II

SEWINGSHIELDS

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Introduction

The excavation at Sewingshields, milecastle 35, took place over 17 months between 1978 and 1980, with an additional week during 1982. Most of the time was devoted to the investigation of the milecastle itself but adjoining lengths of Hadrian's Wall, in total 245 m, were also excavated. As part of a wider survey of the environs of the site, sections were also cut through the military way and the field terracing. The work was undertaken by the authors on behalf of the Department of the Environ-

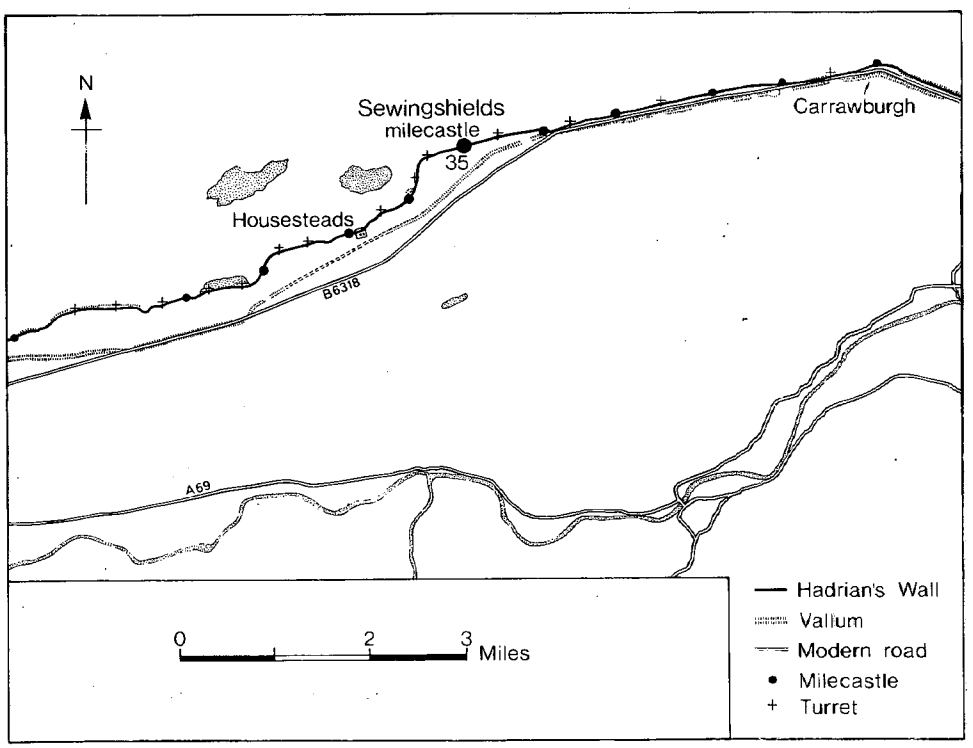

Fig. 1.

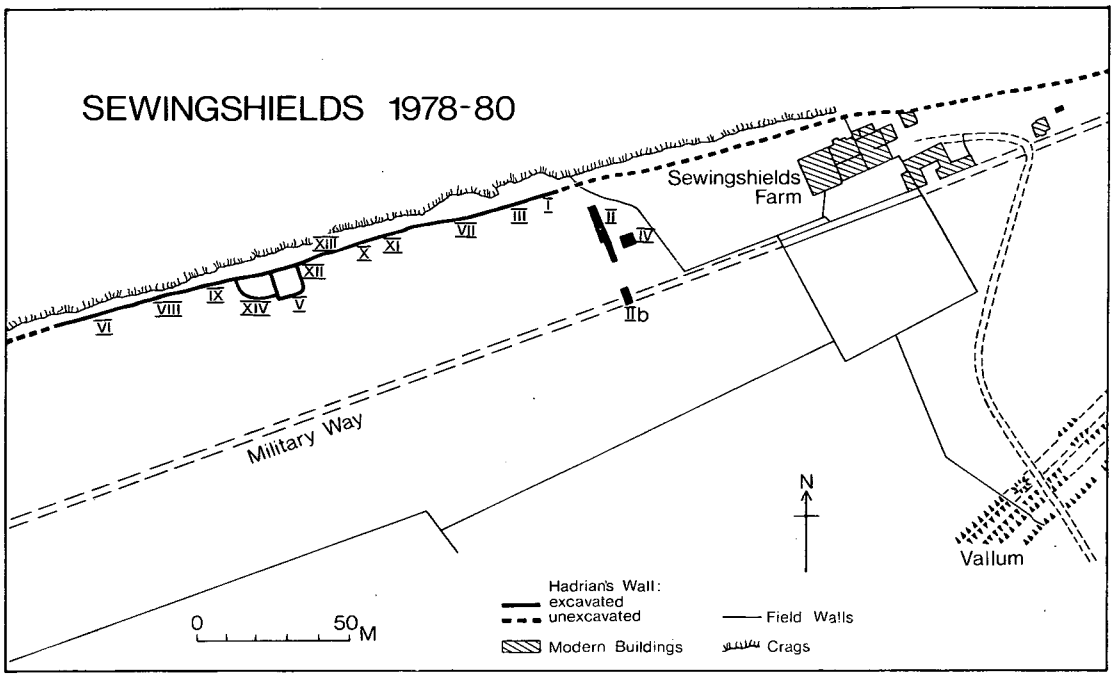

Fig. 2.

ment, who wished to undertake a modern-day archaeological examination of a milecastle and to consolidate the remains of the milecastle and the curtain for public display.

Sewingshields lies exactly halfway between Newcastle upon Tyne and Carlisle. It is precariously situated on the edge of Sewingshields crags, part of the Great Whin Sill, here approximately 300 m above sea level. Immediately north-west of the milecastle there is a sheer drop of 30 m to the base of the crags, while to its south-east the hillside slopes steeply down towards the line of the *vallum*, approximately 425 m away. The soil on the surrounding hillside is thin, stoney and acidic, providing rough pasture which in the Summer is extensively covered with bracken.

Very little archaeological investigation had taken place here prior to 1978. A few lengths of curtain were uncovered in the 1930s under the supervision of Mr. C. Anderson, and again in 1975–6 by Peter Moffat. In 1947, C. E. Stevens conducted a small trial excavation on the milecastle (Stevens 1948), but this was found to have disturbed no significant medieval or Roman contexts on the site.

The excavation, an open area of some 30 m square, extended beyond the walls of the milecastle. It was hoped that the examination of such an area would assist in setting the milecastle within its archaeological context, although it was clear that, by conducting the project as an open excavation, it would not be possible to retain

Sewingshields from the air, during excavation in 1980.

a sectional profile across the site. In the event this excavation method proved particularly valuable, since it enabled a more thorough, though unfortunately still incomplete, examination of the medieval occupation, which had not been limited to the tight internal confines of the milecastle.

