

ART. III.—*Excavations at Tullie House, Carlisle, 1954-56.* By ROBERT HOGG, B.Sc., F.M.A.

Report on the Romano-British coarse pottery. By J. P. GILLAM, M.A., F.S.A.

Report on the medieval pottery. By MICHAEL G. JARRETT, B.A., Ph.D., and B. J. N. EDWARDS, B.A.

PART I.

Introduction.

THE main purpose of this report is to record the results of excavations in the grounds of Tullie House, Carlisle, in 1954-55-56.

Owing to the confined nature of the grounds of Tullie House, which throughout the excavations, continued to be used as a public access to Carlisle Public Library and Museum, and also because of the depths at which the early levels occurred, the excavations had of necessity to be extremely restricted in area. This in turn limited the number of people who could be employed on the site, so that the work was carried on throughout by a team of four consisting of the writer and his assistant Miss Patricia Helps and two labourers from the staff of the Highways Department, Carlisle Corporation. The excavation time-table worked out as follows: first season, 3 May to 1 June 1954; second, 11 July to 17 August 1955; third, 22 May to 27 June 1956. The work was financed by the Carlisle Corporation and undertaken as a research project by the Department of Archaeology, Carlisle Museum.

The results achieved provided dating evidence which makes it possible for the first time to sketch in outline the complete historical development of the City.

Attention was first drawn to the historical importance of the Tullie House site by the chance discovery there

in 1892 of a heavy wooden structure (CW I xii 344) which formed part of the northern ramparts of a turf-built Flavian fort. This discovery showed that the 1st century bridge-head fort lay on the eastern escarpment of the river Caldew and not as might have been anticipated on the Castle hill. The gardens of Tullie House and grounds of the Abbey to the south of them were thus shown to be by this discovery the only available open spaces where the Roman fort levels might be readily studied.

That some sixty years were to pass before a study of these two sites began was due principally to the fact that research had in this region been directed to the history of the Hadrianic frontier, a study which had revealed the pattern of development of the Roman frontier zone as a whole. Roman Carlisle lying within this zone was however a special problem. The town was a key road junction and the principal administrative and trade centre of the region.

Extensive building had been carried on in Carlisle within the historic settlement area over the last 100 years, but had surprisingly failed to produce any helpful structural evidence of the Roman town plan, and not a single section of the great thickness of made ground had been published. This may be readily understood when one realises that the earliest Roman levels are of wood and the later levels of stone-built structures have been completely destroyed by stone robbing.

The quality of the archaeological remains from Carlisle however, particularly the sculptured tombstones, stone pillars, and inscriptions, give some indication of its former standing as an urban settlement, but a considerable amount of excavation requires to be done before any reliable conclusion can be reached regarding its character.

The Excavation.

It will be best to consider the three seasons excavations as a single project. The first trench was sited in relation to the 1892 discoveries, i.e. 56 ft. south of the known position of the south edge of the rampart, in line with section A-B (CW1 xii 347, fig. 3) and thus over the site of the built-up area of the fort and not on the axial road position.

A trench 10 ft. long and 5 ft. wide was marked out parallel to the rampart alignment. The upper filling of this trench to a depth of 3 ft. 6 in., consisted of clean humus, and was excavated in layers some 10 in. in thickness. The pottery yields from the successive layers showed a gradual change in character from relatively recent material at the surface to rich yields of exclusively late medieval date at a depth of 3 ft. The make-up had therefore gradually accumulated over a period of several hundred years and the garden area at Tullie House must therefore have been an open space for this length of time.

At a depth of 3 ft. 8 in. there was a spread of heavy cobbles in earth. Cobble pitching of this character was typical of early medieval construction both of roads and the paved areas of wooden domestic buildings and the excavation of such levels required considerable care.

The pitching was composed of closely packed water-worn cobbles some 3-4 in. in diameter and was evenly spread to a depth of some 12 inches over the irregular surface of a Roman street of bound gravel lying immediately below it. The cobbles were mixed with a good yield of medieval pottery and were thus proved to be a post-Conquest resurfacing of a much eroded and disused road of the Roman town plan.

The presence of the Roman road was a discovery of major importance. It was aligned roughly W.N.W.-E.S.E., i.e. to run from a position about the centre of the modern town westwards in a direction that would

keep it clear of the Castle hill. There was clear evidence that during Roman times it had been reconstructed three times and this stratification sequence is described below.

The uppermost Roman road phase was some 14 in. thick and was composed of compact washed water-worn gravel remarkably even in size, the individual stones being some 2 in. in diameter. The structure was bound in a limy matrix and the whole had stained a brownish colour.

The road had suffered considerably over a long period of neglect and its upper surface had been completely destroyed (Plate I, a). One spoil hole, some 8 ft. in diameter and 3 ft. in depth, must have been showing in Norman times because it had received a packing of cobbles when the post-Conquest resurfacing was carried out.

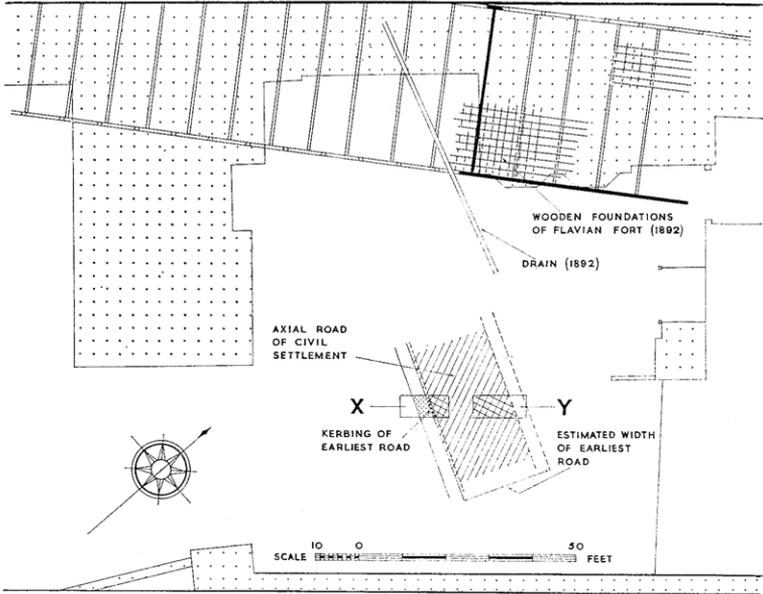
A section was cut through the Roman road levels but they were found to rest so closely upon each other and to be so similar in type that it was impossible to detect with certainty the limits of the successive levels. The excavation was therefore lengthened and the western edge of the road sequence was thoroughly studied.

Plates I, b and II and Fig. 1 show the principal structures found in this second trench. The medieval resurfacing, the character of which is clearly shown (Plate II), has been removed in part from the upper Roman phase. Neither of these two phases was kerbed but the stonework may have been removed by stone robbers. A spoil hole dug at the side of the road was clearly dug for this purpose (section X-Y, Fig. 1).

The upper Roman road phase was separated from the underlying one by a thickness of 4 in. of grey silt the presence of which would appear to indicate a period of disuse of the road.

Beneath this silt the next road phase was found in which a kerb-stone consisting of a re-used gutter-stone was still in position. The thickness of this road was some

TULLIE HOUSE, CARLISLE, 1954.
ROAD SYSTEM OF CIVIL SETTLEMENT



SECTION ALONG X-Y

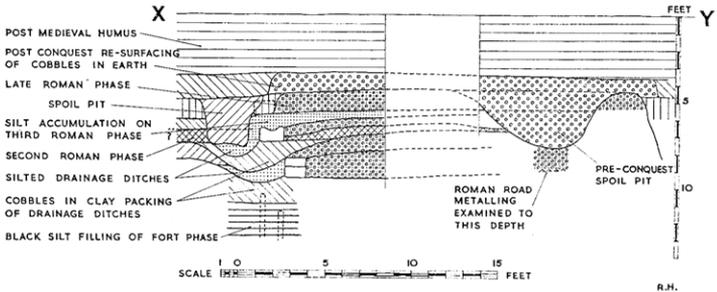


FIG. 1.

12 in. towards the crown, the upper 6 in. of which consisted of bound gravel and the remainder of dark red sandstone brash.

Finally, the earliest road phase was constructed of a basal layer of the slightly larger gravel, some 3 in. in diameter, and an upper layer of smaller grade, the overall thickness being some 2 ft., and was excellently kerbed with two courses of well-dressed sandstone masonry (Plate I, b).

The drainage ditch of this lower road phase contained in addition to a silt deposit a quantity of sandstone debris and rotted mortar from demolished buildings. This ditch had been obliterated with a packing of cobbles in clay before road phase II was constructed over a levelled site.

A similar packing material of cobbles in clay had been used to obliterate what appeared to be a timber-lined ditch which lay beneath the lowest road. This ditch was presumably part of the fort phase. It contained a considerable thickness of black silt which gave a good yield of pottery, but no attempt was made to study, at this time, these earliest levels.

It will, however, be convenient to record here what is in effect a postscript to this first season's work. In August 1957, a 12-ft. drainage trench was cut across the grounds of Tullie House from the N.E. corner of the "shrine" foundation to the N.E. corner of the grounds. During this work a structural correlation of the greatest importance was established between the road sequence and the building levels of the "shrine" excavation, i.e. it was clearly demonstrated that road phase II and the "shrine" structure were of the same period.

The Second Season : The excavation of the building levels.

The second season's work began on 11 July 1955 and was completed on 17 August with again a team consisting of the writer, his assistant and two labourers. The main objective was the examination of the presumed

building levels to the west of the newly discovered road and so to correlate these with the road levels.

The upper 4 ft. of make-up over as wide an area as the site would conveniently permit, i.e. 21 x 11 ft., was systematically removed to make more readily accessible the more critical deeper levels.

At a depth of 3 ft. a short length of foundation structure of re-used sandstone ashlar of Roman character was found in the south-eastern corner of the excavation, associated with an ill-defined occupation spread of beaten earth and gravel with burnt wood.

At a depth of 4 ft. 3 in. the size of the excavation was reduced to a 4-ft. trench cut along the centre line of the excavated area. Within this narrow trench there was immediately found cutting transversely across its eastern end and on the alignment of the Roman road a foundation structure some 3 ft. broad of cobble pitching in earth, covered with the remnants of a flagged surface and revetted with re-used Roman ashlar (Plate III). To the west of this foundation was a floor composed of a 5-in. thick even spread of greyish clay which gave a yield of early post-Conquest sherds, including one fragment which had been fashioned into a spindle-whorl, together with fragments of coal and food refuse in the form of animal bones, all fairly certainly attesting the domestic character of these structures. At this same level in the Castle Street excavation in 1953 (CW2 lv 71) cobble pitching of similar character was found associated with debris of wood and straw thatch. These structures thus provide the first archaeological evidence of the condition of the town in the early post-Conquest period. Domestic architecture seems to have been of the simplest type with crudely cobbled streets and houses of wood and thatch enclosed almost certainly by a wooden stockade, and as we shall see excluding from its area the Castle hill occupied independently by a wooden tower of a motte and bailey fortress.

Beneath the foundation of cobble pitching was a 2-ft. thick zone of demolition debris containing broken pieces of dressed sandstone, fragments of mortar, cobbles, etc., in which all structural features had been completely destroyed. That buildings had formerly stood at this level is proved first by the character of the demolition debris and again by the fact that it is the level at which the uppermost Roman road occurs. Sherds of green-glazed ware were completely absent from the demolition zone although they had been relatively abundant in the level immediately above it. This demolition zone is in fact the first archaeological evidence from Carlisle confirming the documentary record that the site was completely derelict at the time of the Norman occupation. Beneath the zone of demolition at a depth of from 7 to 9 ft. were two superimposed structural levels. The upper one consisted of the foundation of a rectangular building constructed of dressed sandstone set in clay and enclosing a floor of cobbles in earth (Plate V, b). The building measured some 8 ft. 6 in. internal width and was traced for some 10 ft. of its length. The simple rectangular plan was probably that of a native shop, the quality of the construction was rather poor and there was some evidence of the building having been destroyed by fire.

Immediately beneath the remains of the rectangular building were the foundations of what was probably a small native shrine (Plate VI). The structure (Fig. 2) had a rectangular plan, 12 ft. x 10 ft. in overall size, with a floor composed of sandstone brash packed around and holding in position in the centre of the floor a stone-lined pit, 4 ft. 5 in. x 2 ft. 9 in. x 3 ft. deep. The pit was constructed of sandstone slabs some 4 in. thick, the two sides in two courses and the ends of a single slab. The ends of the slabs were mitred and by this means were held in position by the surrounding packing of brash. The pit was not water-tight and there was no evidence to suggest that it had ever been lined to make it so.

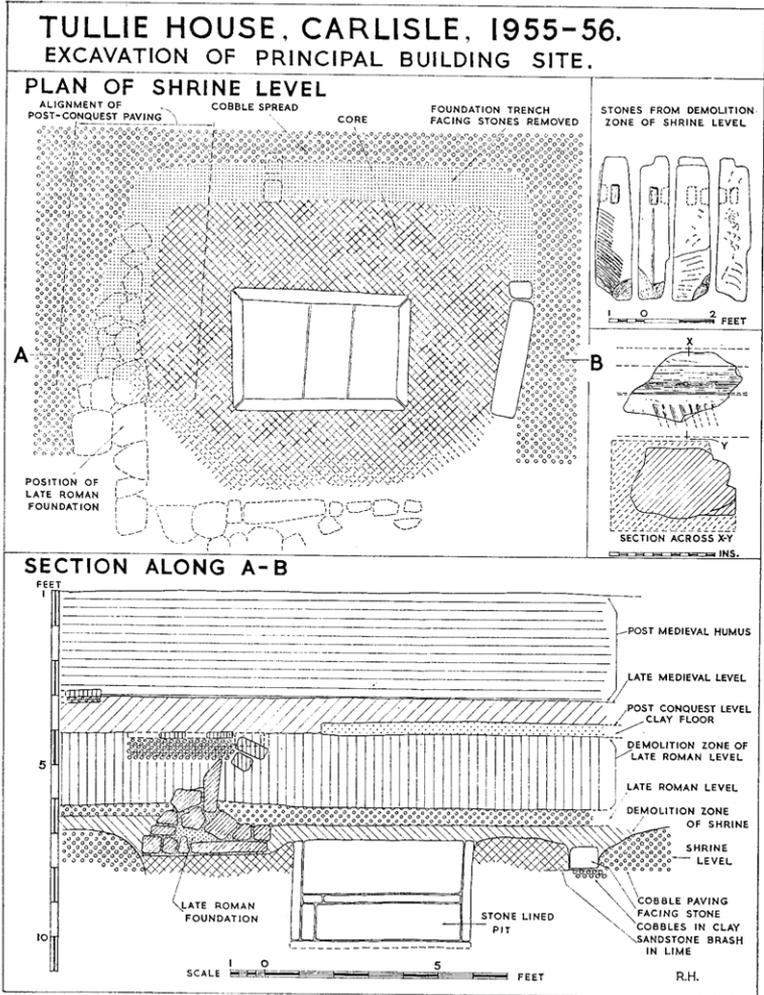


FIG. 2.

