, Scremerston, ten miles to the north of North Hazelrigg, and on a vessel of the same group from Akeld, Northumberland. Beaker 2 (fig. 1, 2) is 180 mm high, is grey to buff in surface colouring, and has many small grits in the dark grey core. The neckgrooves are scored, the fringe decoration consists of finger-nail impressions and, as with the first vessel, the remainder of the decoration has been executed with comb-impressions. Both vessels fall within Dr. Clarke's Northern British/North Rhine Beaker Group, of which there are many examples in a mainly east coast distribution from Yorkshire to Moray. Herringbone and fringe motifs are popular in this group as is the grooved neck. Moray. Herringbone and fringe motifs are popular in this group as is the grooved neck. The miniature beaker (fig. 1, 3) is only 85 mm high but is of similar form. Less than half of the vessel survives and the decorative outer surface has been extensively eroded so that the method of execution, though not the overall pattern, remains in some doubt. Some of the circumscribed grooves appear to be impressions from a finely toothed comb but others are only scored. The borders below the neck and above the belly decoration consist of fingernail marks. Miniature beakers of this order are comparatively rare.

This assemblage of vessels provides yet another instance within the so-called NB/NR Group where a second or third vessel has been included in the burial, sometimes, as at Hexham, of other Late Northern Groups. The inclusion of the small accessory beaker is also of interest and, as has been remarked upon elsewhere, perhaps suggests an approach towards Incense Cup traditions, whatever may have been the ultimate origin of these. It is unfortunate that in this instance the method of burial is not known, since although inhumation prevails in the NB/NR Group it also has the biggest number of possible cremations. This is the only example of a miniature beaker in a closed find from Northumberland. The small vessel found with beakers from Wards Hill near Rothbury, recorded hitherto as a Pygmy Cup, 2 cannot be completely restored but has every appearance of having been another miniature beaker. In this case, however, the finds are not strictly associated one with another.

In terms of uncorrected dating, Dr. Clarke would envisage the developed NB/NR beakers as flourishing during the seventeenth century B.C. The only radiocarbon date available at the moment for this group is that of 1670 ± 50 B.C. (half-life 5568 years) for an insular NB/NR beaker from Chatton Sandyford, situated only some five miles to the south of North Hazelrigg on the same Fell Sandstone series.¹³

GEORGE JOBEY

3. MESOLITHIC OCCUPATION AT GALLOWHILL FARM, CORBRIDGE

IN DECEMBER, 1973, the Field Research Group of the Society of Antiquaries of Newcastle upon Tyne walked the proposed route of the Corbridge—Hexham by-pass and found a localized area of flint artifacts and waste in a field (centred NY 99806535) on Gallowhill Farm, Corbridge. Subsequently, in a more thorough search of the ploughsoil, the concentration was more closely located in the centre of the southern half of the field. The site was re-visited when road-making was in progress and it is happily reported that the road works have only

⁹ Ibid., vol. 2, figs. 307 and 272.

¹⁰ Ibid., vol. I, 118-129.

¹¹ Ibid., vol. I, 272.

¹² J. Tait, Beakers from Northumberland, 16.

¹³ G. Jobey, Arch. Ael., 4 XLVI (1968), 22.

interfered with the northern half of the field and that the area of flint finds has been disturbed only by a small water pipe across it to a new cattle trough.

The field concerned is on shallow loam directly overlying sandstone, which has been quarried in several places nearby. The field slopes gently, facing south and is approximately 1.5 km from the R. Tyne and 0.4 km from the Cor Burn.

The collection consists of 248 pieces as follows:

Cores

- 7 single-platform pyramidal cores, 1 fire-crackled.
- 1 single-platform pebble core with only $\frac{1}{2}$ of its circumference used.
- 5 cores with 2 or 3 platforms.
- 1 irregularly broken piece of flint from a pebble with some flake scars.
- 4 core-trimming flakes.
- Only 1 of the cores may have been re-used as a scraper.

Implements

- 8 steep-sided scrapers on tiny chunky flakes.
- 6 short end-scrapers, 3 of them hollow.
- 5 notched blades.
- 10 pieces of flakes and blades with signs of trimming or use.
- 1 obliquely blunted point, the trimming having produced a slight hollow.
- 1 keeled blade with trimming down part of the left side.
- 1 sub-triangle with the two longer sides slightly curved and one blunted.
- 1 triangular flake with slight blunting of the longest side.