SEWINGSHIELDS

The Roman Milecastle

Phase 1 (fig. 3)

The Hadrianic Milecastle was of long-axis plan (Breeze and Dobson 1978); but the destructive activities of later stone robbers prevented its exact dimensions from being recorded. Enough remained of the north and west walls, however, and the south wall west of the gateway to show that internally, it was at least 15·25 m east-west, by 18·30 m north-south. As fig. 3 shows, however, neither the north and south, nor the east and west walls were quite parallel.

The north wall rested on foundations up to 3·3 m wide. These consisted of large blocks of dolerite packed with smaller fragments of stone. Where the bedrock had risen above the Roman ground surface it had been smashed down. Above all this, a layer of clay was spread across the entire foundation to provide a level finish. The bottom course of the wall itself was initially planned to have a width of 3 m but only two stones of the south face were still in place west of the junction with the west wall, and a solitary stone to the east of the junction. The north wall was completed to a narrower gauge, but ran along the original line of the north face of the broad wall and was of one build with the west wall and probably also the east wall. The bottom course of the narrow north wall was 2·41 m wide, and after a single offset, no more than 2·18 m wide. Up to three courses of the north face, but only two courses of the south face were found *in situ*. The facing stones themselves were of good quality dressed sandstone and were usually bonded with mortar. The core was also bonded generously with yellow mortar, which had decayed, in places, to a thin, soft, sandy consistency.

The north wall, as it was found, proceeded unbroken across the site with no provision for a north gate; but although a north gate here would have been little use, opening on to a sheer drop of about 30 m, it is not possible to be certain that one had never been planned, since it seems likely that the north wall had been rebuilt, or at least extensively repaired at some time. Facing stones, presumably re-used and therefore evidence for rebuilding, were found in the foundation course where a north gate might normally have been expected, and an uninscribed altar (see below p. 99) was found among stone fallen from the wall to the north.

The west wall was better preserved. Both faces were provided with an offset, which was slightly narrower on the west than the east. The bottom course was no more than 2·85 m wide. The second course of the east face was also offset 9·8 m south of the internal north-west corner, reducing the width of the wall by about 37 cm.

The south-west corner was rounded externally, but right-angled internally. Its

a. Sewingshields from the air—before excavation, looking west along the Whin Sill.

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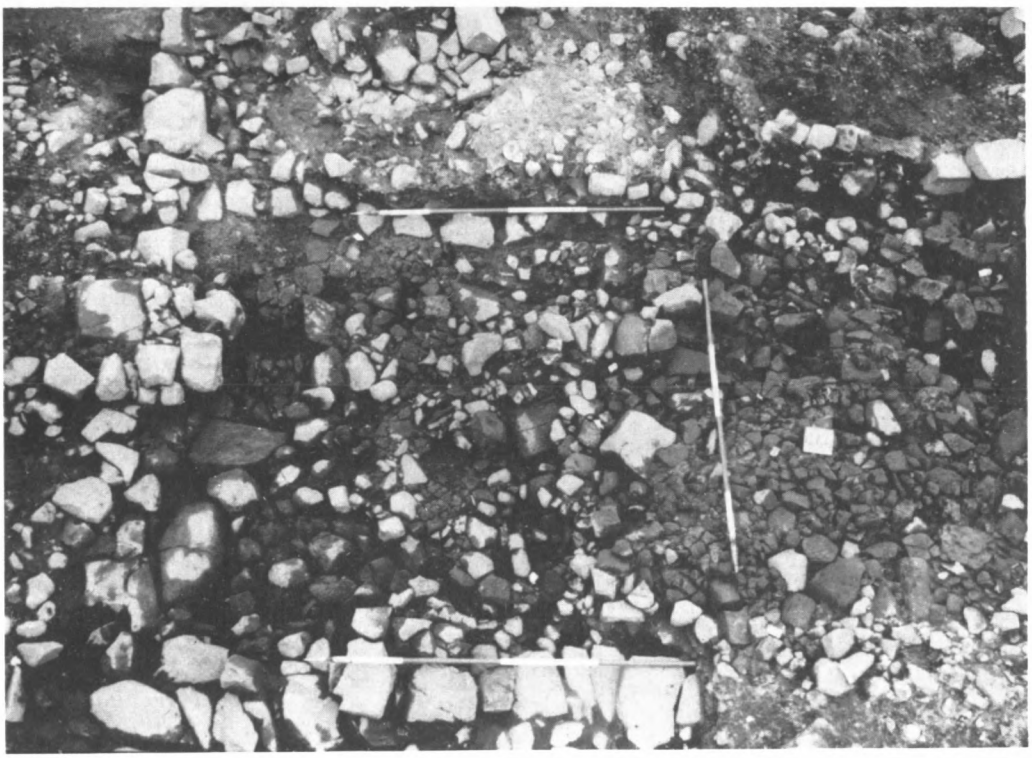


b. The foundations of the South Gate, looking west. Scales: 2 m.

external face survived up to six courses high above the foundations but, especially above the second course, many of the facing stones had been laid with their long axes vertical rather than in the more common horizontal position. Several blocks of dolerite were included in the face and very little mortar was found between the stones. The second and third courses of the external face were offset around the corner to form a buttress. The core of the wall contained many abnormally large stones and was bonded with little or no mortar, being either packed with earth or even left dry. The general impression was of hasty or careless workmanship. The internal face was finished more neatly, but only up to two courses of it remained.

The south wall only survived for about 2·5 m east of the south-west corner. It was 3·15 m wide below the offsets and 2·8 m wide above them. The line of the wall east of the site of the south gate was marked only by a few dolerite blocks of the foundation course. These did not run as far as the south-east corner, no trace of which was found.

Only a stump of the core of the east wall, approximately 4 m long, remained at the junction with the north wall. It was bonded liberally with yellow mortar. The width of the foundation course was about 3·3 m. Although from this the approximate line of the wall could be extrapolated, a medieval robber trench had removed all other traces of it.

Medieval stone robbing had also levelled the south gate, so that only its foundations were left in place (plate Vb). From these, it appears to have been no more than 2·87 m wide on the line of the south face of the south wall, but broadened slightly towards the north. No projections for massive masonry jambs were found, so it is probable that it conformed broadly to gateway Type IV (Simpson 1976). Although C. E. Stevens records that he found a Type II gateway at Sewingshields (Stevens 1948), the evidence recovered, both of the nature of the gateway and of the position of what may well have been his excavation trench in the area where a north gate might have been expected, shows that he must have been mistaken.

The evidence from other excavated examples, although slight, seems to show that the main walls and gates of each milecastle were completed before work on the interior structures was started. At Sewingshields, between these stages of building, an attempt was made to level the southern part of the site. Clay and stone rubble, 20 to 25 cm deep, was laid against the inside face of the south wall, gradually thinning as it ran north. Over this, sandstone flags were laid. These only survived in appreciable numbers in the south-west and north-east corners of the milecastle; but it seems likely that they occupied most of the space not taken up by the other structures on the site.

The milecastle was divided by a roadway which ran through the south gate. This had been repaired on numerous occasions, but the earliest surface was of sandstone and dolerite chippings, changing outside the south gate to fragments of black limestone.