The building had been completely demolished in Roman times to the extent of the stonework having been removed from the foundation trenches. Debris from the demolition filled the pit and was sealed by the superimposed cobble floor which had in part settled into the pit.

The demolition debris contained numerous fragments of thin red sandstone flags and two carved stones which deserve special mention (Fig. 2). One was a carved red sandstone block almost certainly from the plinth course of the superstructure, the only structural item to be recovered from the superstructure to confirm what is suggested by the plan that the building was of monumental form.

The second stone was found mixed with the demolition debris. Drawings of this are shown (Fig. 2) but its purpose is unknown.

Associated with this small building was a gravel pavement which as has been already indicated was continuous with road phase II. This paved area was found over the whole of the excavated area, and its extent suggests a relatively large open space with monumental-type buildings, probably a consecrated area for the town shrines.

It was decided at this stage to make at some later date a permanent display *in situ* of the shrine foundation, and in consequence the underlying levels were examined in a shaft immediately to the west. For this purpose a trench 7 ft. x 5 ft. in area was opened 5 ft. west of the main excavation, and within it an examination of the entire stratification of the site was made down to subsoil level at a depth of almost 16 ft. A brief description of the successive levels which are diagrammatically represented (Fig. 3) follows:

The first 2 ft. consisted of clean humus which overlay the burnt remains of a building of clay-daub type. Beneath these remains there was more dark brown make-up soil down to a depth of 4 ft. 6 in. at which level there was a foundation structure of heavy cobbles

associated with a ditch containing a considerable thickness of black silt. Buried in this silt at the bottom of the ditch was a 14th century jug of green glaze ware in whole condition (Plate VII, b).

The ditch had later been sealed with a packing of heavy cobbles when the site was levelled, but as the silt consolidated both the cobbles and the debris of clay daub had settled into it.

At a depth of 4 ft. 6 in. there occurred a spread of stone debris some 8 in. thick lying on what was probably a late Roman street composed of a 7-in. thick layer of clean road metalling on an 18-in. bottoming of sandstone brash. The alignment of this feature was not determined.

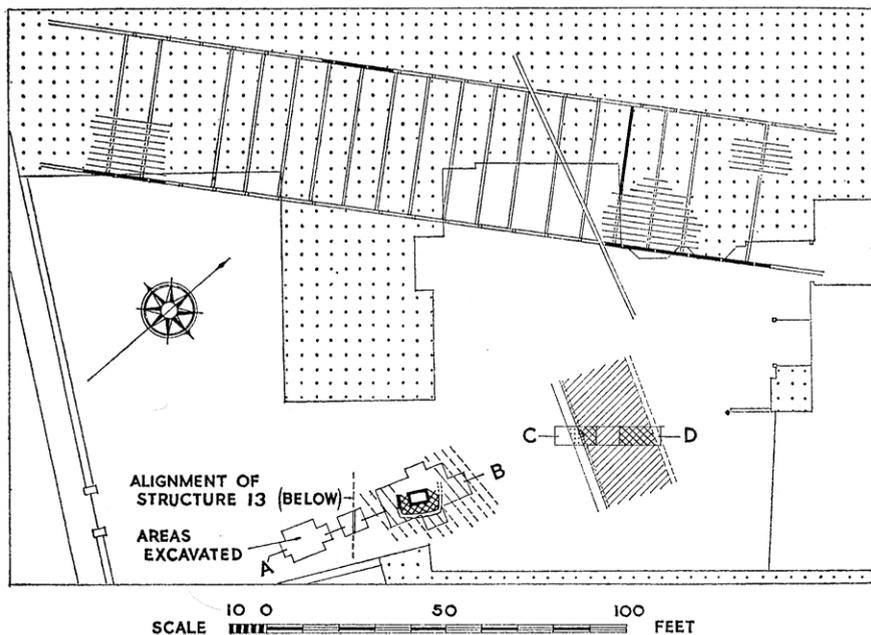
At a depth of 6 ft. 9 in. the gravel-paved area surrounding the shrine was again encountered, which of course was the level at which the adjoining excavation had been stopped.

Immediately beneath the shrine gravel was an occupation level of peaty matter resting on a clean gravel spread which had a bottoming of re-used timber showing structural features and still bearing clenched nails.

At a depth of 9 ft. 4 in. there was a 6-in. thick floor of beaten clay which was overlain by black occupation material containing burnt debris. The structures occurring at depths lower than the clay floor are at a stratification level equivalent to the pre-road level, i.e. they are associated with the fort phase and not the civil replanning of the site.

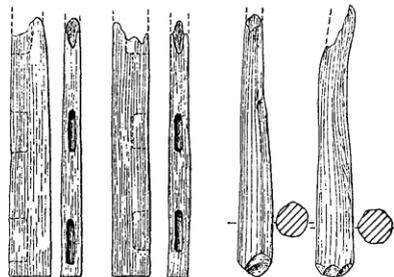
There were three strata of placed clay and cobbles each overlain by a thin spread of occupation material, the lowest layer of clay rested on the original surface at a depth of 12 ft. 3 in. There was a thickness of some 12 in. of brown soil containing pieces of broken branches presumably debris from the clearance of the site, beneath which was a subsoil of light grey laminated clay, which changed to a red sandy boulder-clay at a depth of 15 ft.

EXCAVATIONS: TULLIE HOUSE, CARLISLE, 1954-56



KEY TO LEVELS IN DEEP SECTIONS

- | | |
|--|----------------------------------|
| 1. DEBRIS OF LATE ROMAN PHASE | 2. SHRINE LEVEL |
| 3. OCCUPATION LEVEL | 4. GRAVEL SPREAD |
| 5. MAKE-UP CONTAINING WOOD DEBRIS | 7. CLEAN HUMUS |
| 6. PLACED CLAY AND COBBLES WITH WOOD IN SITU | 8. STONE PACKING |
| 8. STONE PACKING | 10. PLACED CLAY |
| 12. FOUNDATION COURSES OF LATE ROMAN (?) ROADWAY | 11. SILT |
| 13. TIMBER REVETMENT AND PLACED CLAY ON FORT ALIGNMENT | 15. BEATEN CLAY FLOOR |
| 14. PLACED CLAY WITH COBBLES | 17. STONE PACKING OF DITCH |
| 16. BLACK SILT DITCH FILLING | 18. DEBRIS OF CLAY DAUB BUILDING |



9. TIMBER FROM PRE-SHRINE LEVEL

SECTION ALONG

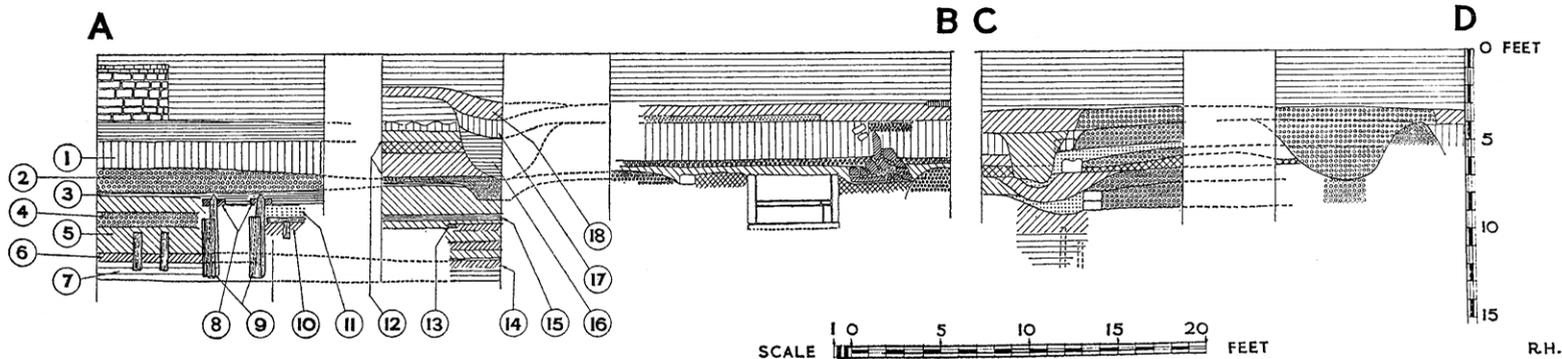


FIG. 3.

9 in. The natural levels were examined by means of a 6-in. hand auger.

The third season's work in 1956 began on 22 May and lasted until 27 June with again a team of four and was concerned, firstly with the completion of the examination of the shrine structure, and secondly with the excavation of an area of the site immediately to the west of the previous year's work, where it was expected another stratified sequence of building levels might be found. The results of the first of these projects have already been incorporated above and it only remains to describe the second.

An area 9 ft. square was deturfed 6 ft. west of the position of the previous year's excavation and the upper levels removed from the whole of this area to a depth of 6 ft., after which the excavation area was narrowed to a trench 4 ft. wide and the lower levels were studied in this. By this means, timbering of the sides of the trench was avoided.

The upper levels, i.e. those above the gravel-paving of the shrine level at 6 ft. 6 in., were rather confused, but the sequence appeared to be as follows: there was a surface spread of humus to a depth of 1 ft. 6 in. followed by a stratum of clayey make-up probably representing the demolition of a clay-daub type building. The clayey material was spread over a deposit of black organic matter which had accumulated over a foundation of stone flags and cobbles which occurred just above the spread of gravel at the shrine level.

Immediately beneath this gravel-spread there occurred a structural sequence very similar in character to that found at the equivalent level in the excavation immediately to the east, i.e. a black occupation stratum overlying cobble pitching, spread on a bottoming of re-used timber. The stump of a wooden post set in a packing of stones was associated with the cobble-spread.

Beneath these structures was a spread of clean make-up

and beneath this again were two well-defined wooden structural levels. The uppermost of these occurred at a depth of 9 ft. and contained heavy posts, roughly dressed, some 5 in. square (Fig. 3) and sunk upright into a foundation trench packed with stonework in clay. Associated with these posts was a bed of compact gravel. The posts were set in two rows of two, the rows were 4 ft. apart and the post 2 ft. The significant fact was that the posts were set across the trench on the civil alignment, i.e. parallel to the road.

These posts had been driven down into and had consequently disturbed the lowest level at its eastern end. At the western end of the excavation, however, at this level, i.e. at a depth of 12 ft., there was a spread of gravel in clay associated with a number of posts some 2 to 3 in. square set out on a rectangular plan, and representing remains of the Flavian wooden fort. These structures rested on the original surface.

This completes a description of all the structural levels noted. Their historical significance will be discussed after the chronological assessment of the various pottery yields from them has been given. A description of the small finds and the pottery now follows.

The small finds.

Dragonesque fibula (Plate VII, a). Feachem, *Antiq. J.*, xxxi 32 ff. Flavian. Length 2 in. The head is bent towards the body but is not joined to it. There is a smooth curve from the tip of the ear to the snout, i.e. the base of the ear is not defined by a notch in this upper curve. There is an enamel inlay in two colours — dark ultramarine blue and duck-egg blue.

The enamel inlay belongs to the type in which a curvilinear design is arranged around a central circular device, but is unique in this specimen in that the design arises from two such devices. The complication so introduced has been effectively handled by the craftsman, and the

specimen probably represents the peak of development of the type. The date shows that this point occurred immediately before the beginning of the Roman occupation of Northern Britain, after which time the consequent adverse economic pressure upon native craft expression brought about a degeneracy and subsequent extinction of the type.

The following are illustrated in Fig. 4.

1. Small leaden terminal in the form of a bust. Hadrianic (7-1956.18). Length $1\frac{1}{4}$ in. The features are consider-

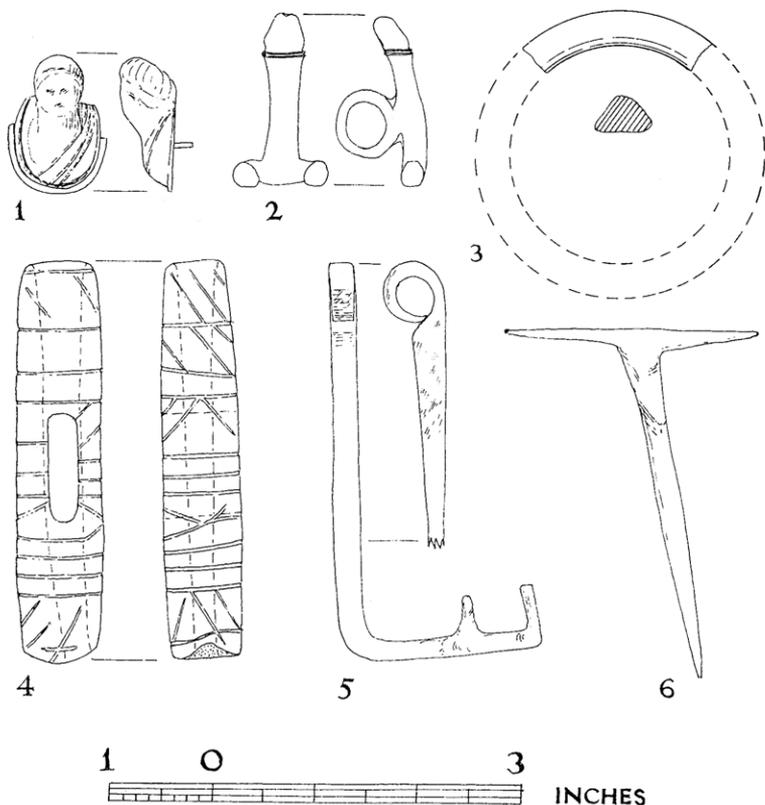


FIG. 4.

ably worn but appear to be female. The bust is not naked, clothing is indicated by incised lines passing from the left shoulder across the breast. The rear of the piece is cut vertically flat and provided with a projecting bronze pin for fixing it, probably to a piece of furniture.