Waste

- 3 microburins.
- 19 pieces of waste of 20 mm or over.
- 136 pieces of blades, flakes, etc. of less than 20 mm dimension.
- 38 fire-crackled pieces including fragments of implements and waste.
- 1 piece of flint hammerstone.

The material used was almost entirely flint with a striking predominance of grey, mostly of light shades. Excluding the burnt fragments, the colours were as follows:

- 149 pieces of grey flint
- 8 pieces of orange-brown flint
- 35 pieces of white or creamy white flint or chert
- 10 pieces of various colours
- 8 pieces with heavy patination

The few pieces on which cortex appeared showed a pebble surface.

o) [IMP] TETRICUS PF AUG

r) illegible

Shields.

The other noteworthy point was the tiny dimensions of the whole collection. With the exception of the irregular piece of grey flint of 45 mm grouped with the cores, there were few reaching 30 mm, the vast majority being under 20 mm maximum dimension.

Mesolithic flint implements occur at another site at Corbridge. In the Museum of Antiquities is a collection from Shorden Brae which lies on the immediate bank of the Tyne just west of Corbridge village. This includes both mesolithic and neolithic artifacts.

The mesolithic collection described here will be deposited in the Joint Museum of Antiquities at Newcastle University.

JOAN WEYMAN

4. CASUAL FINDS FROM SOUTH SHIELDS

In the display cases of the South Shields Corporation Museum there are five Roman coins which are described as local casual finds. All detailed record of their exact provenance and date of discovery has long since been lost. One coin is said to have been found at Templetown in the north-west of South Shields. It is a very worn antoninianus of Tetricus I.

The other four are all said to have been found at Westoe village, just inland from South

bust right, radiate and draped. figure (Pax?) standing left.

·	
Carausius. antoninianus. o) IMP CARAUSIUS [] r) PAX AUG	bust right, radiate and draped. Pax standing left with olive branch and vertical sceptre. A rather coarse piece.
Maximian. billon tetradrachm of Ale	exandria.
o) AK MAO VA MAXIMIANOC	CEB bust right, laureate and draped.
r) <u>L B</u>	Elpis standing left with dress raised.
	A very well preserved piece.
Constantine I. follis.	
o) []CONST[]	bust right, laureate and draped.
r) [IOVI CONSERVATORI AUG	G] Jupiter standing left, right hand raised, small eagle before.
Constans. ae.3.	
o) CONSTANS PF AUG	bust right, diademed and draped.
r) GLORIA EXERCITUS	vexillum depicting wolf and twins between two soldiers.

Of these coins four are unexceptional enough as casual finds from the area near a sizeable fort which is known to have been occupied at this time. The Alexandrian tetradrachm deserves special mention as something of a rarity so far from its place of issue. Its state of preservation shows that it had seen very little circulation before being lost. It is always a possibility that this, as with some of the Byzantine coins found in very unlikely British contexts, was brought back by travellers of a recent date, but parallels exist, from Corbridge for example, and it is not unreasonable to regard this as a late fourth century arrival.

N. SHIEL

5. THE POTTERY FROM TURRET 19B, WEST CLAREWOOD

THIS TURRET, together with Milecastle 19 and Turret 19a, was excavated by the North of England Excavation Committee in 1932.¹⁴

In 1965 Miss Woodfield was able to write "It now appears that 19a, an apparently isolated example of a turret east of the North Tyne going out of action at the end of the second century, may represent the rule rather than the exception, as it now has been joined by turrets 18b, 25b, and 26a. In actual fact there is practically no published information on the length of occupation of any other turrets east of the North Tyne, except 7b, where Period II and III occupation is definitely attested. Other turrets have only been cursorily examined for the most part with a view to determining their types, and at a period when the interest was almost entirely confined to elucidating the initial problems of the building period, and not much attention was given to length of occupation. Pottery is rarely discussed or published..."¹⁵

West Clarewood was one of these turrets, and study of the surviving pottery (figs. 2 & 3)—which must now be treated as unstratified but is still in many respects typical of all turrets—suggests that Miss Woodfield's rule is valid.

The earliest Hadrianic pottery is the rustic ware (nos. 3-7), with linear decoration in low-relief, that is thus more likely to be Hadrianic in date than to be Flavian or Trajanic survivals. ¹⁶ The carinated bowl with the reeded rim (no. 28) also belongs in this period.