Only one substantial building was found to belong to this phase (Building I) (plate VIa). This lay in the south-east corner of the milecastle. It was a two-roomed structure, 7·45 m by 4·25 m possessing well-made stone wall-footings of a double thickness of clay-bonded, neatly dressed sandstone blocks. Access was gained near

MILECASTLE 35 Phases 1&2

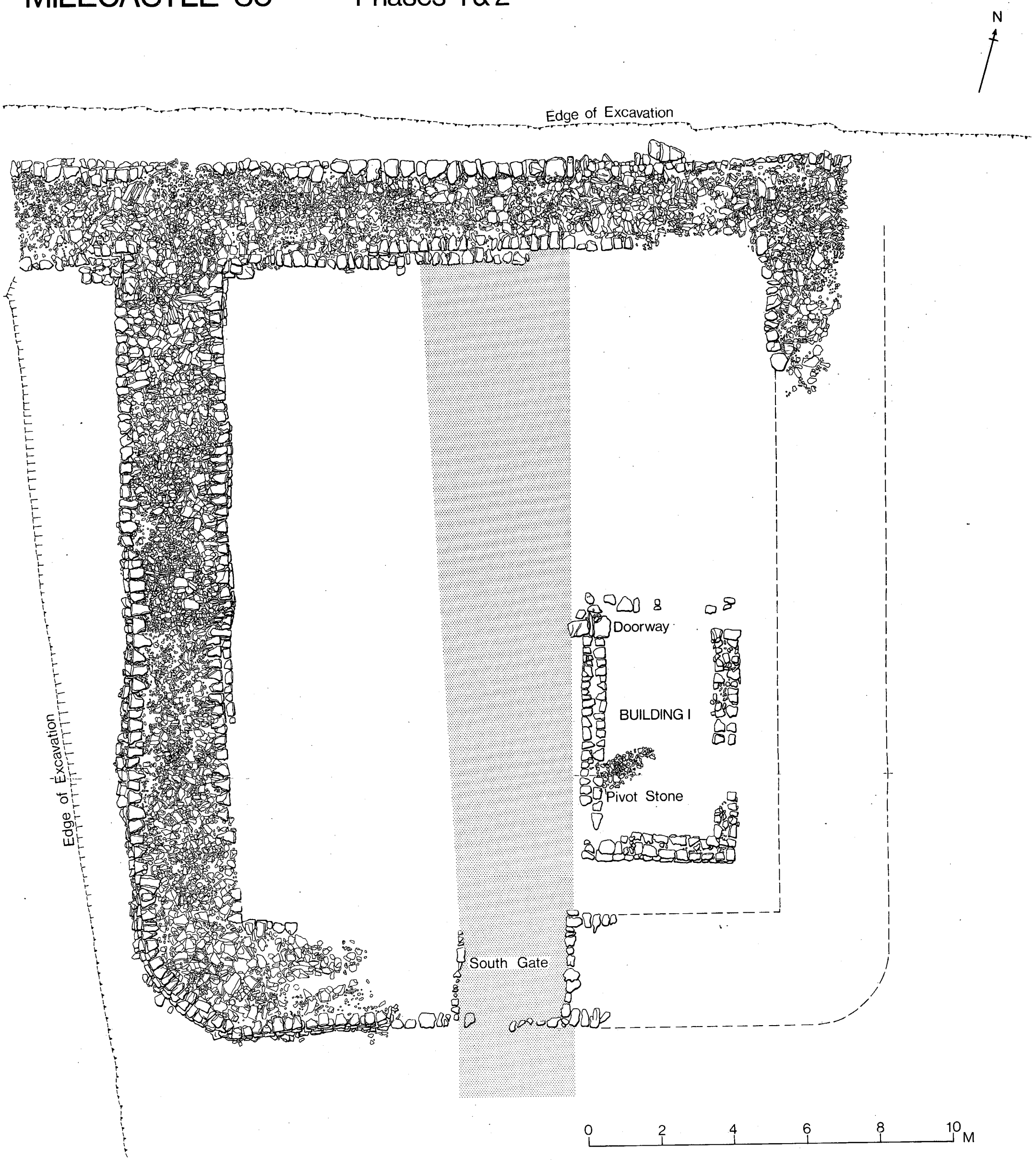


Fig. 3.