2. Bronze phallus. Hadrianic (34-1956.12). Length $1\frac{3}{4}$ in. The object is provided with a loop probably for attaching it to harness-gear as an emblem of good luck.
3. Fragment of a glass armlet. Flavian (34-1956.14). Estimated inside diameter $2\frac{1}{8}$ in. Sub-triangular in cross-section, opaque white glass. Cf. Kilbride-Jones, type 3A (PSAScot. lxxii 377, where he points out that the type had a long history and was for most part confined to the region between the Hadrianic and Antonine Walls).
4. Bone object of uncertain use but variously described as a toggle, dress-fastener or bridle cheek-piece.

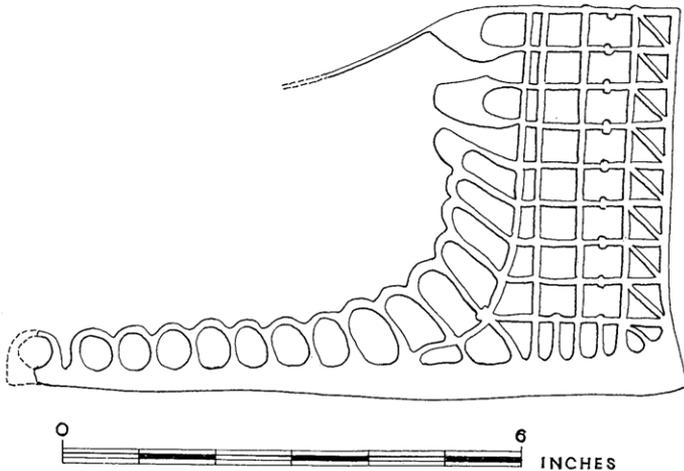


FIG. 5.

Mid.2nd century (7-1956.17). Length $4\frac{7}{8}$ in., ornamented with transverse and oblique grooves. The surface is highly polished, apparently through use.

5. Iron L-shaped slide-key with terminal loop. Hadrianic (34-1956.12).
6. Iron T-shaped hold-fast. Trajanic (34-1956.13). Used especially in bath-houses for fixing tiles to walls. (Curle, *Newstead*, 289.)

Openwork slipper or *carbatina* (Fig. 5), made from a single piece of leather elaborately cut and pierced for lacing. Flavian (34-1956.14): Wheeler, *London in Roman times*, 105. Length of sole $8\frac{1}{2}$ in. and therefore probably for a lady's use.

PART II.

Report on Romano-British coarse pottery from excavations at Tullie House, 1954-1956.

The pottery illustrated on Figures 6-8 and described below includes most of the pieces sufficiently well preserved to be drawn, from stratified Roman levels, and a selection of pieces from later or disturbed levels. Nos. 1-11 were found in 1954 in the section across the Roman road; nos. 12-52 were found in 1955 and 1956 in association with, or in the vicinity of, the shrine. Within each of these two sites the pottery is dealt with by stratified groups in the relative chronological order indicated by the stratification, beginning with the earliest. In assigning a date to each group the evidence of those pieces which would not repay illustration is taken into account, as is also the evidence of stratigraphically related groups composed wholly of unillustrated fragments.

Pottery from the road section.

Nos. 1-4 come from the black drainage-ditch material below the level of the kerbs of the earliest Roman road, in section C-D.

1. Fragment from an unusual carinated jar in brownish-grey sandy fabric with a black-burnished outer surface; a single indentation survives on the body.
2. Fragment from a wide-mouthed jar in light grey self-coloured fabric. Flavian to early Hadrianic.
3. Fragment from a carinated bowl with a reeded rim in reddish-brown self-coloured fabric. Flavian to early Hadrianic.
4. Fragment from a lid in dark grey fabric with a black surface, burnished on the exterior. Flavian to Hadrianic.

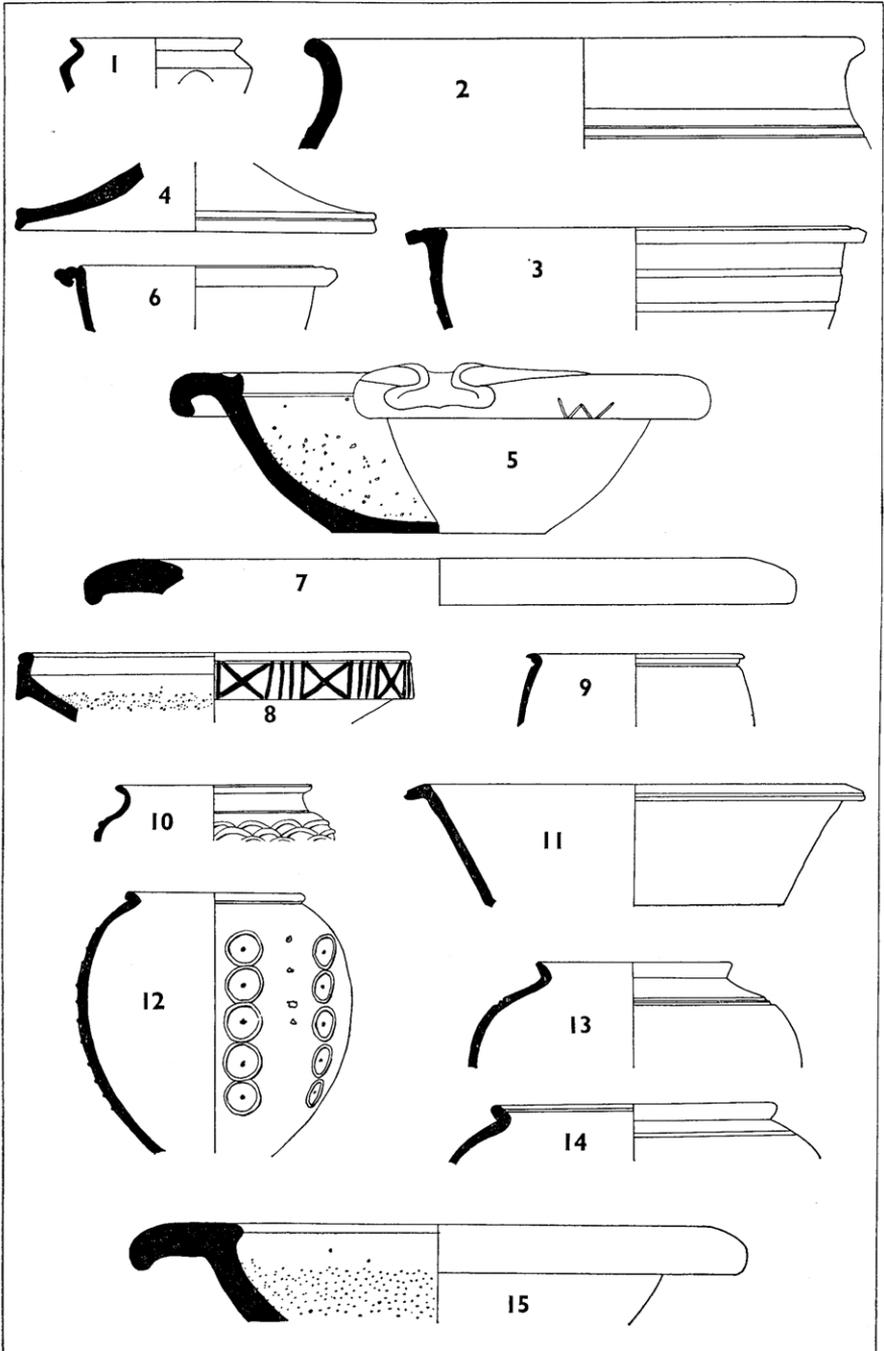
Among the associated pieces are wall fragments from a cross-hatched grey jar of Hadrianic type, and from a black-burnished cooking-pot, with acute-angled cross-hatching, of a type which first emerged under Hadrian. The group as a whole provides a *terminus post quem* of *circa* A.D. 125 for the earliest road.

No. 5 comes from the south-west end of section C-D, from an occupation layer beneath Roman road II and associated with road I.

5. Twenty-three fragments making up the greater part of a mortarium in red fabric, with a blue core in the thickest part of the rim and with a cream slip, worn on the interior; multi-coloured grit, mainly reddish-brown and opaque whitish-grey. An owner's mark in the form of a W is incised on the rim. A small fragment only of a potter's stamp survives; this seems to be part of the typical border of one of the dies of the potter AUSTINUS and possibly part of the T in the name. Whether or not the piece is assigned to Austinus, it is wholly typical in fabric and form, even to the detail of the groove below the bead, of the products of the small group of potters to which he belonged; they were active in the Carlisle region in the Hadrianic-Antonine period.

The associated fragments were small but could well be contemporary, and the group as a whole provides a *terminus post quem* of *circa* A.D. 130 for the second road.

Nos. 6 and 7 come from Roman road III, that is from the make-up of the higher of the two layers in the later of the two kerbed roads shown in section C-D.



6. Fragment from a carinated bowl with a reeded rim in light grey fabric with a dark grey matt surface. Trajanic or early Hadrianic.

7. Fragment from the rim of a mortarium in pink self-coloured fabric; there has been no grit on the surface of the rim. The potter who made no. 5 sometimes produced mortaria with flattish rims and the fragment is probably Hadrianic-Antonine.

Among the associated pieces is a complete footstand from a samian vessel of Dragendorff's form 33 with the stamp VXOPILLI.M, of a Lezoux potter of the Antonine period, probably the mid to late Antonine period. There are also wall fragments from a black-burnished cooking-pot decorated with cross-hatching in groups of lines; while this form of decoration is absent from rich late 2nd-century deposits at Corbridge it appears before the close of the 2nd century at Aldborough, Brough by Bainbridge, Catterick and York. The group as a whole provides a *terminus post quem* of circa A.D. 160 for the third road, and nos. 6 and 7 are to be regarded as survivals in their context.

No. 8 comes from building debris above the Roman road construction at the west end of section C-D.

8. Large fragment from a mortarium of Corder's Crambeck type 7, in orange-buff fabric with a smooth orange surface and warm light brown-painted decoration; grit small, black and closely spaced. Late 4th to early 5th century.

The associated fragments are all of earlier date.

Nos. 9-11 are selected from a large group from a high level at the east end of section C-D.

9. Fragment from a cornice-rim beaker in white fabric with dark colour-coating. Late 2nd to early 3rd century.

10. Fragment from a scale-pattern beaker, doubtless once indented, with light orange colour-coating on the exterior and dark on the interior. Late 2nd to mid 3rd century.

11. Fragment from a flat-rimmed bowl in grey fabric with highly-polished black surface, lacking the usual decoration. Antonine.

While the pottery, including the associated fragments, is consistently of the turn of the 2nd and 3rd centuries, two out of three unillustrated groups, found at a lower relative level in the section, contain medieval fragments, and the context of the present group is therefore post-Roman.

Pottery from the shrine area.

Nos. 12-15 come from the lowest level, at a depth of at least 12 ft., at the southern end of section A-B.

12. Seven conjoined fragments from a barbotine-decorated jar in grey fabric with a black surface. Flavian.

13. Sixteen fragments from the rim and shoulder of a jar with shoulder grooves, in hard matt orange-red fabric. Flavian, or Trajanic at the latest.

14. Fragment from a jar in coarse gritty brick-red fabric. Flavian, or Trajanic at the latest.

15. Fragment from a flat-rimmed mortarium in light buff fabric with small white grit. Flavian.

Among the associated pieces are an unstamped amphora handle and fragments of rustic ware. Though small, the group is internally consistent and was undoubtedly formed between A.D. 70 and A.D. 100.

Three small groups of pottery from the middle part of section A-B, found in levels between the subsoil and nos. 21-24 below, and thus corresponding in level with nos. 12-15, while including no piece which would repay illustration, were consistently Flavian in character and included a fragment of fine cream moulded pottery with a yellowish-green glaze, of a kind usually assigned to Saint Rémy en Rollat.

Nos. 16-20 come from the gravel-spread at a depth of between 10 ft. 3 in. and 12 ft., in the southern part of section A-B, that is from the demolition zone of the early fort level.

16. Five conjoined fragments from an unusual narrow-mouthed jar in coarse dark grey fabric with a smooth black surface.

17. Two conjoined fragments from an unusual bowl in hard light grey fabric with a darker exterior surface.

18. Fragment from a mortarium in fawn fabric with white grit both in the interior and on the surface of the rim. The vessel is closely related to the typical flat-rimmed mortarium of Flavian date, cf. no. 15 above.

19. Three fragments from a segmental bowl in light grey fabric with a dark grey surface. While the type is not exclusively Flavian it is certainly pre-Antonine, and the present example, in its context, is probably Flavian.

20. Fragment from a lid in dark grey fabric. This class of lid is found in both Flavian and slightly later contexts.

Among the associated pieces are fragments from a samian bowl of form 29, from a fine small form 27, of rustic ware, and the reeded rim of a carinated bowl. While the group includes both unusual vessels and representatives of types which continued into the early 2nd century, all the recognisable pieces are of types which had emerged by A.D. 100, which is thus the *terminus post quem* for the demolition of the early fort; the event may have been as late as A.D. 120, but, in view of the absence of any characteristic Hadrianic fragment, cannot well have been later than that.

Nos. 21-24 come from the brown humus make-up and occupation level at a depth of between 10 ft. and 11 ft. 4 in., in the middle part of section A-B.

21. Rim fragment in pinkish-grey sandy fabric; part of a heavy two-ribbed handle in the same fabric and from the same deposit may be from the same vessel, an amphora of Italian origin and 1st century date.

22. Fragment from the rim of a small jar or beaker in light grey fabric. Flavian or Trajanic.

23. Two small conjoined fragments in brick-red gritty fabric.

24. Fragment from an uncommon type of wide-mouthed jar, or bowl, in orange-brown fabric charged with quartz grit. While uncommon in the north, jars with rims resembling those of the carinated bowl are found in 1st and early 2nd century contexts elsewhere in Britain.