Period IA seems to be well represented (e.g. nos. 13, 18, 19, 20), rather more so than can be distinguished for IB (but nos. 23, 24, 26, 29). Second century forms which might derive from either period may be present in the Samian rim (form 18, 31 or 18/31) and in the rough-cast beaker (nos. 1 & 2). There seems to be no evidence from the pottery for the occupation of the turret continuing into Period II, there being nothing which can be said to be unambiguously third century in date.

As in other turrets the yield of Samian was sparse, in this case only one plain sherd surviving (no. 1); perhaps the soldiers of the garrison could not afford such luxuries, which would at any rate have been unnecessary in a turret. The pottery in almost all turrets is more or less uniform in its utilitarian nature, concerned with the consumption of food rather than with its preparation: thus mortaria are rare—there was none found at West Clarewood—and

¹⁴ Birley E., Brewis P., and Charlton J. "Report for 1932 of the North of England Excavation Committee." A.A. X (1933), 97–102.

¹⁶ Thompson F. H., "A Romano-British Pottery Kiln at North Hykeham, Lincolnshire". Ant.J. XXVIII (1958), 26.

¹⁵ Woodfield C., "Six Turrets on Hadrian's Wall". A.A.⁴ XLIII (1965), 141.

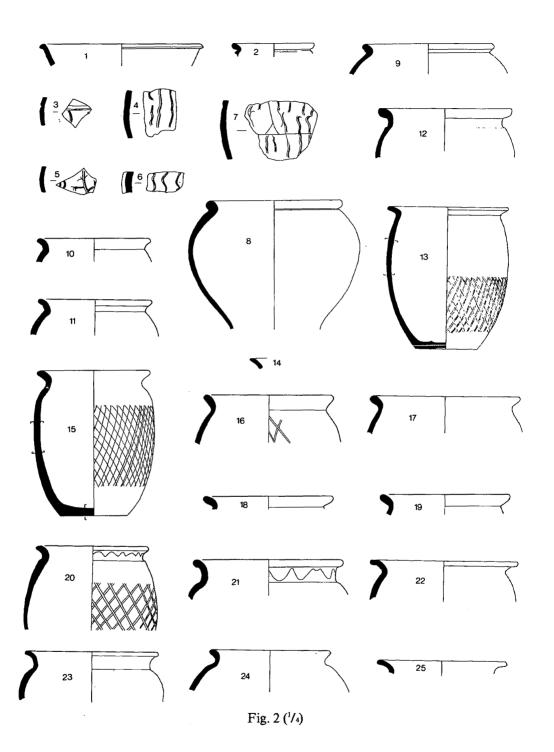
the bulk of the vessels represented are jars or cooking pots. That these types were in constant and continual use is further evidenced by the presence of a shoulder sherd of a grey jar or cooking pot with a perforation, presumably for repair, in the neck (not illustrated).

Amphorae and flagons are, as usual, not prominent, West Clarewood producing one, and two or more, respectively; each vessel was represented by wall sherds alone (not illustrated). Miss Woodfield describes this pattern as evidence of a barbarian diet,¹⁷ but one might expect that the containers of liquids would have had careful handling and thus might have experienced a lower breakage rate: their immediate distribution could have been on a basis of "so-much-deposit-on-the-bottle", as it were.

The large and very coarse vessels (nos. 34-6) of which only the bases have survived could have been for storage, although if the preparation of food was at a minimal level this would seem unlikely; their use as urinals may be more plausible.