MILECASTLE 35 Phases 3&4

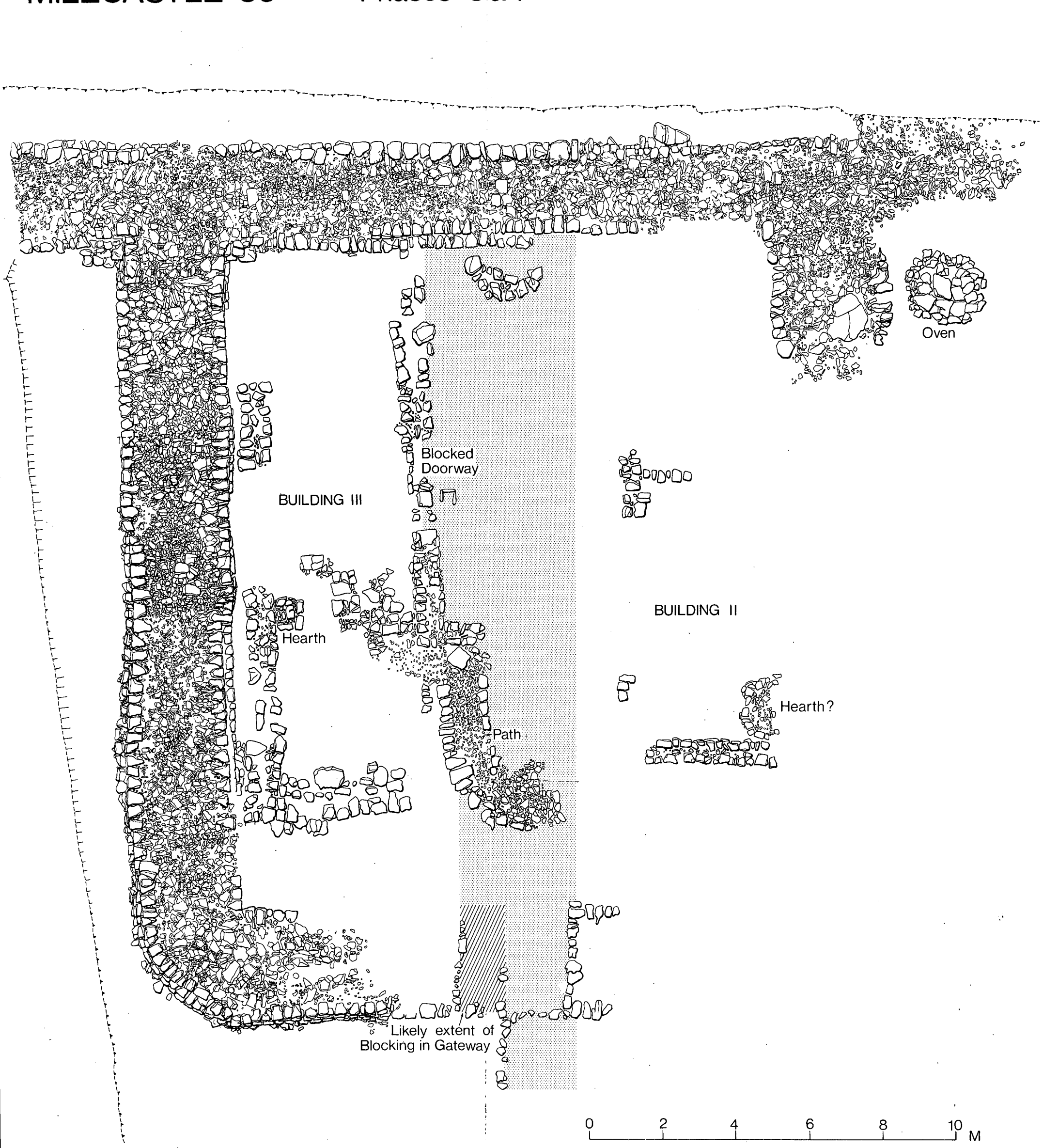


Fig. 4.

the north end of the west wall by a doorway which led into the larger of the two rooms. Neat pivot and threshold stones were still in place. The east and west walls survived two courses high and the south wall, three courses high, but the north wall had been almost destroyed by later buildings. The bottom course of the south wall was broader than those of the other walls, presumably to counter the slope of the ground.

Little of the original floor levels remained, but a few flagstones still rested on a clay make-up layer in the northern room, and it is possible that the same arrangement had existed in the southern room where only the clay layer was found. Traces of the dividing wall were largely obscured by the wall of a later building. A few sherds of pottery were found associated with the clay layer (524, p. 124) consistent with second century use of the building (see below), but no further or more accurate dating evidence was found.

No other structures could be ascribed with any confidence to the earliest layout of the milecastle, but as it was not possible to reveal fully the Phase 1 levels on the western part of the site as these were crossed by the walls of later buildings retained for consolidation, it is, perhaps, possible that other, more minor structures may have existed there.

Phase 2 (fig. 3)

Evidence for this phase is restricted to the provision of new floors in Building I and the re-surfacing of part of the road.

A second layer of flagstones was found just inside the entrance of Building I immediately above the earlier floor. One of these incorporated a small pivot hole, but as it could not belong to any obvious doorway it is possible that it had once served in the original dividing wall within the building. On the line of the dividing wall a small pivot stone was found, which was clearly not an original feature. A second clay layer, approximately 15 cm deep, was also found sealing the similar earlier layer in the southern room. This contained charcoal and burnt organic material which may, perhaps, have derived from a timber superstructure of the building.

A small patch of road surface just inside the south gate is probably also to be dated to this period. This consisted of rammed sandstone chippings set on a layer of small stone rubble, in all 10 to 15 cm deep. It did not extend far into the milecastle, but seems to have provided a further opportunity for levelling the slope of the ground. The south gate had been too greatly disturbed by stone robbers to retain any trace of alterations at this time.

Phase 2 clearly does not represent any substantial change, but its recognition is important because of the generally accepted 'Wall Period Ib' (Gibson and Simpson 1911) associated with the restoration of Hadrians' Wall *c.* A.D. 160. There is insufficient evidence to identify Sewingshields Phase 2 conclusively with Wall Period Ib; but this possibility should not be dismissed.

Phase 3 (fig. 4)

Major changes now took place in the internal arrangements of the Milecastle. The

a. Building I; looking north.

b. The curtain to the east of Milecastle 35; looking East.

reasons for this are unclear, but there is no evidence of damage or destruction by enemy action preceding this, or any other phase at Sewingshields.

On the east side of the site, a new structure (Building II) replaced Building I. A complete plan of this could not be recovered as only its south wall and fragments of its west wall remained, but the east wall must have run very close to the main east wall of the milecastle, or else the building may even have butted directly on to it. Any evidence for this had been destroyed by stone robbers. The south wall was quite well preserved, and consisted of two courses of dressed sandstone blocks bonded with clay, built almost exactly above the line of the dividing wall within Building I. The remnants of the west wall indicated that Building II measured at least 8·5 m by 4·5 m. No floor levels remained intact within the building, but displaced flagstones suggested that a flagged floor may again have been laid upon a clay-soil foundation. No doorway was recognized, but in the south-east corner of the building the base of a sub-circular structure was found, perhaps a hearth or oven. This consisted of three courses of neatly dressed thin sandstone blocks, bonded with clay, and enclosing a core of hand-packed stone chippings. The eastern half of it had been destroyed by the robbing of the adjacent main east wall.

The western side of the milecastle was now occupied for the first time by a substantial building (Building III) (plate VIIa). The foundation course of the stone footings of this contained very large dolerite blocks in a double row, packed with smaller stones and bonded with mortar—the only use of mortar in an interior structure at Sewingshields. The second course, which survived only along part of the south wall and the northern half of the east wall, was of dressed sandstone bonded with clay. The foundations of the south wall were particularly massive, suggesting that it may have been provided with an offset or series of offsets, to counter the slope of the ground, similarly to the south wall of Building I. No trace of the north wall was found, but the overall dimensions of the building were approximately 5·5 m by at least 14·5 m. Two doorways were found in the east wall of Building III, but at least one more, removed by later building activity, may have existed further south along this wall.

No internal walls were found, but from the position of the doorways it seems likely that the building was divided into three or four rooms. Inside the southernmost of the two doorways a flagged sandstone floor was found, laid in three narrow terraces. These appeared to be contemporary rather than successive and no other flagged surfaces were found beneath them. In the middle terrace a well-made stone hearth was found, formed of fire-reddened sandstone flags, bound on all four sides by a shallow kerb. Where the flagstones were missing on the southern terrace, a simple hearth of burnt clay was found, almost certainly pre-dating the floor, but not necessarily earlier than the building itself. Pottery from material (540) apparently contemporary with the hearth and clearly earlier than the floor dates to the first half of the third century and therefore provides an indication both of the start of Period 3 generally and of Building II specifically.

Contemporary with Building III, close to its northern door, three flagstones were found set vertically into the road surface at right angles to each other to form an

open-sided square. Their exact relationship to Building III is unclear, as is their function; but similar structures have been recorded at Milecastles 9 and 37.(Birley 1930, Hunter Blair 1934).—It is also possible that the repairs to the north gate described above may have been carried out at this time.

Apparently contemporary with the changes to the internal arrangement of the milecastle, the south gate was also altered. Although damage sustained as a result of stone robbing removed much of the evidence for this alteration, a rough kerb of dolerite blocks was found running south from the central point of the gateway, bordering a new road surface to the east and suggesting that the western half of the gateway was now blocked.

Phase 4 (fig. 4)

Broadly speaking, the arrangement of the milecastle established at the start of Phase 3 seems to have had a long life, perhaps as much as a century. Pottery of the 4th century was found pre-dating the buildings which mark the next major change to the site (Phase 5); but during the course of much of the third and early fourth centuries at Sewingshields certain events seem to have taken place which indicate that more than merely a gradual development from the earlier Phase 3 was taking place, including the decay and systematic dismantling of Building II, the refurbishment of Building III and the provision of new access to it. Accordingly it seems reasonable to recognize these changes as marking a separate phase in the history of the site.