Among the associated pieces are fragments from a fine

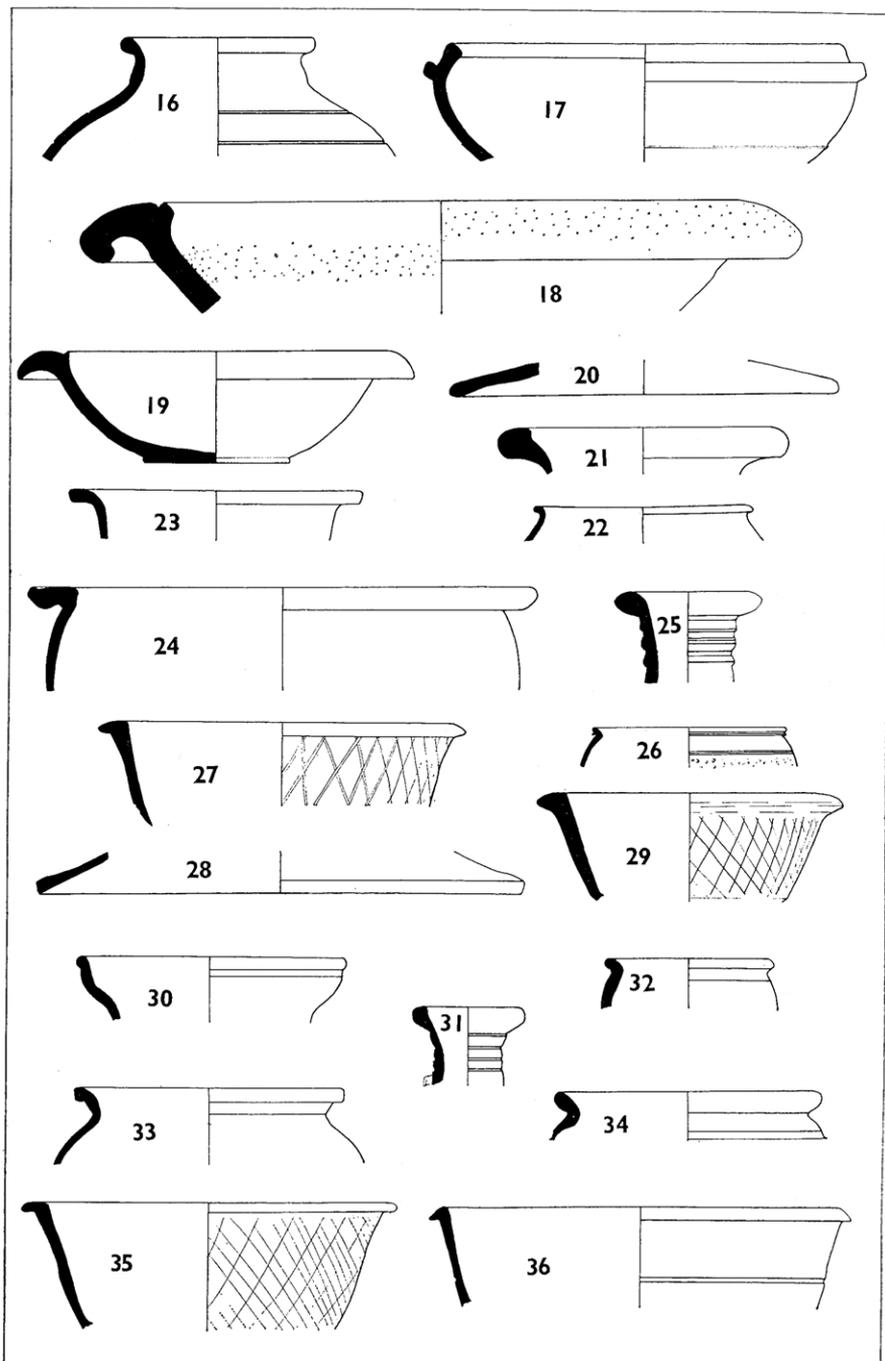


FIG. 7.

samian platter of form 18, and from grey jars or cooking-pots, none in black-burnished fabric. While one vessel is somewhat unusual, and another undistinguished, the character of the group is distinctly pre-Hadrianic; it corresponds in level and date with nos. 16-20.

No. 25 comes from the gravel spread in clay at a depth of between 9 ft. and 10 ft. 3 in., beneath the timber-work in position at 8 ft. 6 in., in the middle part of section A-B.

25. Neck of flagon in hard reddish-brown fabric; typologically Hadrianic.

Among the associated pieces are surviving fragments of rustic ware, but nothing post-Hadrianic, and the group as a whole is not later than the early part of Hadrian's reign.

Nos. 26-28 come from a clay floor at a depth of between 9 ft. 5 in. and 9 ft. 9 in. in the middle part of section A-B.

26. Fragment from a roughcast beaker, now grey in colour. Flavian to Hadrianic.

27. Three conjoined fragments from a flat-rimmed bowl in typical black-burnished fabric. Hadrianic-Antonine.

28. Fragment from a lid in cream fabric. Trajanic-Hadrianic.

Among the associated pieces are fragments of samian vessels of forms 18, 27 and 37, rustic ware, more than one cross-hatched grey jar, more than one black-burnished cooking-pot, and a further dish or bowl in the same fabric. The group as a whole is Hadrianic; parts of four vessels in those black-burnished fabrics which first appeared in what is now Cumberland between A.D. 120 and A.D. 125 are present. This is stratigraphically the earliest group in this part of the section to include them. The pottery, none of which is drawn, found in association with the foundation structure with timber revetment, that is above nos. 21 to 24 but below nos. 26 to 28, did not include black-burnished fabrics.

Nos. 29 and 30 were found in association with the placed timber bottoming of the make-up below the occupation deposit at a depth of 8 ft. 6 in. in the southern part of section A-B.

29. Fragment from a bowl in burnished dark grey fabric, with the typical gritty granular paste or black-burnished ware. Hadrianic-Antonine.

30. Two fragments from a cup, reminiscent of the samian form 27, in light brown fabric with reddish brown core.

Among the associated pieces are fragments from a cross-hatched cooking-pot. The group as a whole is Hadrianic; while not stratigraphically linked with no. 25 or nos. 26 to 28, it corresponds with them in level and in date.

Nos. 31-37 come from the black occupation material immediately below the gravel-spread, which is a continuation of the gravel-spread at the level of the shrine, at a depth of 7 ft. 2 in., in the middle part of section A-B.

31. Neck of flagon in red fabric with buff slip. Hadrianic-Antonine.

32. Fragment from a beaker, or small cooking-pot, in granular black-burnished fabric. Hadrianic to mid Antonine.

33. Rim fragment from a jar in light grey fabric with a darker grey surface. Probably Flavian-Trajanic and a survival in its context.

34. Rim fragment from a cooking-pot in grey fabric; soot survives on the surface. Probably late Antonine.

35. Two conjoined fragments from a flat-rimmed bowl in typical granular black-burnished fabric. Hadrianic-Antonine.

36. Fragment from a bowl with down-turned rim. The fragment now appears to be in a pink fabric with brown colour-coating. Colour-coated vessels of this form, and also without cross-hatched decoration, though usually white in fracture, have been recorded, though not as yet published, from deposits of the beginning of the 3rd century at Waternewton. It is, however, possible that the present vessel was originally in a grey fabric with a black-burnished surface, and has been evenly altered by exposure to fire. Vessels of this form and fabric, though recorded in earlier contexts in Essex, Hertfordshire, Kent, Middlesex and Surrey, first appeared in northern Britain *circa* A.D. 170.

37. Fragment of dish in reddish-brown self-coloured fabric. This is not closely datable, but is possibly a pre-Antonine survival.

Among the associated pieces are fragments from samian vessels of forms 18-31, 27 and 33, all somewhat large and coarse, and 37, from several cooking-pots, jars, bowls and dishes in one or other of the two main varieties of black-burnished fabric, and from a white-bodied rough-cast beaker; several pieces in the group are stained with vivianite. Though it includes survivals, the group as a whole has a distinct late 2nd-century character. Nos. 34 and 36 provide a *terminus post quem* of circa A.D. 170. A date earlier than the late 2nd century for the gravel overlying the group, and thus for the shrine, is quite impossible, and a date in the early 3rd century not unlikely.

Nos. 38-44 come from the occupation level immediately below the gravel-spread at shrine level in the southern part of section A-B.

38. Neck of large flagon in reddish-brown self-coloured fabric. Antonine.

39. Neck of flagon in red fabric. Antonine.

40. Large fragment from small flask in buff self-coloured fabric. Mid to late Antonine.

41. Several fragments from a rough-cast beaker in fawn fabric. Hadrianic-Antonine.

42. Rim and shoulder fragment from a bead-rim cooking-pot in black-burnished fabric. Hadrianic-Antonine.

43. Several fragments from a jar in grey fabric with lustrous finish. Probably Antonine.

44. Fragment from an unusual vessel in grey fabric with a black surface.

Among the associated pieces are several fragments of samian, of cross-hatched black-burnished cooking-pots and an imitation of the samian form 38; several pieces in the group are stained with vivianite. The group as a whole is contemporary with nos. 31 to 37, which come from the same absolute and relative level in a different

part of the section, and indicate a *terminus post quem* of *circa* A.D. 170 for the gravel-spread and thus for the shrine.

Nos. 45-48 come from the cobble-spread over the demolished shrine.

45. Large fragment from a narrow-mouthed jar in hard smooth red fabric; this resembles some of the products of the 3rd-century kilns at Quernmore in Lancashire.

46. Two conjoined fragments from a flanged bowl in grey fabric with typical black-burnished surface and intersecting-arc decoration. Late 3rd to early 4th century.

47. Fragment from a flanged bowl in grey fabric with black core and brown surface; the fabric would seem to be black-burnished ware altered by fire, rather than lead-grey Crambeck ware. Early to mid 4th century.

48. Rim fragment from a mortarium in red fabric with a glaze-like red gloss on the flange; though the shape is not typical, this vessel is identical in fabric with the so-called Raetian mortaria, made at Wilderspool in Cheshire, and found on and near Hadrian's Wall in deposits of the 2nd and 3rd centuries.

Among the associated pieces are fragments from a samian form 38, doubtless a survival, from a plain-rimmed dish and from other vessels of the early 4th century or earlier. While three of the vessels could be of 3rd century date, no. 47 brings the group securely into the 4th century, and is indirect evidence for the date of demolition of the shrine.

No. 49 comes from the demolition zone of the Roman structures, at a depth of between 6 and 7 ft., in the northern part of section A-B.

49. Rim fragment from a jar or cooking-pot in hard grey fabric. This is presumably contemporary with the Huntcliff type, with which it is identical in form, though not in fabric. Mid to late 4th century.

Associated pieces include fragments of late 3rd century flanged bowls, as well as samian and rough-cast survivals, but the illustrated piece dates the whole group, and thus the activity represented by the level, to the middle years of the 4th century at earliest.

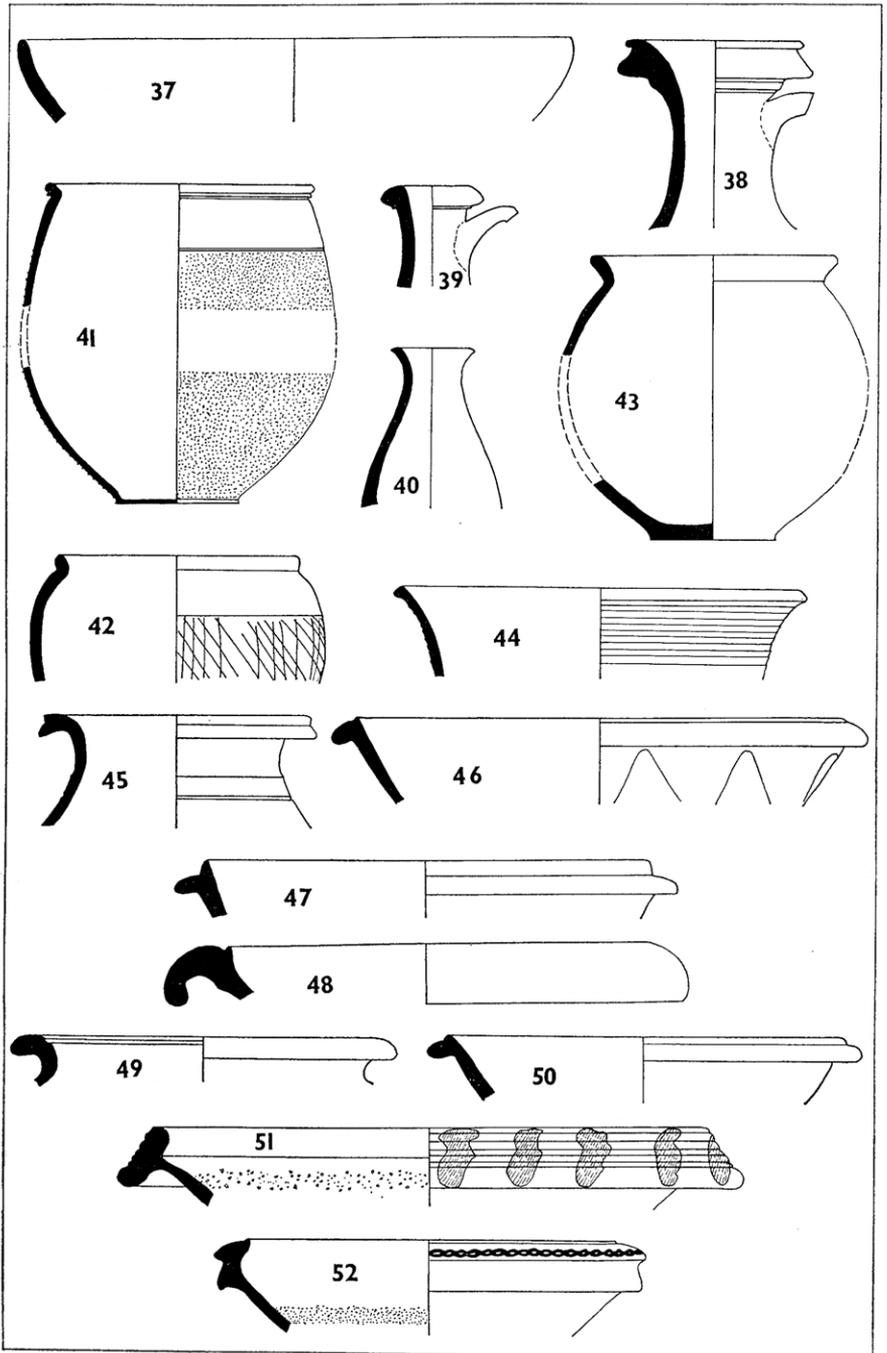


FIG. 8.