- 1. Plain Samian rim of form 18, 31 or 18/31.
- 2. Rim of a rough-cast beaker in dull rusty fabric with a grey surface, black in places; cf. Gillam 75 (A.D. 130-180).
- 3. Sherd from the shoulder of a rustic ware vessel. Its low relief linear decoration has a superscript line: hard bluish-grey fabric. c. A.D. 100-130.
- 4. Wall-sherd of a rustic ware vessel in light grey fabric with a slightly darker surface. The linear rustication is in very low relief. c. A.D. 100-130.
- 5. Wall-sherd of a vessel in rustic ware in a hard bluish-grey fabric: the decoration is marginally less linear than the other sherds. c. A.D. 100-130.
- 6. Wall-sherd of a rustic ware vessel in a gritty grey fabric with a dark grey exterior surface. The linear rustication is in medium high relief. c. A.D. 100-130.
- 7. Wall-sherd of rustic ware vessel in a sandy light grey fabric with mid-grey surface: linear rustication in low relief. c. A.D. 100-130.
- 8. Plain jar in rust-coloured fabric with a light grey core and mid-grey surface on the exterior, greybuff on the interior. Rather haphazard faceted burnishing occurs on the rim and down to the shoulder.
- 9. Plain grey jar in coarse, cement-coloured fabric with a darker grey exterior surface.
- 10. Plain jar in sandy-buff fabric, burnt black externally.
- 11. Plain jar in sandy-buff with a light grey surface: traces of burnishing remain though the exterior has been blackened in use.
- 12. Jar in a gritty brick-pink fabric with a grey core resembling Derbyshire ware, though the form is not a Derbyshire one; blackened by fire on the exterior. Antonine? cf. Frere S. Verulamium Excavations I (1972), 310-11, no. 656.
- 13. Cooking-pot in a soft brick-pink fabric; some burnishing survives on the shoulder. cf. Gillam 115 (A.D. 130-140).
- 14. Rim fragment in gritty grey fabric.
- 15. Cooking-pot in orange-pink fabric with a mid-brown surface, traces of burnishing on the neck.
- 16. Cooking-pot in dense light grey fabric with faint traces of cross-hatching.
- 17. Cooking-pot in creamy-yellow fabric with faceted burnishing on the shoulder.
- 18. Rim fragment in light grey ware with faceted burnishing on the rim, cf. Gillam 116 (A.D. 130-150).
- 19. Rim in light bluish grey fabric with darker grey surface, burnished in facets, cf. Gillam 116 (A.D. 130-150).

¹⁷ Woodfield, op. cit., 101.



- 20. Hand-made cooking-pot in light grey fabric with a dark grey, hand-burnished surface; imitating BB1, cf. Gillam 120 (A.D. 120-160).
- 21. Hand-made cooking-pot in rust-brown fabric with a blue-grey core and a dark grey surface, burnished in facets. Perhaps imitating BB1, cf. Gillam 125 (A.D. 120–180).
- 22. Jar in a gritty, light rust-coloured fabric, heavily burnt.
- 23. Cooking-pot in a coarse, sandy, dark grey fabric: though heavily burnt on the exterior traces of burnishing remain on the neck, cf. Gillam 135 (A.D. 170-250).
- 24. Jar in a dense dull orange fabric with a red core; the surface is burnished in facets. Possibly Antonine.
- 25. Rim fragment in grey buff fabric and a highly hand-burnished black surface. BB1.
- 26. Wheel-made jar-shaped beaker in smooth mid-grey fabric with a light-grey core. The lattice decoration seems to have extended to the base, though obscured by subsequent burnishing. Probably imitating BB2.
- 27. Miniature cooking-pot in white fabric with blue-grey surface.
- 28. Carinated bowl with a reeded rim in a gritty grey fabric, cf. Gillam 215 (A.D. 80-125).
- 29. Dish in black-burnished ware (BB2) in a light grey fabric the surface of which has been changed to a rusty-brown colour, cf. Gillam 310 (c. A.D. 160-190).
- 30. Base of a dish in black-burnished ware (BB1).
- 31. Base of a wheel-made cooking-pot in light grey fabric: the lattice decoration was continued to the bottom of the pot and later obscured by burnishing.
- 32. Base of a hand-made cooking-pot in gritty grey fabric, heavily burnt.
- 33. The abraded base of a wheel-made vessel in grey fabric, evenly burnished on the exterior.

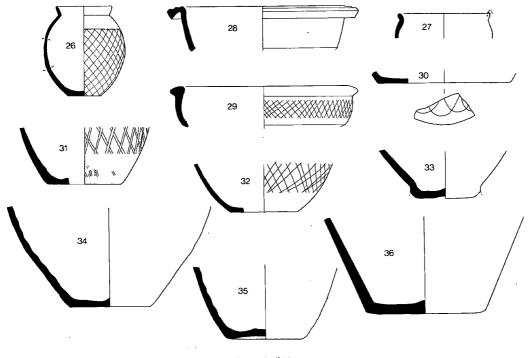


Fig. 3 (1/4)

- 34. Base of a crudely-made vessel in buff fabric, burnt on the exterior.
- 35. Base of a jar in a soft white fabric with a grey-blue surface.
- 36. Base of a large coarse vessel in a sandy grey fabric burnt on the surface to brick-orange and black.

The writers are indebted to Mr. J. Charlton and Professor E. Birley for their permission and encouragement to publish this material; also to Mr. J. P. Gillam for his comments upon some of the more recalcitrant pieces and for his many kindnesses to us.

STEPHEN HILL AND HUMPHREY WELFARE