The robbing of Building II must have happened at a time when the walls of Building I were already obscured, for although the west walls of the two buildings ran parallel within only a few centimetres of each other, almost all the stones of the Building III wall appear to have been carefully removed, but the earlier wall had not been disturbed.

With Building II no longer standing, a substantial path was laid leading straight from the south gate into the southern doorway of Building III (plate VIIb). The new path consisted of a "core" of small stones tightly packed within kerbs of dolerite or sandstone. It had been re-laid at least once, and pottery trodden into its surface (462, p. 120) showed that it continued in use into the fourth century. On the northern edge of the path a small retaining wall was built, consisting of unbonded, undressed dolerite blocks two courses high, abutting at right angles the east wall of Building III. At this time, the northern doorway, which showed signs of repair (it was found to have two successive pivot and threshold stones) was blocked.

Two other structures may also have been built at this time. The first of these was a semi-circular platform of large blocks of unusually regularly hewn dolerite almost immediately above the road surface close to the main north wall of the milecastle. The function of this is unclear. If, for example, it had served as a base from which a ladder could provide access to the top of the wall, it is difficult to imagine why it should have been made so substantial.

The second structure was a large oven found outside the milecastle, in the angle between the east wall and the curtain. It was excavated in 1982 in advance of the

a. Building III, overlain by Walls A, B, C, and D of Buildings IV and VI; looking north-west, during the final stages of excavation.

b. Phase 4. Path between the South Gate and Building III; looking south-west. Scales: 2 m.

consolidation of the main walls adjacent to it. It possessed a floor of large fire-reddened sandstone flags, resting on a substantial foundation of unbonded smaller stones. A little of its superstructure, a single course of small sandstone blocks, remained around its eastern half. Although there was insufficient evidence to provide an accurate date for its construction a coin, dating *c.* A.D. 275 (no. 7), found in the material associated with it, indicates that it was probably in use during Phase 4.

Phases 5 and 6 (figs. 5 and 6)

Phases 5 and 6 represent a change in the nature of occupation at Sewingshields. The site seems to have been cleared prior to this and perhaps even partly demolished, after a period of gradual decline. A great deal of rubble seems to have been shifted from the northern part of the site towards the south, having the effect of further levelling the site, but apparently also preventing access through the south gate. Unfortunately damage from stone robbing destroyed any evidence for the state of the gateway at this time.

Three successive structural phases were found in the western part of the site (corresponding to Phases 5, 6 and 7) and at least two in the eastern part. It was never easy to establish the relationship of phases on each side of the site with certainty; but the overall arrangement of the site is not in doubt.

Four walls (A, B, C and D, figs. 5 and 6), representing the Phase 5 and 6 structures in the western part of the site were found. These ran east-west in pairs and re-used parts of the east and west walls of Building III, the south wall of which was now buried under rubble, and the north wall demolished. A and B seem to have been the north walls of successive buildings of which C and D were the respective south walls (Buildings IV and V). It is not possible to say which was built first, but as Building IV (walls A and C) was more correctly aligned with the re-used east and west walls of Building III, it is possible that this belonged to Phase 5 and accordingly Building VI (walls C and D) to Phase 6. They were of almost identical size both approximately 6·5 m N–S × 5·5 m. All of the Phase 5 and 6 walls were unbonded and included a great deal of dolerite as well as a few re-used, dressed stones.

A few stones of the second course of A remained, but the wall was so disturbed that it appeared as a haphazard tip of large stones, loosely packed with smaller stones. B was very similar to A, but perhaps even more disturbed. It seemed to be of one build with a short length (1·2 m) of wall running north-south at a point where the west wall of Building III had not survived.

C and D were better preserved. Both possessed two distinct courses each consisting of a double line of large stones packed with smaller stones. In general the lower courses contained larger blocks than the upper courses, and had been carefully set into the slope of the site. These large blocks of dolerite were noticeably more massive than any used in earlier structures on the site, even the core of the main walls. The top of the second courses included re-used flagstones and other flat stones, perhaps to provide a level base for a superstructure of lighter material. Indeed, there was surprisingly little stone rubble fallen from the superstructures of Buildings IV and VI,

which contrasts markedly with the large quantity of stone fallen from the dry-stone walls of the medieval buildings on the site. Where C and D abutted the west wall of Building III, a few stones of a single course of a contemporary heightening of the earlier wall remained. This was not repeated at the junction of C with the east wall of the earlier building, as it still stood two courses high; but the junction of it with D had been removed by a robber trench running north from the area of the west side of the south gate.

No doorway into either Building IV or VI was recognized, and although it is possible that the south doorway of Building III was maintained for a while, it was certainly blocked later. No floors remained intact either, but the discovery of a number of disturbed flagstones suggest that they had been of stone. Pottery found in walls C and D (342 and 400, p. 116–7) confirms a date well into the fourth century for both buildings, but it was not possible to isolate specific occupation levels from the group of rather disturbed contexts associated with Phase 5, 6 and 7 structures in this part of the site (see pottery report).

In the eastern part of the site two pairs of walls of similar nature were also found (Walls E, F, G and H). In addition, a short length of north-south walling was found, contemporary with F, but pre-dating E.

E was built directly above the remains of the north wall of Building I. It was impossible to ascertain how much of this, or indeed the other Phase 5 and 6 walls had been destroyed by the large robber trench running along the line of the main east wall of the milecastle, nor was any junction found at its western end with a north-south wall. A few stones of the second course of E remained in place, but only a single course of F survived, although this had been laid rather more regularly than that of E. The short length of north-south wall associated with F at its western end ran below E, but did not extend beyond the north face of the later wall.

G was built almost directly against the south face of the south wall of Building II. Like E, it included stones of more irregular size than F. Some of the dolerite blocks at the eastern end of G were as large as any ever used at Sewingshields.

H survived as a mostly single, but substantial, row of dolerite blocks. It seemed to be earlier than G, the construction of which may have been responsible for its partial destruction, explaining, perhaps, why only a single line of stones was found.

If G was indeed later than H, it seems logical to suppose that E and G were part of one structure (Building VII) and F and H part of another (Building V). The disturbed nature of the northern part of the site prevented the recovery of any certain evidence of contemporary walling to the north of E. It is unclear, for example, how much further Building V originally extended. As they remained however, Building VII was at least 5·6 m (N–S) by 4·1 m and Building VI 6 m by 4·4 m. As it is not possible to establish the exact chronological relationship of these buildings with Buildings IV and VI it has been assumed here that Building V belongs to Phase 5, and Building VII to Phase 6. There is no doubt that both Buildings V and VII were constructed well into the fourth century, as fourth century pottery was discovered from a layer which extended below Wall F and also within Walls E and F (see 484, 262 and 263, p. 114, 116, 122).