Nos. 50 and 51 come from the demolition debris of the final Roman phase, at a depth of between 4 ft. 3 in. and 6 ft., in the northern part of section A-B.

50. Fragment from a flanged bowl in grey fabric; though there is no internal wavy line, this piece is probably a Crambeck product, and is in any case not earlier than the middle of the 4th century.

51. Two conjoined fragments, one burnt, from a reeded hammer-head mortarium in cream fabric with brown-painted decoration on the flange; black grit. Early to mid 4th century.

The associated fragments include further examples of the types illustrated, a black-flanged bowl and a grey jar rim, all of 4th century date, some survivals, including samian, and a single medieval sherd, which, if not intrusive, dates the whole deposit to long after the Roman period, and, in any event, implies medieval disturbance.

No. 52 comes from an early post-Conquest level to the west of the shrine.

52. Two fragments from a mortarium in creamy white fabric with decoration in light brown paint; grit small, black and closely set. This is a typical Crambeck product of Corder's type 8. Late 4th to early 5th century.

This vessel, stratified in an undoubtedly medieval level, is nevertheless, like no. 8 above, evidence for activity in the area at the close of the Roman period.

(Groups 7-1956.8/12/13/14/15 and 16 are *not* dealt with; either high-level, contain medieval pieces or are too scrappy for assessment.)

I am most grateful to my assistant, Mr J. Tait, for preparing the drawings which illustrate this section of the report, and for help in other ways.

PART III.

The medieval pottery.

As before, excavations in Carlisle have produced an important and interesting series of stratified medieval

pottery. When the material from the 1953 excavations was published, E. M. Jope and H. W. M. Hodges commented on the associations of medieval pottery in the Carlisle area. Readers are referred to their discussion.¹ The time is not yet ripe for a reappraisal of the position of the Solway area in the field of medieval pottery, but several points of general interest arise from the pottery here published.

The first is that the 13th century cooking-pots of this area bear no obvious relationship to those of Yorkshire and the north-eastern counties. There are, for instance, no parallels at Scarborough² or Finchale³ for the Carlisle series. On the other hand they compare fairly closely with material from Scottish sites, especially with vessels from south-west Scotland.⁴ Some of those vessels are dated by coin hoards found in them to c. 1300, but the type is clearly derived from the square-rimmed cooking-pots of the 12th century which occur on both sides of the Pennines. By the 14th century it had apparently developed (probably in Scotland; for manufacture at Stenhouse, near Falkirk, see *Finchale* 237, 256) into a globular form with one or two handles which is common on Scottish sites⁵ and which also occurs in Northumberland and Durham. We have suggested elsewhere⁶ that this globular form may occur late in the 13th century. It is not so far recorded from the Carlisle area.

We have indicated elsewhere⁷ that there is at present no possibility of producing a firm dating for medieval pottery in Scotland and northern England. This uncertainty applies to the typology of small cooking-pots outlined above, and to the dates suggested in this report.

¹ *Carlisle I* 79-86.

² J. G. Rutter, *Medieval pottery in the Scarborough Museum* (Scarborough, 1961), 30-46.

³ *Finchale* 254-258.

⁴ e.g. Kirkcudbright & Ayr, PSAScot. xci (1957-8) 136-137.

⁵ e.g. Deer, Aberdeens; Inchholm, Fife; Eccles, Berwicks (all in SMP); Bothwell, Lanarks.

⁶ *Finchale* 256.

⁷ *Finchale* 230-237.

Those dates are sometimes as much as fifty years earlier than the dates suggested for similar vessels in *Carlisle I*. The earlier dating is based on Mr Hogg's interpretation of the stratification found during the excavation; that interpretation, which we have discussed in detail with him, is linked with the whole history of Carlisle in the 12th and 13th centuries. It does not necessarily provide a reliable dating for the pottery, nor can the pottery provide an adequate confirmation of the excavator's conclusions. We do suggest, however, that the dating adopted in this report provides a good working hypothesis for the study of pottery in northern Britain.

On this hypothesis it is necessary to accept that the smooth, hard grey fabric (often with micaceous sparkle, and usually with a thick and hard external glaze) which is characteristic of the finest vessels of the 14th and 15th centuries in the north was available in Carlisle from c. 1250. The cooking-pots in a very hard vitrified fabric (cf. *Carlisle I* 8) must also have been in circulation about that date. Jope and Hodges note that the type occurs in contexts of c. 1200-1275, but suggest that it first occurs "well into the second half of the 13th century". We suggest that the type occurs earlier, and are reinforced in this view by another cooking-pot, no. 96, which is in a different fabric but also has a flat base. The indications are that cooking-pots similar to 96 were probably manufactured in the middle years of the 13th century. This being admitted, one of the main arguments for placing the vitrified type at a later date, the probable date of the Nottingham kiln whence the flat-bottomed form is supposed to have come to Carlisle, is removed.

A striking feature of the pottery found in 1954 and 1956 is that there is very little amongst it which may be assigned to the 12th century. This is the more remarkable in that the earliest group consists of residual material, collected c. 1240 for levelling up part of the Roman street system.

Group I (35-1954.3 = 2A) (Fig. 9).

Sherds mixed with heavy cobble-pitching used to re-surface the upper level of the Roman street.

This group was probably brought to its findspot in the earth used for filling-in holes in the Roman street. It comprises sherds in the gritty fabrics of the 12th and 13th centuries. Only one sherd is in the hard dark grey ware without grit which becomes common later; it has a hard pale green external glaze. Glazes in this group are otherwise thin, often with grit showing through them; almost all are yellow, brown or very pale green. A date, c. 1240, is suggested for the deposition of the group.

1. Part of the neck of a ring-necked flagon with pinched spout, in brick-red slightly gritty fabric with grey core. There is a patch of cream slip at the bottom of the surviving fragment. We have been able to trace no parallel for this; it may be Roman, but Roman parallels are also lacking. It does not appear to be the spout of a pitcher similar to *Carlisle I* 4. Aper. diam. $1\frac{1}{8}$ in.

2. Rim of a large jar or jug in pink gritty fabric with external yellowish-brown glaze below the rim. Probably of the same general type as *Melrose* 5-8, assigned to the 13th century. Aper. diam. $4\frac{3}{4}$ in.

3. *Not illustrated*. Neck of a strap-handled jug in grey fabric with much coarse grit, fired to pink inside. The grits are up to 5 mm. in diameter. External brownish-purple glaze of poor quality and varying thickness.

4. Rim of jug with pinched spout in pinkish-buff fabric with grey core. Some colourless glaze on lip and splashes of pale yellow, almost transparent, glaze on side. Closely paralleled by *Dunstanburgh* 2, although that is in "hard smooth brownware, probably of late 14th to early 15th century date". For the type, see *Finchale* 17.

5. Rim of cooking-pot in grey-pink fabric with much coarse grit. No close parallel can be adduced. Aper. diam. $4\frac{7}{8}$ in.

6-12. Rim fragments of cooking-pots in grey fabric, fired to pink on surfaces, with much small grit, mostly white. No. 6 had a diameter of seven inches; the surviving fragments of the other vessels are too small to give exact diameters. No. 7 is paralleled by *Bothwell* 60 and 8 by an unpublished fragment from below high-water mark in Budle Bay, Northumberland, though that piece is in a lighter fabric. While the other rims have no close parallels, the group is clearly derived from and closely allied to the 12th century cooking-pots of northern England, and should probably be assigned to the early part of the 13th century.

13. Sagging base of a cooking-pot in grey fabric with coarse grit, fired to brick-red inside and to drab brown outside. Typical of several sagging bases in this group.

14. Strap handle in dark grey-black fabric with greenish-orange glaze on upper surface. The underside is unglazed and fired to deep pink.

15. Strap handle in similar fabric to no. 14, with dark brown glaze on upper surface; underside fired to dirty pink.

16. Rim of straight-sided dish or jar in grey fabric with fine grit. Yellow-brown external glaze carried on to the lip. Inner surface fired to buff.

Group II (7-1956.6=TH 6) (Fig. 9).

Sherds mixed with a clay floor of a building in the lowest medieval level.

While not dissimilar to group I in the types it contains, this group has a much higher proportion of sherds in fine hard dark grey ware, and is probably to be dated at least a decade later, perhaps *c.* 1250. With the hard grey fabric is associated a good-quality olive-green glaze.

17. *Not illustrated.* Base of cooking-pot in very hard red fabric with blackish surfaces and added grit, mostly less than 1 mm in diameter. The vessel has been fired to a temperature which has produced some vitrification. It was cut from the wheel with a wire or knife and then trimmed; the result is a remarkably flat and tidy base. While still soft the vessel was wiped on the outside with a cloth, producing an effect similar to the scratch-marked wares of southern England. Other examples of this fabric are nos. 59, 60, 72 and 120; for a fuller discussion, with parallels of the type from Nottingham, see *Carlisle I* 8.

18. Neck of jug in hard light grey fabric with hard olive-green glaze outside and on lip. Cf. *Carlisle I* 21, in a group assigned to the second quarter of the 14th century, and see below, nos. 35, 67 and 110. For our views on the type, see *Finchale* 17. Aper. diam. $4\frac{1}{4}$ in.

19. Rim of jug in pale pink fabric with fine grit and splashes of green and purplish external glaze. Traces remain of the junction of a strap handle $\frac{1}{2}$ in. below the rim. The nearest parallel is SMP 42 (Deer Abbey, Aberdeens.) of unspecified fabric. Aper. diam. $4\frac{3}{4}$ in.

20. Rim of large jug with broad strap-handle in hard grey fabric with light olive-green external glaze. Aper. diam. $3\frac{1}{4}$ in.

21. Skillet handle in grey gritty fabric, fired to pink where not protected by the splashes of creamy-fawn glaze. Some of the grits are as much as 3 mm. long. The nearest parallel appears to be *Kirkstall*, fig. 8/15.

22. Strap handle in dark grey fabric, fired to pink for a depth of about 2 mm. where not protected by the pale green glaze which is applied only to the central groove.

23. Spindle-whorl made from a sherd in hard grey fabric without grit; a small patch of mid-green glaze remains on one side.

Group III (7-1956.5=TH 5; 34-1956.2) (Figs. 9 and 10).

Sherds from make-up above the previous level.

None of the sherds in this group need be later than the late 13th century, and some of them (e.g. 25, 57) are characteristic of that period. Nothing therefore contradicts the conclusion reached by Mr Hogg on other grounds, that the foundation sealing this group must be assigned to the early years of the 14th century.

24. Rim of jug or jar in orange-pink fabric with white grit, splashes of brown glaze on the rim, the result of galena dusting. Fabric and glaze suggest a mid 13th century date. Aper. diam. $3\frac{1}{2}$ in.

25. Rim and bridge spout of jug in hard creamy-buff fabric with grey core; although there appears to be no added grit this has a rough texture. Pale green to light brown external glaze. Decorated below the spout with a face mask with incised eyes and hair and applied nose. The spout is set at an angle to the rest of the vessel, so that the jug would have to be inclined to the left when pouring. Late 13th century. Aper. diam. $3\frac{1}{2}$ in.

26. Rim of jug or jar in hard-fired buff-pink fabric with no added grit. Patchy external olive-green glaze, one small patch of orange glaze just inside the rim. Aper. diam. $3\frac{1}{2}$ in.

27. Rim of jug or jar in pinkish-buff gritty fabric. Five wavy lines round the rim, olive-green glaze below it. Aper. diam. $3\frac{5}{8}$ in.

28. Rim similar to no. 27, but with no glaze or decoration remaining. The two vessels are comparable with *Melrose* 5-8, which are probably of 13th century date.

29. Rim of jug in hard grey fabric fired to buff where not protected by the olive-green glaze. Decorated with a face mask with applied nose (missing) and eyes formed by stabbing with a sharp stick. Second half of 13th century. Aper. diam. $4\frac{1}{8}$ in.

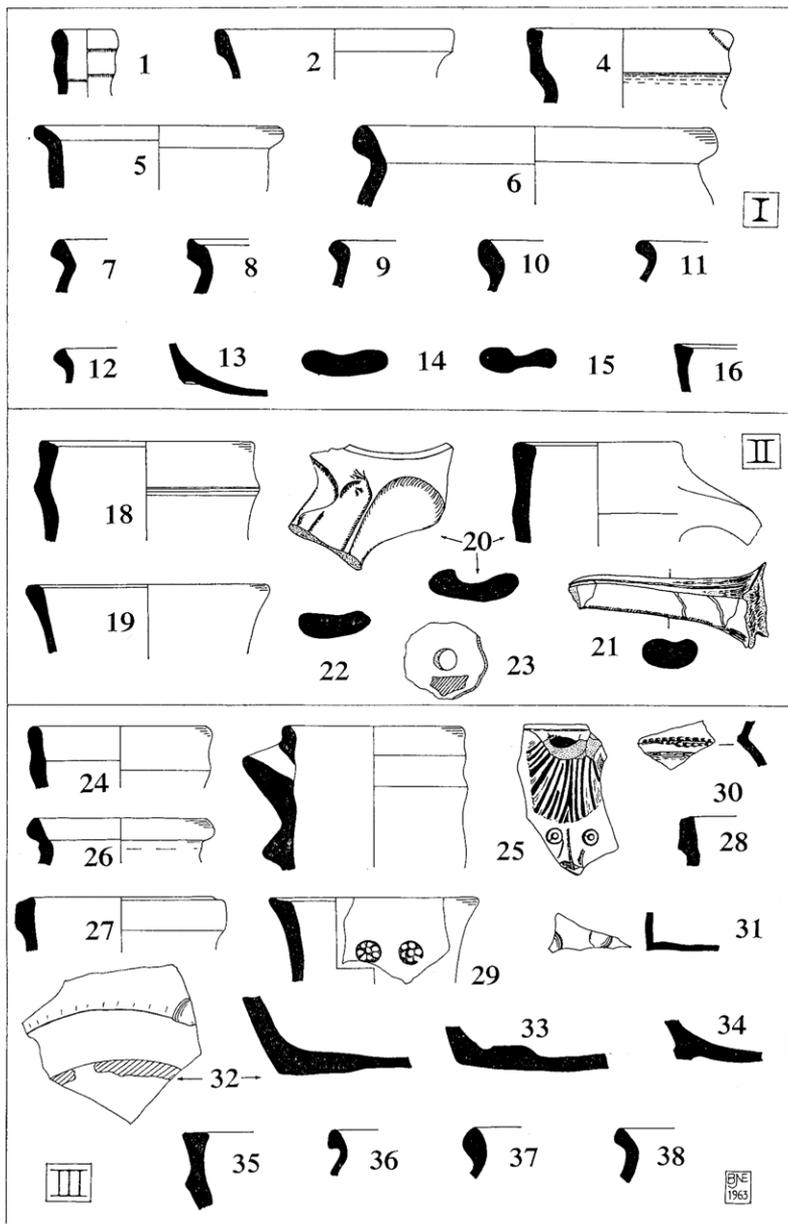


FIG. 9.