The floor levels associated with these buildings survived, albeit in some disarray, between walls F and G. Irregular but flat slabs of dolerite had been laid amongst a few better flagstones, possibly derived from earlier structures. The presence of hearths was suggested by patches of burning on some of these stones. This flagging was not restricted, however, to the area between the walls, but spread out intermittently towards the west and south to cover the earlier road surfaces right up to Buildings IV and VI and to the edge of the robber trench in the area of the south gate. The absence of evidence for the west wall of either Building V or VII, except for the short length contemporary with F, raises the possibility that these may have been open to the west.

In the area to the north of E, which had been flagged in Phase 1, and at least once subsequently, a few fragments of walling were found and also patches of flagging, which gave the impression of having been arranged in groups to serve as 'pads'. Unfortunately none of this material added up to any readily recognizable pattern, nor could it be dated with certainty and these fragments were too ephemeral to express meaningfully on a reduced phase plan.

The Phase 5 and 6 levels on the east of the milecastle produced a quantity of metal-working debris (see p. 106–8 for full details), and it is therefore possible that Buildings V and VII were, to some extent, devoted to industrial activities. A sequence of three particularly well-preserved metal-working hearths were found to the south of wall G each bounded by vertically set stones, but an even more concentrated area of industrial activity was found in the south-west corner of the milecastle, to the south of wall D.

There, the earliest in a sequence of at least nine hearths were found above a layer of clay and rubble upon which a flagged surface had once lain, but which had been removed except for a few stones close to the angle of the south-west corner itself. This surface post-dated the erection of Building III, and both it and the south wall of that building were sealed by the industrial layers which themselves dipped from west to east. Most of the hearths were defined by patches of black or red-burnt clay, set either on the surrounding soil, or sometimes on a foundation of sandstone chips, and at least one was surrounded by vertical stones in the manner of those in the south-east corner. A great deal of fourth century pottery was recovered from these deposits, and one hearth (460) produced two coins (nos. 18, 19) dating *c.* A.D. 330/5. Many objects of bronze and iron were also found but few of these could be thought to belong to the fourth century, nor was any evidence found to associate them directly with metal working.

In the north-west corner of the milecastle, a large well-made oven had been inserted cutting the foundations of the west wall of Building III. The floor of this was made up of a mixed collection of flat stones including a gaming board (fig. 18, no. 160), laid on a foundation of large unbonded blocks of dolerite packed with small stones. None of the superstructure remained.

Phase 7 (fig. 7)

Phase 7 is represented principally by Building VIII, but it is also the final phase at

MILECASTLE 35 Phase 5

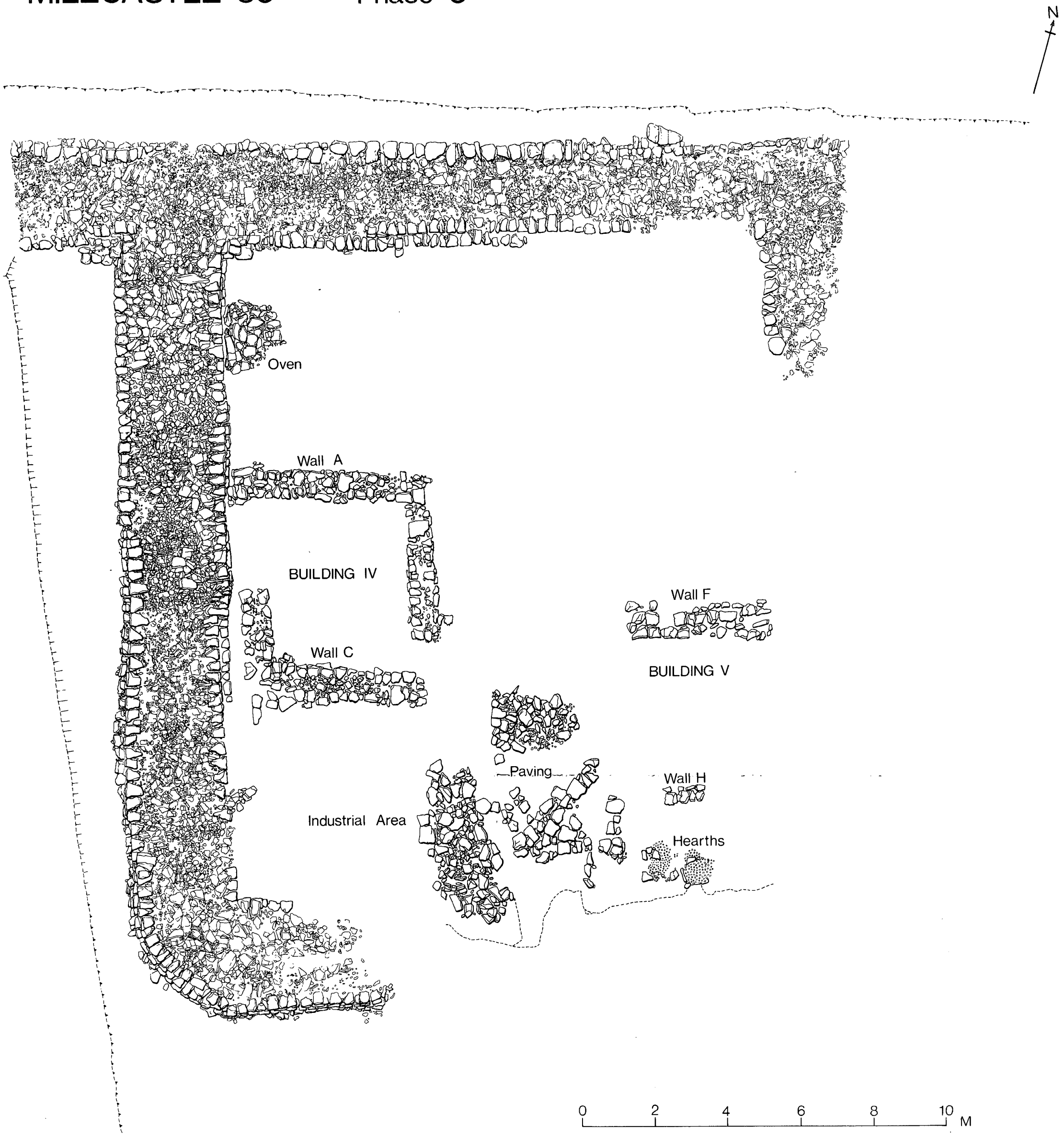


Fig. 5.