30. Body sherd in hard grey fabric fired to buff externally except where protected by a small patch of pale greenish-brown glaze. Rouletted decoration on a cordon moulding round the carination. For this cf. *Carlisle I* 30 and *Dunstanburgh* 14.

31. Basal angle of vessel in orange-pink gritty fabric with grey core, the angle decorated with finger-pinching.

32. Basal angle of large jug or jar in fine hard grey fabric with olive-green external glaze. The stacking ring on the base marks the limit of the glaze, and indicates that at this stage the vessel was inverted, and was already stacked in the kiln before glazing. There is one finger-print on the bottom of the wall, presumably due to the potter lifting the vessel by the base while it was still "green".

33. Slightly convex base of a large vessel in hard smooth light grey fabric with external olive-green glaze.

34. Base of large vessel in dark grey, slightly gritty fabric fired to pink on surfaces; sparse external pale green glaze. This base is the only one to possess even a rudimentary footstand.

35. Rim of jug with external moulding and strap handle. Grey fabric with fine grit, fired to pink inside, with external brownish-green glaze.

36-49. Cooking-pots in orange-pink gritty fabric. Some of these types are represented by more than one specimen. None is glazed. No. 40 is to be compared with *Carlisle I* 9 and *Bothwell* 60; 41 with SMP 42 (Deer Abbey, Aberdeens.); 45 with *Melrose* 14 and 49 with *Carlisle I* 3. Despite the suggestion of Jope and Hodges (*Carlisle I* 9) that the slight hollowing of the inner surfaces of the rim is reminiscent of late Saxon St. Neots wares, we suggest that this group (together with nos. 92-103) is basically a derivation from the late 12th century club rim-types of northern England.

50. Cooking-pot in the same fabric as 36-49 with fine hard orange-brown external glaze.

51. Cooking-pot in very hard and well-fired pinkish-brown fabric with grey core and white grit. The rim is badly set on, at an angle to the rest of the vessel.

52. Club rim of a cooking-pot in orange-pink fabric with grey core and white grit, of a typical 12th century type. Cf. *Carlisle I*, 2 B (Brougham) and *Knaresborough* 11.

53. Rod handle in pinkish-grey gritty fabric with sparse pale green glaze.

54. Large strap handle in grey gritty fabric fired to pink where not protected by the olive-green glaze. Three small holes in the handle reach almost to the underside. This is a common feature on thick handles, and is probably intended to prevent

cracking through uneven heating or cooling. A similar explanation has been offered for stab-marks or incisions on medieval chimney-pots.⁸

55-56. Two strap-handle fragments in hard grey fabric fired to buff-pink where unglazed. 55 has speckly olive-green glaze, 56 orange and green.

57. Part of the strap handle of a large vessel in hard grey fabric fired to buff where not protected by the olive-green glaze. Decorated at the upper junction with a face-mask with incised eyes and applied nose, the beard formed with sets of six short combed impressions.

58. Strap handle in dark grey gritty fabric fired to pink on the underside. Sparse olive-green glaze on the upper surface.

Group IV (7-1956.4=TH 4) (Fig. 10).

Sherds from an occupation level which sealed the above make-up.

Although this group was found above the stone-paving which sealed group III, it does not differ greatly from it. There is a rather higher proportion of vessels in hard fine grey fabrics; the group should be dated *c.* 1425.

59-60. *Not illustrated.* Fragments of two vessels in the same very hard slightly gritty fabric as 17. 59 has traces of rilling and 60 exhibits the clean-cut base which appears to be characteristic of vessels in this fabric.

61. Curved end of skillet handle in mid-grey sandy fabric fired to lighter grey or pink at the edges. Patchy orange to olive-green glaze. Cf. *Kirkstall*, fig. 8/15, and *Durham*, fig. 3/7.

62. Rod handle in the same fabric as 61, with sparse pale green glaze.

63. Fragment of strap handle in a fabric similar to 61, with larger grits and one piece of iron; this is 4 mm. by at least 6 mm. Patchy olive-green glaze.

Group V (7-1956.3; 35-1954.2) (Fig. 10).

Sherds from make-up above the occupation level which yielded group IV.

This group is virtually unstratified; it includes pottery of various dates from the 13th century to the 16th.

64. Rim of small jar in grey fabric with a little very fine grit, covered externally with greenish-fawn glaze. Aper. diam. 2½ in.

⁸ G. C. Dunning in E. M. Jope, *Studies in Building History* (1961), 80.

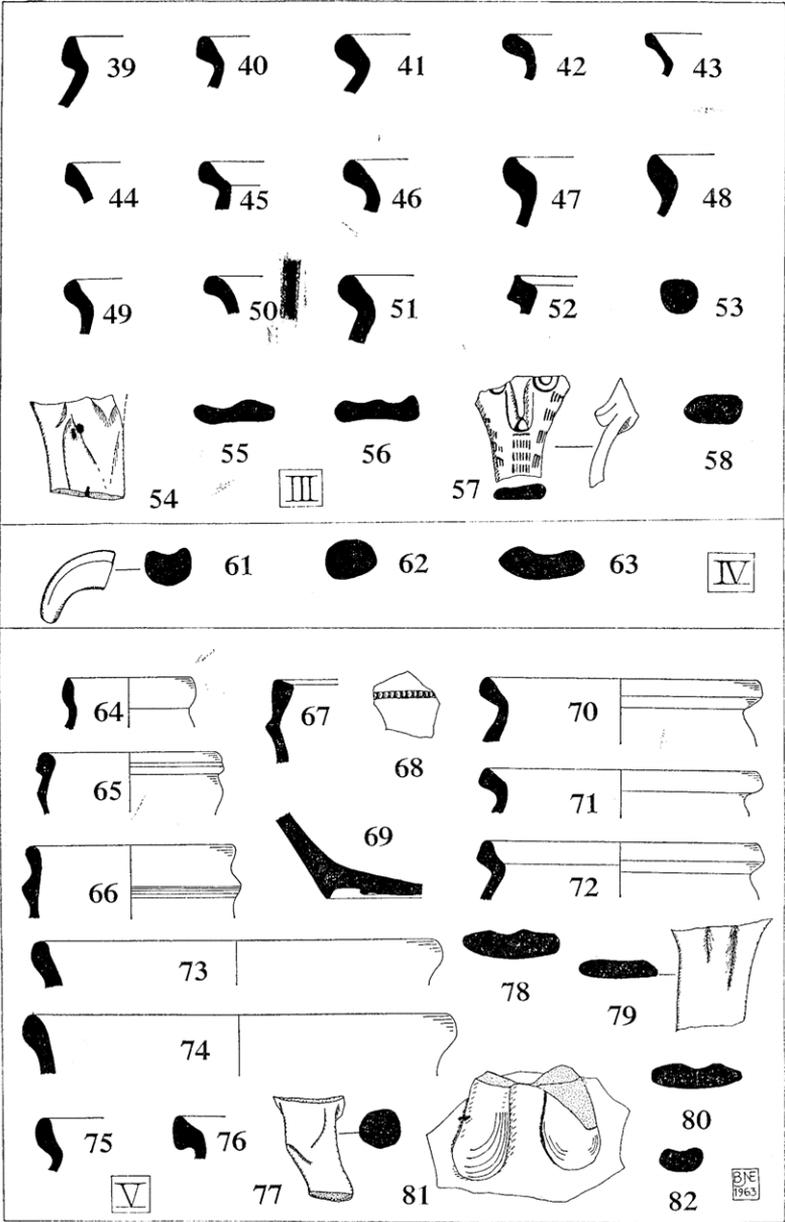


FIG. 10.

65. Rim of jug with pinched spout in hard, fine pink fabric with grey core and sparse grits. Small splashes of biscuit-coloured glaze. For the rim section cf. *Bothwell* 10, dated to the late 13th century; the Bothwell jug has a different type of spout restored. Aper. diam. $3\frac{1}{2}$ in.

66. Rim of jug in grey fabric with large but sparse grits, up to 3 mm. in diameter. Thick and hard internal glaze carried half an inch over the exterior. Except where it has bubbled, this is dark and speckly brownish-green. It has been deliberately scraped off the lip. Aper. diam. 4 in.

67. Rim of strap-handled jug in grey fabric with some fine grit and olive-green external glaze. Cf. no. 18.

68. Body sherd in grey slightly gritty fabric with external greeny-fawn glaze. Band of rouletted decoration on an exterior moulding. Cf. *Carlisle I* 30.

69. Part of the base and wall of a large vessel in fine hard grey ware with external olive-green glaze. The base has sagged to an extent which must have made it difficult to use the vessel, and bears a stacking-ring from the mouth of the vessel fired above it.

70. Rim of cooking-pot in dirty pink gritty fabric with very fine grit. Aper. diam. $5\frac{1}{2}$ in.

71. Rim of cooking-pot, fabric as 70. Aper. diam. $5\frac{1}{2}$ in.

72. Rim of cooking-pot in hard red gritty fabric, slightly vitrified in firing. Aper. diam. $5\frac{1}{2}$ in.

73. Rim of cooking-pot in dirty pink fabric with fine grit. Aper. diam. 8 in.

74. Rim of large jar or cooking-pot in coarse pink gritty fabric, fired softer than other cooking-pots. Splashes of purplish-brown external glaze. Aper. diam. $8\frac{1}{2}$ in.

75. Rim of cooking-pot in fabric similar to 70, but with grey core.

76. Rim of cooking-pot, fabric as 70.

77. Two fragments of one rod handle in dark grey slightly gritty fabric, fired to pale grey below the splashes of yellow and greenish-yellow glaze. Unglazed parts are fired to pink.

78. Strap handle in hard grey fabric. For glaze, see 79.

79. Strap handle in the same fabric as no. 78. On both 78 and 79 two coats of glaze have been applied. The first is very pale sage-green and the second and thicker a hard yellowish-brown. Double-glazing is not apparent on other vessels.

80. Strap handle in grey fabric, fired to pink where not protected by the olive-green and brown glaze.

81. Junction of the strap handle and body of a large jug in fine hard grey fabric with external olive-green glaze.

82. Part of jug handle in grey stoneware with mottled brown glaze. Clearly from a Bellarmine or similar product of the Frechen kilns. 16th or 17th century.

83. (*Not illustrated*). Small fragment of rod-shaped pottery, pale grey with darker core, dark olive-green glaze. Presumably the handle of a small vessel.

Group VI (34-1956.7) (Fig. 11).

In blackish accumulation beneath a depth of 4 ft.

This group consists exclusively of 13th century sherds. There is a remarkably high proportion of cooking-pot fragments in the total, and together with nos. 36-51 this series adds considerably to our knowledge of the cooking-pots in circulation in the area in the 13th century. Unless otherwise stated, the cooking-pots in this group are in a hard pink fabric with added grit.

84. Rim of a strap-handled jug in fine buff-pink fabric with pale grey core; dark sage-green glaze above handle and in splashes on rim. Aper. diam. $4\frac{1}{2}$ in.

85. Rim of large strap-handled jug in hard pale pink fabric with very little grit. Yellow-fawn glaze down the wide strap handle and on the body below it. The nearest parallel appears to be SMP 4 (Jedburgh Abbey, Roxb.), dated to the 13th century. Aper. diam. $4\frac{1}{2}$ in.

86. Rim of jug in pale creamy-buff sandy fabric, fired to pink where not protected by the yellowish-green glaze which covers the outside to a line $\frac{3}{10}$ in. below the lip. Cf. 108.

87. Rim of jug with small pinched spout, in pale grey fabric with little grit, splashed with pale sage-green glaze. There is an external moulding below the rim, for which see SMP 11 (Jedburgh Abbey, Roxb.). No fabric is recorded for this vessel, which is assigned to the 13th century.

88. Body sherd in grey gritty fabric, fired to pink internally, and with external brownish-green glaze. Decorated with three bands of incised lines.

89. Sagging base of a large vessel in pink gritty fabric with patches of yellow-green glaze, the result of galena dusting. There is a finger-print at the basal angle.

90. Body sherd in dark grey gritty fabric fired to light grey below the external dark olive-green glaze; there are two bands of impressed decoration.