MILECASTLE 35 Phase 6

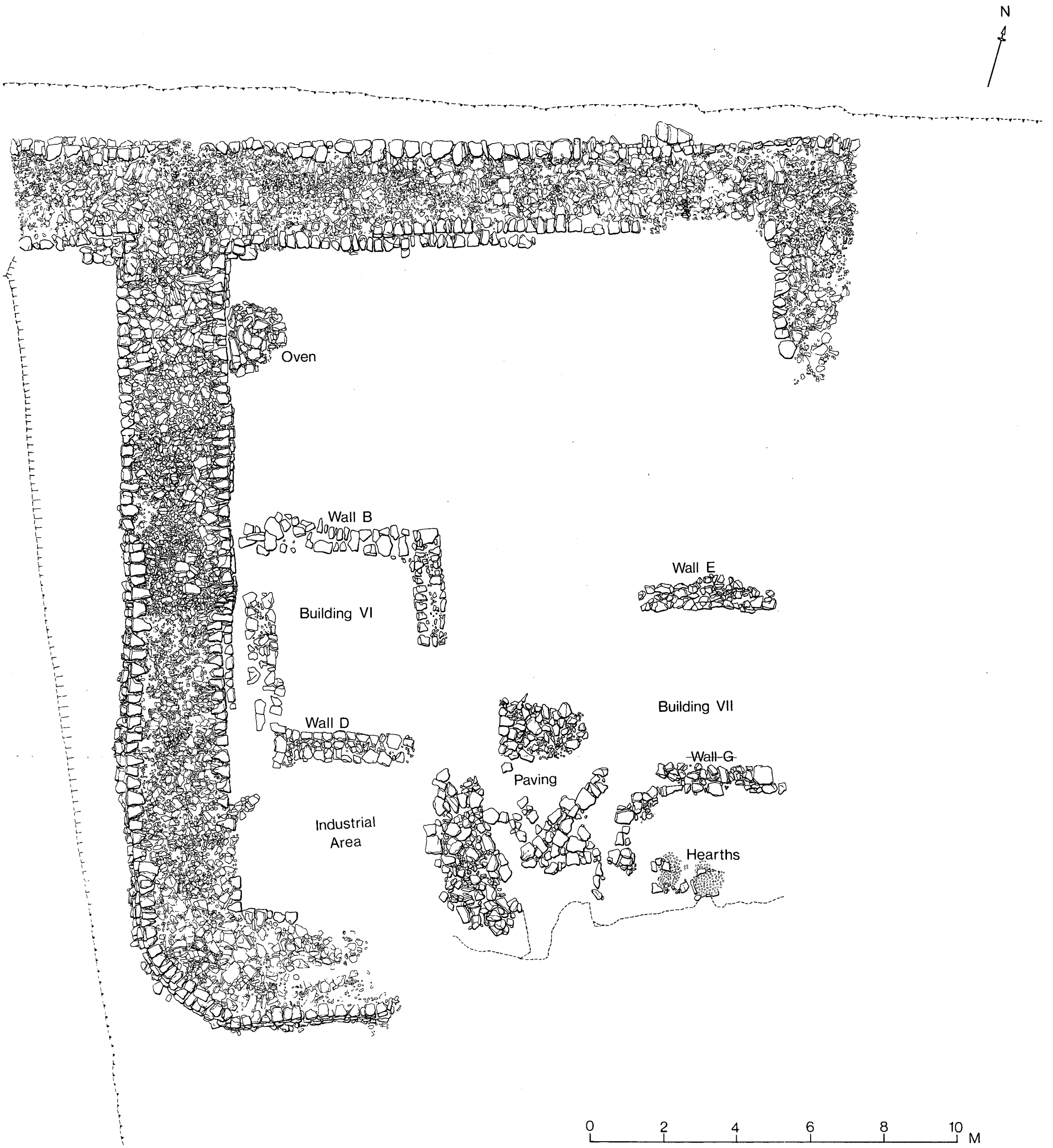


Fig. 6.

a. Rubble drain (Context 420) through the east face of the Milecastle west wall. Scale: 1 m.

b. Building B; looking west. Scales: 2 m.

Sewingshields which may be confidently ascribed to the Roman occupation of the site.

Only the north and east walls of Building VIII could be traced with certainty. The north wall ran against the south face of wall B, and the east wall was set inside the line of the east wall of Building III, but spread across the west face of the earlier wall as it progressed south. A few stones which may have formed part of a west wall were found above the west wall of Building III. All these walls were constructed of large, unbonded stones, mostly dolerite, but the east wall included several re-used dressed blocks. Only the bottom courses remained, and even these had suffered considerable disturbance. No indications of doorways or floor levels were recognized.

One other feature may date to this phase. This was a rough but definite setting of dolerite blocks (420), found running through the east face of the main west wall of the milecastle from a point between the west end of wall D and the possible south wall of Building VIII (plate VIIIa). This seemed to form a crude drain leading off the site. It was not recognized on the outer face of the main west wall, but seems to have proceeded no further than the loosely packed core of this wall. The position of this "drain" suggests that the main west wall of the milecastle could have been standing no higher than it was found when excavated. The extensive robbing of the east wall and the eastern half of the south wall removed any evidence for the state of those walls at this time.

It is impossible to be sure how long the fourth century occupation of Sewingshields lasted, but the coin of Valentinian (no. 21) suggests that it extended at least into the final third of the century.

DISCUSSION

The excavation at Sewingshields has presented the detailed history of a milecastle for the first time in many years. It is appropriate therefore, to consider, in summary form, some of the wider implications of the evidence for the history and development of this site and to try and place it in the wider context of Hadrians' Wall and its milecastles. (For fuller treatment see Savage 1983.)

The function of the milecastles of Hadrian's Wall is enigmatic, that is their function subsequent to the decision to build Forts on the line of the Wall itself, which meant that passage for troops through the Wall was no longer necessarily gained primarily through the milecastles. Indeed several milecastles, including Sewingshields, could never have been so used because of their situation, but were maintained, adapted and occupied (perhaps intermittently), for about 250 years. In fact, they seem always to have been an integral part of the frontier system.

In view of this, any evidence for the internal arrangement of milecastles is of considerable importance. The only milecastle where the initial Hadrianic arrangement has been indisputably exposed is Milecastle 50TW (Simpson, Richmond and St Joseph 1935). Here, the only substantial structure seems to have been a two-roomed building, standing in the south-east part of the site—a clear parallel to Sewingshields Phase 1. The earliest phases of other sites which seem to display something quite different,

especially that of Milecastle 48 (Gibson and Simpson 1911) are open to re-interpretation on the basis of the published reports; and Milecastle 9 for example (Birley 1930), may well have adhered rather to the model of Sewingshields and 50TW.

There is no need however, to try to establish a standard plan for Hadrianic milecastles especially as in other respects, they were clearly varied. Their size, for example, shows a remarkable degree of variation (table A) with an apparent concentration of large milecastles on either side of the Irthing Gap. This is not reflected around the corresponding crossing of the North Tyne. There must have been sound military reasons for this, but they are no longer obvious.

Sewingshields adds very little to knowledge of what has come to be known as "Wall Period Ib"; it certainly does not bring it into question, but the evidence for fundamental reorganization at the start of Phase 3 is of considerable interest, as it seems to reflect a large-scale re-appraisal of many elements of the frontier system, spread perhaps over quite a number of years. The reasons for a reconsideration of the frontier around the start of the third century have been debated elsewhere at length. The particular effect of a great increase in the size of the accommodation at Sewingshields, probably also at Milecastle 9, and perhaps even at Milecastle 48 (for the large "barracks" there need not be any earlier than this) adds a further element which must now be taken into account. It may have taken place partly in response to the demolition of Wall turrets in the Central Sector; but this provokes rather too many unanswerable questions about the nature of the patrolling of the Wall, and the relationship of the forts with the minor elements of the frontier.