91. Rim of jar in hard pink fabric with very fine grit. Aper. diam. $3\frac{1}{2}$ in.

92. Rim of cooking-pot. Aper. diam. $4\frac{1}{4}$ in.

93. Rim of cooking-pot, cf. *Bothwell* 60, assigned to 13th or 14th century. Aper. diam. $4\frac{1}{2}$ in.

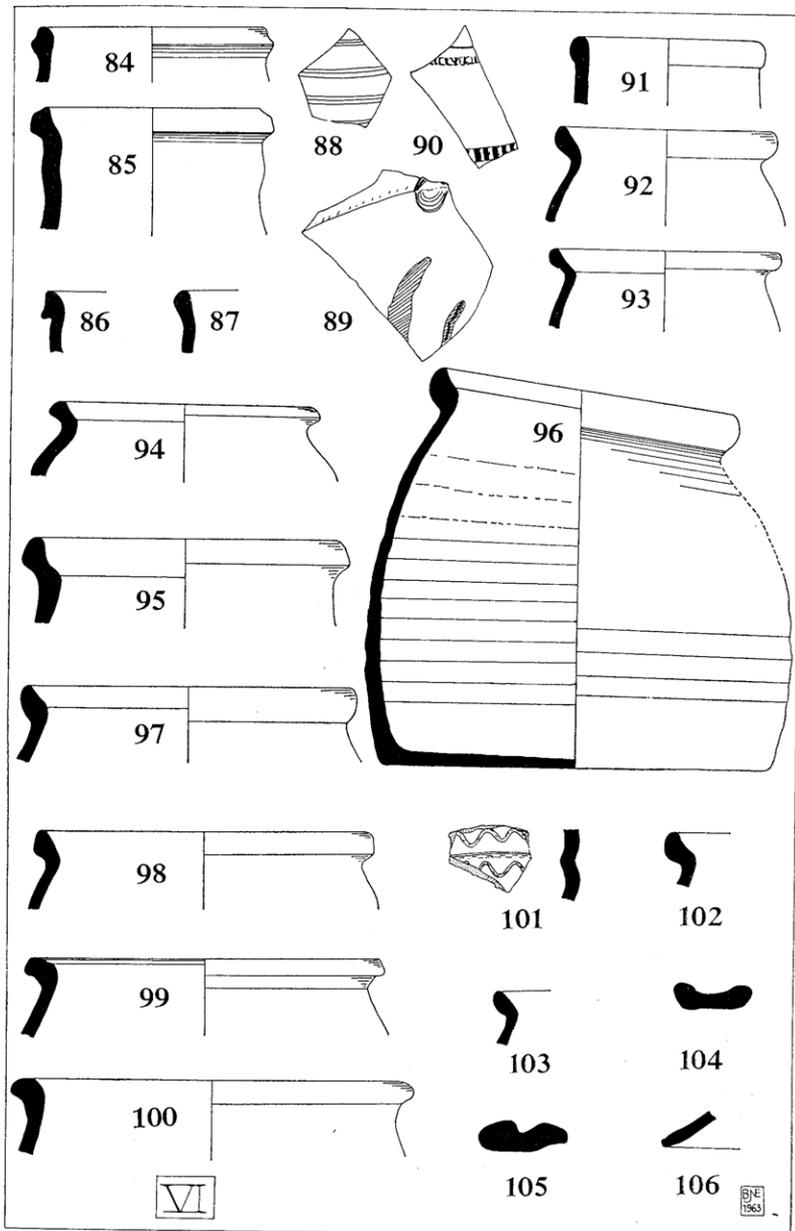


FIG. II.

94. Rim of cooking-pot. Aper. diam. 5 in.

95. Rim of large jar or cooking-pot in dirty cream fabric with grey core and much fine grit. Cf. *Bothwell* 60 and SMP 72 (Crossraguel Abbey, Ayr.). Aper. diam. 6 in.

96. Cooking-pot covered internally to about half its height with a speckly-brown glaze which ran above this line in places when the pot was inverted. The exterior, including the base, the upper part of the interior and the rim show the characteristic pitting effect in the centre of patches of glass which is caused by dusting with galena particles. (See *Carlisle I* 105-106.) Some of the liquid glaze used on the interior was splashed on to the rim; in the kiln this caused the pot to stick to the one below it, and a small portion of the fabric of this lower vessel remains adhering. Diam.: aper. 6 in., base 8 in., ht. 8 in.

The completely flat base of this vessel may be compared with that of the cooking-pots in the hard red vitrified fabric, though the similarity does not extend to other features. The most probable explanation for the sloping rim is that the vessel, while still green, had another balanced inside the mouth, causing the wet clay to sag; for this cf. *Bothwell* 9.

97. Cooking-pot rim. Aper. diam. $6\frac{1}{2}$ in.

98. Cooking-pot rim. Aper. diam. $6\frac{1}{2}$ in.

99. Rim of cooking-pot in more gritty fabric. Aper. diam. 7 in.

100. Rim of cooking-pot. Aper. diam. $7\frac{1}{2}$ in.

101. Body sherd in hard pink gritty fabric with external speckly yellow-brown glaze. Bands of incised wavy line decoration.

102. Rim of cooking-pot.

103. Rim of cooking-pot, with patches of brownish glaze.

104. Strap handle in pink gritty fabric with purple-brown glaze.

105. Strap handle in dark grey sandy fabric, fired to pink where not protected by the olive-green glaze.

106. Fragment of lid in pink gritty fabric with patches of yellow-brown glaze.

106a. Black ditch filling (7-1956.12). Jug in finely gritty, light grey fabric fired to light pink on the outer surface, except for a circular patch of grey which survives on the base (Plate VII, b). There is an irregular area of light olive-green glaze, confined to the lower part of the neck and the upper part of the body, but apart from this, and a scatter of odd spots and patches, the vessel is unglazed. Beneath the lip the neck is constricted by a deep, $\frac{3}{4}$ in. wide groove, and a shallower, broader groove unites the neck with the body. Simple pinched spout.

Rod handle firmly applied to the neck and body with deep thumb-impressions. The whole of the surface of the body bears shallow finger-grooving. The base is fairly deeply concave. Apart from a very small hole in the upper part of the body, the vessel is complete. Diam.: aper. 3 in., max. $7\frac{1}{2}$ in., ht. $8\frac{1}{2}$ in.

Group VII (34-1956.6) (Fig. 12).

In clayey spread between 3 ft. and 4 ft.

This group contains a noticeably higher proportion of the fine grey fabrics with hard and thick glaze, and is probably to be assigned to the early years of the 14th century.

107. Rim of small vessel in grey fabric, fired to pink where not protected by the external bright leaf-green glaze. Rouletting below the rim.

108. Rim of jug in grey sandy fabric fired to pink where not protected by the external pale olive-green glaze which extends to the bottom of the moulding round the rim. There is one small patch of yellow glaze on the rim, with a galena pit at the centre. Cf. no. 86.

109. Rim and strap handle of a large jug in hard orange-pink fabric. The top is not circular, but has an approximate diameter of $3\frac{1}{2}$ in. Hard and shiny external olive-green glaze, which trickled as far as the lip when the pot was inverted. Some glaze on the handle, that on the upper part produced by galena dusting.

110. Rim and junction of strap handle of jug with pinched spout in hard grey fabric with sparse grit fired to pale orange inside, with dirty olive-green external glaze. Cf. nos. 18, 67, 111 and *Carlisle I* 21.

111. Rim and pinched spout of jug in pink fabric with sparse grit. External fawnish-green glaze extended as far as the sharply-angled moulding below the rim; in places it trickled as far as the lip when the vessel was inverted. From a vessel similar to no. 11, c. 1250 or later.

112. Fragment of herring-bone stamp on body of vessel in light grey fabric with hard dark olive-green glaze. Stamps of this type are fairly common on vessels from Scottish sites — e.g. at *Melrose*, and in the unpublished material from the kiln-site at Colstoun, East Lothian.

113. Ridge of a high angular lid akin to *Finchale* 123, possibly a curfew rather than the lid of a roasting-dish or similar vessel. Smooth dark grey fabric fired lighter beneath the external dirty olive-green glaze.

114. Body sherd in pink fabric with fine grit and external orange-brown glaze. Decorated with an incised wavy line.

115. Body sherd in pink sandy fabric with hard olive-green external glaze. Rouletted decoration on a horizontal moulding.
 116. Rim of jar in dark pink sandy fabric. Aper. diam. 4 in.
 117. Rim of cooking-pot in pink gritty fabric. Aper. diam. $4\frac{3}{4}$ in.
 118. Rim of cooking-pot, fabric as 117. Aper diam. $6\frac{1}{2}$ in.
 119. Rim of cooking-pot, fabric as 117. Aper. diam. $6\frac{1}{2}$ in.
 120. Rim of cooking-pot in very hard red slightly vitrified fabric with much fine grit.
 121. Rim of cooking-pot, fabric as 117. Aper. diam. 7 in.
 122. Rim of cooking-pot, fabric as 117.

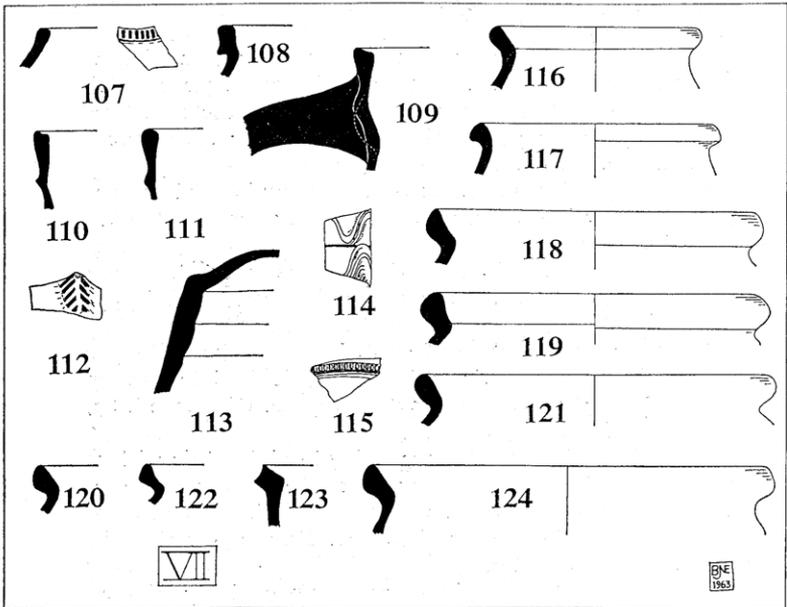


FIG. 12.

123. Rim of cooking-pot in hard pink sandy fabric with patches of chestnut-brown glaze with galena pitting at the centre of each. Clearly of the northern 12th century type though no exact parallel can be adduced. The nearest rim section is probably *Knaresborough* 10; below the rim the shape appears to be nearer to *Kirkstall*, fig. 24/1.

124. Rim of cooking-pot, fabric as 117. Aper. diam. 8 in.

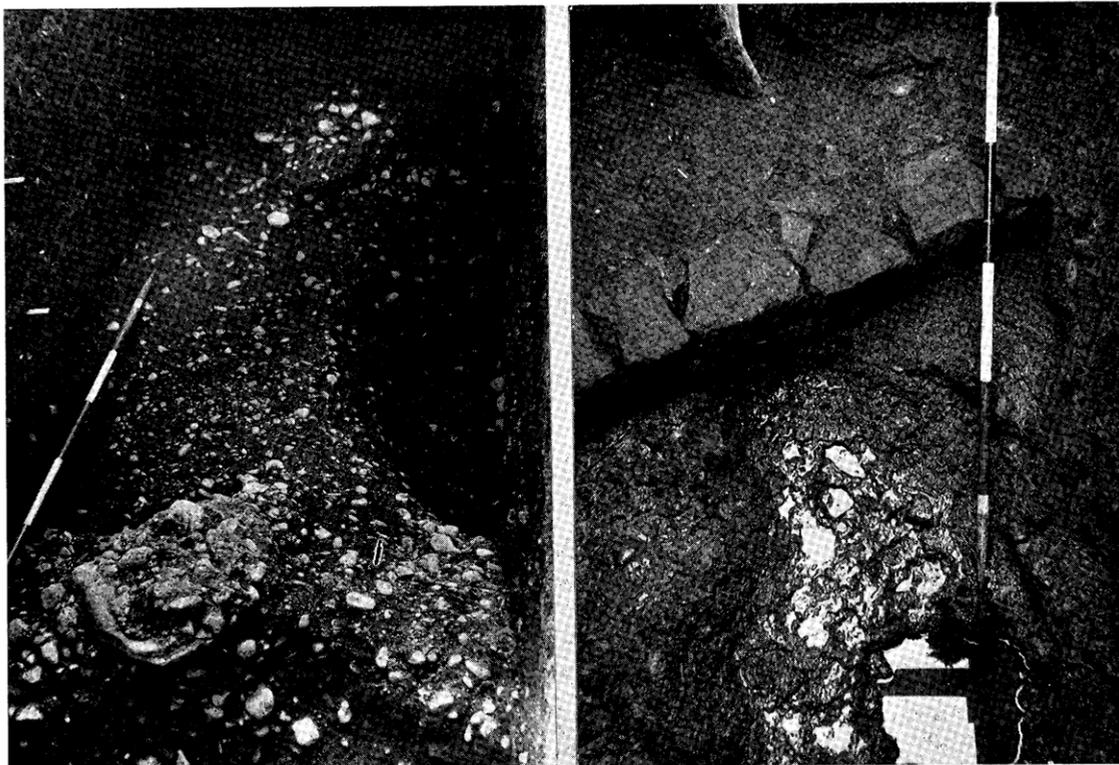


PLATE I.—The stratification of the Roman road levels.

- a. The 13th century cobble re-surfacing removed from the upper Roman street level to show the extent of the destruction of the surface.
- b. Kerbing of the earliest, 2nd century, road level, with timbering of the 1st century fort phase beneath.



PLATE II.—The stratification of the Roman road levels.

The western edge of the upper levels of the Roman street showing the 13th century re-surfacing in cobbles and earth of the upper Roman street level, and at the base the Severan road level with the kerb stone still in position.



PLATE III.—The shrine excavation: the stratification of the building levels. Surface make-up concealing cobble pitching of 13th century level with remains of flagging and collapsed stonework, associated with clay floor and presumed wood and thatch domestic building.

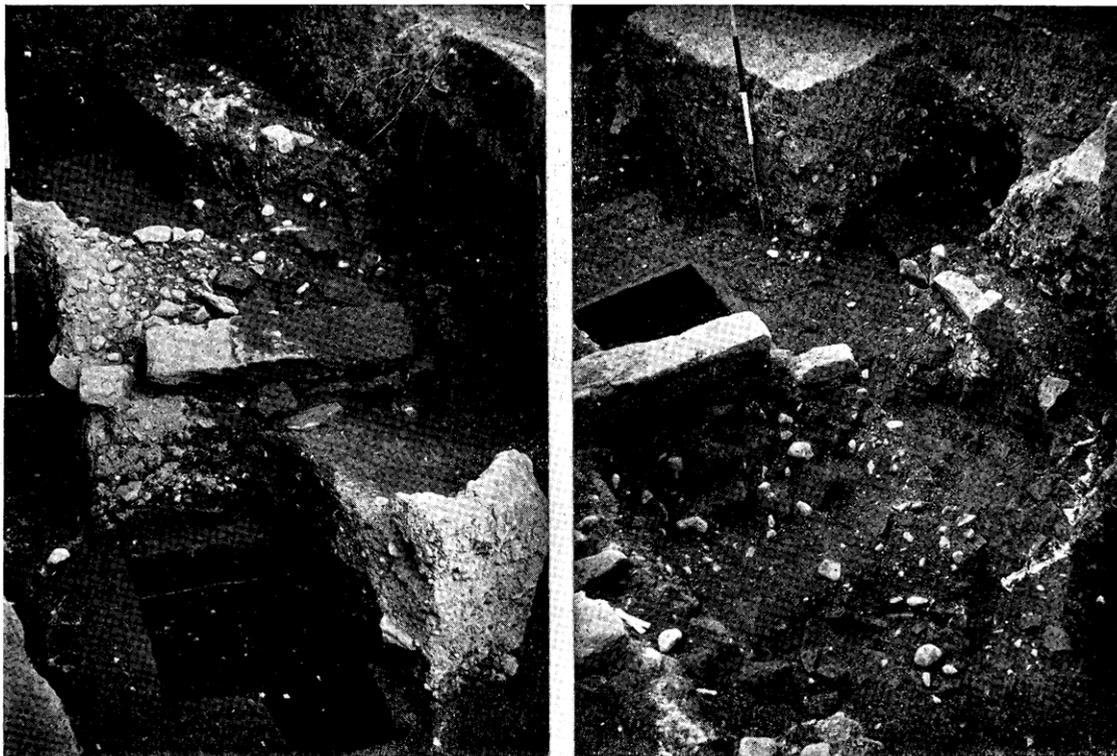


PLATE IV.—The shrine excavation: the stratification of the building levels.

- a. General view of stratification showing upper make-up concealing ill-defined cobble spread, overlying 13th century level of cobble pitching associated with clay floor, and late Roman levels below.
- b. 13th century cobble pitching was 002196, 00610000 of the character of the post-Roman zone of demolition overlying late Roman levels.

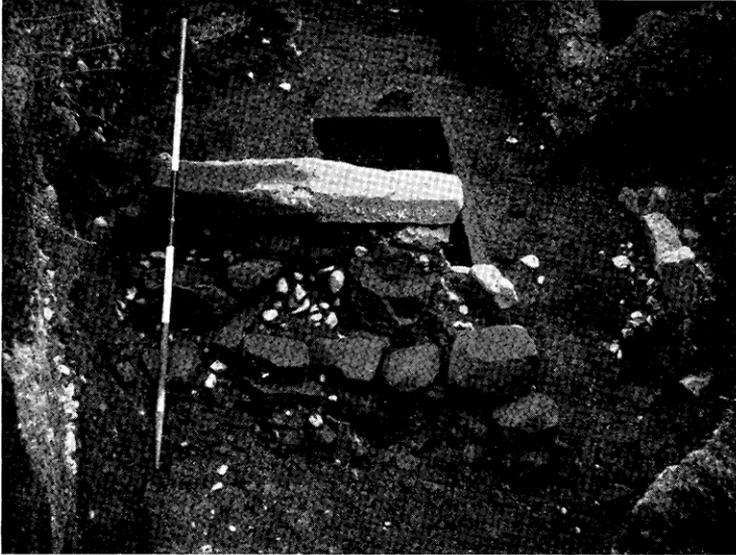


PLATE V.—The shrine excavation: the stratification of the building levels.

- a. Section showing large revetting stone of 13th century level, overlying post-Roman zone of demolition, which covers late Roman levels.
- b. Post-Roman levels removed to show in part cobble floor and foundation walls of c. late 3rd century building, which overlays the foundations of the shrine.



PLATE VI.—The shrine excavation: the shrine level.
Upper levels completely removed to show the shrine foundations.

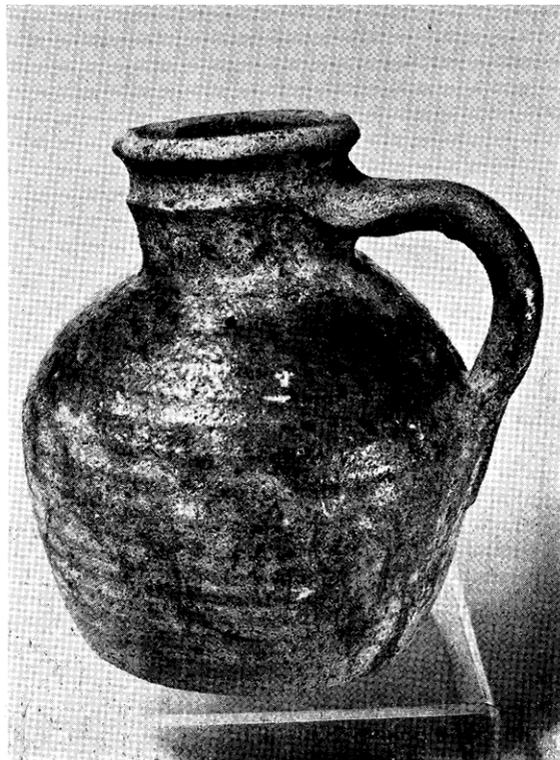


PLATE VII.—a. Dragonesque fibula, Flavian.
b. Green glaze ware jug, 14th century.

Acknowledgements.

We wish to thank Mr Hogg for inviting us to report on this important series of pottery. The report was originally compiled while one of us (MGJ) was Sir James Knott Research Fellow of King's College, Newcastle upon Tyne.

The following abbreviations have been used in the report:

- Bothwell*: S. H. Cruden, *Scottish mediaeval pottery: the Bothwell Castle collection*, in PSAScot. lxxxvi (1951-2) 140-170.
Carlisle I: E. M. Jope and H. W. M. Hodges, *The medieval pottery from Castle Street* in CW2 lv (1955) 79-107.
Dunstanburgh: J. Charlton, *Excavations at Dunstanburgh Castle in 1931: the finds*, in AA4 xiii (1936) 285-292.
Durham: M. G. Simpson and V. Hatley, *An excavation below Bishop Tunstal's Chapel, Durham Castle*, in *Antiq. J.* xxxiii (1953) 56-64.
Finchale: M. G. Jarrett and B. J. N. Edwards, *Medieval and other pottery from Finchale Priory, County Durham*, in AA4 xxxix (1961) 229-278.
Kirkstall: H. E. J. le Patourel in *Kirkstall Abbey Excavations* (by various authors), *Thoresby Soc. Pub.* xliii (1955).
Knaresborough: D. Waterman, *A group of twelfth-century pottery and other finds from Knaresborough Castle*, in *Antiq. J.* xxxiii (1953) 211-213.
Melrose: S. H. Cruden, *Scottish Mediaeval pottery: the Melrose Abbey collection*, in PSAScot. lxxxvii (1952-3) 161-174.
SMP: S. H. Cruden, *Scottish mediaeval pottery*, in PSAScot. lxxxix (1955-6) 67-82.

Historical conclusions.

As this excavation provided the first stratified sequence of levels from the Carlisle site any conclusions that can be drawn from this evidence alone regarding the character and historical development of the town since the time of its Roman foundation must be of a tentative nature. Nevertheless the conclusions reached fit so logically into the pattern of historical development of the region as a whole that they may be accepted with a high degree of confidence.

To consider first the dating of the Roman levels as deduced by Mr Gillam primarily from the pottery evidence but in part from stratigraphical relationships. For convenience of reference the sections A-B, C-D (Fig. 3) will be considered to be aligned North (at D) — South (at A) and to consist of four parts: the road section and the three sections of the building levels, i.e. the shrine section, the deep section to the south of this, and the southernmost deep section.

Evidence of the earliest occupation was found in the latter two sections. Two pre-Hadrianic levels were noted both containing timber-built structures. The lowest of these is Flavian in date and no evidence was found to dissociate it from the Agricolan occupation. This level is therefore the Agricolan bridgehead fort stage built as the western terminus of the Stanegate and as a protection of the important crossing of the River Eden. Mr Gillam dates the demolition of this fort to *c.* A.D. 100. Very heavy timber-work with morticed joints associated with a thick spread of gravel lay above demolition debris of the Flavian level in the southernmost deep section. Stratigraphically this level appears to antedate the earliest road phase. Mr Gillam states that this level cannot be later than early-Hadrianic, and on balance it probably represents a Trajanic reorganization of the military defences and therefore to form part of the pattern of Trajanic consolidation which is a well established phase of the military occupation of this region. Both these early fort phases were constructed in wood, thus there appears to have been no consolidation in stone during the military occupation of the site.

Shortly after the Trajanic consolidation there is no doubt that a fundamental reorganization of the site occurred owing to the construction of the Hadrianic Imperial frontier. This involved the demolition of the military works and the replanning of the town as a civil settlement; a development that is best attested by the

stratified road sequence and the significance of this important feature may now be considered.

The discovery of this previously unknown Roman street was the major achievement of the excavation, providing as it did the key, both to the alignment of the civil replanning of the Roman site and to its historical development. The street, the upper level of which was buried beneath some $3\frac{1}{2}$ ft. of humus, crossed the Tullie House site diagonally running roughly W.N.W.-E.S.E. Two important conclusions may be drawn from its alignment. Firstly, projected southwards the street passes back to the centre of the historic town, thus indicating that the Roman town centre became later that of the walled, medieval town which remains today the centre of the modern town. Again, projected northwards, the line of the street passes to the west of the Castle hill, a fact which provides the first direct piece of evidence that the planning of the Roman town ignored the promontory position and thus that the defence of the Roman town was based on a regional rather than a site conception. Modern Castle Street, formerly known as Castlegate Street, is medieval in origin and may be as late as the 13th century in date. It represented a basic modification of the Roman town plan made necessary by the consolidation in stone of the Norman motte and bailey defence works on the Castle hill, which then required a direct line of communication between the Governor's quarters in the Castle and the seat of civil administration in the centre of the town. Castle Street gradually superseded in importance the old Roman street until finally the latter became extinct.

To consider now the dating of the sequence of road levels, of which there were three of Roman date and one of Medieval. There is little doubt that the lowest road level represents the civil replanning of the site and the demolition of the military works which this implies, following the construction of the Imperial frontier works,

with the fort at Stanwix on the opposite bank of the river. Mr Gillam dates the construction of this lowest road phase and therefore this major reorganisation to A.D. 125 at the earliest. It would, however, be logical to assume that the work of reorganizing the Carlisle site would post-date the construction of Roman Stanwix and therefore be at the earliest late-Hadrianic in date.

With respect to the dating of the second Roman road phase, the vital datum was the structural correlation, established in August 1957, between this road level and the shrine (see p. 19, above) which allows us to date the second road level with reasonable confidence. Mr Gillam states that for the shrine "a date in the early 3rd century is not unlikely", therefore the major reconstruction of the site at this time implied by the evidence as a whole seems almost certainly part of the Severan reorganization of the frontier zone. It is not possible to date precisely the upper Roman road level. The buildings associated with it were completely destroyed, but pottery found in this zone of demolition indicated occupation until the late 4th century. The uppermost road therefore which stratigraphically occurs at the very top of the Roman sequence definitely represents a 4th century reconstruction and is probably Theodosian in age.

One dramatic piece of evidence was provided by the condition into which the upper Roman road had decayed before being resurfaced in the post-Conquest period. The surface of the road was completely destroyed by great pot-holes, which on other evidence were probably the remains of robber-trenches. Not a scrap of evidence for the occupation of the site during the Dark Age was found. Its post-Roman history therefore was apparently a period of gradual decay, which for this part of the town at least reached the point of virtual extinction.

Most surprisingly, however, the Roman town plan was not completely lost for the resuscitation of the site in the post-Conquest period was based upon it. Dr Jarrett and

Mr Edwards state that a date of *c.* 1240 must be assigned to the pottery associated with the post-Conquest resurfacing of the upper Roman road. This is much later than might be expected, but an explanation is forthcoming.

The 13th century reconstruction of the old Roman street was indirectly influenced by the building of the medieval town defences on the Castle hill, and a brief word about these is here necessary. The late 11th century defence works were of motte-and-bailey type. Proof of this is the surviving remains of the motte which can be distinctly seen beneath the keep. The newly built Norman town would almost certainly be constructed as a separate entity and it is possible that the stockade found crossing Castle Street (CW1 iii 137 and map, CW2 xxiv 94) may have marked its northern limits. At this stage therefore the Tullie House site would lie outside the limits of the town and apparently was not incorporated or at least revived as a built-up area until the 13th century.

The consolidation in stone of the medieval promontory defences dates from the 12th century. (Curwen, *Castles and towers*, 95-107, gives a comprehensive list of sources for the history of Carlisle Castle, and these concluding remarks are based on information from them.) The structural history of the Castle interests us here because of the bearing which it has on the formation of Castle Street and therefore the effect which this modification of street plan had on the fate of the Roman street crossing the Tullie House site.

It is probable that the early 12th century castle gateway was in the S.E. angle of the inner bailey. In *c.* 1168, however, walls were built connecting the town to the castle and a new entrance to the castle was built at the centre of the south curtain. The Tullie House site would apparently be incorporated into the town area at this time, but — as indicated by the pottery — the site was not revived as a built-up area on the Roman plan until the early part of the 13th century.

The construction of Castle Street can hardly have occurred much earlier than this and may indeed be later. It is of some significance that the earliest reference to *la Castlegate* is 1385 (*Place-names of Cumberland*, pt. 1, 47) although the street is said to have been known earlier as *via Francorum* in 1287 (*op. cit.* 47).

The evidence therefore seems to indicate a 13th century date for Castle Street, from which time the Tullie House Roman street system would decline in importance until it ceased to function in late medieval times.

Acknowledgements.

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