It is difficult to detect a close parallelism in the subsequent history of Sewingshields with that of the nearby forts. The comparatively large number and variety of weapons recovered from Sewingshields (admittedly seldom from well-stratified contexts), seems to emphasize the military nature of the long third century occupation of the site during Phases 3 and 4; though the role of a site like Sewingshields within the greater frontier strategy of the times is quite unclear.

If Phase 4 is correctly understood as a period of decline, this would accord with an overall impression of years in which the frontier faced no urgent threat. In reality, however, more evidence is needed before any firm conclusions can be drawn.

The termination of this period is particularly problematic, not only at Sewingshields, but on other milecastle sites which have produced numbers of fine, early fourth century coins, *folles*, almost totally absent on other sites. Again, the frustrating lack of well-stratified examples inhibits informed speculation as to their significance, but they have now appeared too frequently to be ignored.

The evidence for the nature of fourth century occupation at Sewingshields (Phases 5, 6 and 7) is perhaps the most important contribution to knowledge of milecastles on Hadrian's Wall made by the excavation, but the lack of good evidence from other sites makes it difficult to present Sewingshields as a type site. The evidence which exists from other sites suggests a variety of situations. Milecastles 52 and 54, for example (Simpson and Richmond 1935), seem to have been provided with fine new gateways, but the date of these is not as certain as was first thought. It also seems

TABLE A. Milecastle Dimensional Statistics[1]

Milecastle	Axis Orientation	Internal Dimensions (m)	Internal[2] Area (m^2)	Gate[3] Types
9	Long	14·88 × 18·29	272·15	IV
10	Long	17·68 × 14·33	253·35	IV
13	Short	17·91 × 15·24	272·95	I
17	Short	17·68 × 14·94	264·14	I
18	Long	16·15 × 18·14	292·96	I
19	Long	17·22 × 16·26	280·00	III
20	Long	17·98 × 16·56	297·75	III
22	Long?	16·76 E–W	not known	III
23	Long?	14·94 E–W	not known	not known
24	Long?	15·24 E–W	not known	not known
25	Long?	not known	not known	not known
26	Long?	not known	not known	not known
27	Long	17·91 × 14·63	262·02	IV
28	Long?	not known	not known	not known
32	Long	not known	not known	not known
33	not known	not known	not known	II
34	Long?	not known	not known	II
35	Long	18·30 × 15·25	279·08	IV
36	Long	not known	not known	not known
37	Short	17·55 × 15·11	265·18	I
38	Short	15·24 × 18·90	288·04	I
39	Long	14·94 – 15·70 × 18·90	289·55	II
40	Long	14·86 × 18·29	271·79	II
41	Short	not known	not known	I
42	Short	19·20 × 14·94	286·85	I
44	Long	not known	not known	not known
45	Long	not known	not known	not known
47	Long	21·03 × 18·29	384·64	II or III
48	Long	21·34 × 18·52	395·22	III
49	Long	22·86 × 19·81	452·86	III
50[4]	Long	23·16 × 18·29	423·60	III
51	not known	not known	not known	III
52	Short	23·40 × 27·51	643·73	III
53	Long	23·32 × 21·95	511·87	III
54	Long	23·62 × 19·66	464·37	III
73	Long	19·05 × 18·49	352·23	not known
79	neither	17·53 × 17·53	307·30	II or III

NOTES

1. Based on information summarized in Daniels (1978)—except for Milecastle 35.
2. This is an approximate figure only as it assumes unless there is firm evidence to indicate otherwise, that all Milecastles have opposite sides of equal length. In fact most dimensions are more properly described as of the two adjacent sides of greatest length.
3. As defined by Daniels (1978) p. 24.
4. 50 TW is excluded from this list, but it also was a long-axis Milecastle.

strange that the north gate of Milecastle 52 should have been blocked at the same time.

It is certain from the pottery and coin evidence that many milecastles were occupied during the fourth century, but little more can be said. There is, however, evidence for the major reorganization of at least some of the forts early in the century so it is unlikely that the milecastles would have remained in use, preserving ever more anachronistically, their second or third century character. Despite the conclusions of the report, it is apparent, for example, that Milecastle 48 was not left unaltered. The comparatively crude nature of the contemporary structures at Sewingshields may account for the lack of recognition of similar evidence, at a time when the science of excavation was still in its infancy (notwithstanding the excellence of Simpson's work as judged by the standards of his contemporaries).

Regarded in isolation, the fourth century at Sewingshields represented something of a decline in the style of life on the site, or at least its structures seem more crude than their predecessors. The metal-working deposits indicate however, that life was far from basic, and judged on the evidence of artifacts belonging to earlier phases, it would be unwise to dismiss Sewingshields as having no military significance, although it may no longer have been recognizable as a milecastle. A great deal more evidence from other sites is needed before it can be discovered whether or not the evidence from Sewingshields is in any way typical of sites of broadly similar history. There is no good reason to anticipate that this would have been the case, as local variations may abound.

Even less can be said with confidence about the end of the Roman occupation. What little evidence there is appears to point to gradual decay and decline.

EXCAVATIONS AT SEWINGSHIELDS, THE MEDIEVAL PHASES

Sewingshields lies on the northern edge of the South Tyne valley at the boundary between the northern and southern parts of the medieval Lordship of Tynedale. This was administered as an independent liberty, which was not fully integrated into the rest of Northumberland until 1495. From 1158 the Lordship was held by the kings of Scotland, who administered it through the principal manor at Wark in North Tynedale. This was where the gaol was, and where the assizes were held (Harbottle and Newman 1973, 138–47).

In 1296 Edward I annexed Tynedale during his invasion of Scotland, although it continued to be administered as an independent liberty. The effectiveness of the English administration fluctuated during the succeeding years, and for some years after the death of Edward I and the defeat at Bannockburn Robert Bruce had control of Tynedale. It was not until the middle of the 14th century that the border between the two countries was stabilized, and the major campaigns aimed at conquest were replaced by the succession of border raids and skirmishes that continued on into the 16th century (Bond 1867, Vol. 2, 329–35, 357, *NCH* Vol. 15, 155–164). Whilst a number of these raids were large-scale affairs causing serious damage, most were little more than thieving expeditions that reflected the strengths and rivalries of the border

magnates and the local surname groups, rather than national policies (Hodgson 1820–58, Part 2, Vol. 3, 326–7).

One of the effects of the independent status of the liberty of Tynedale was that it was excluded from the Lay Subsidy of 1296, which is perhaps the most valuable surviving source of information about the size and density of settlement in medieval Northumberland. The paucity of the surviving documentary evidence makes it impossible to follow in detail the effect that the growing lawlessness in Tynedale had on individual settlements; but some idea of the changing fortunes of Sewingshields can be obtained from the succession of brief references that are available, mainly in the surviving Inquisitions *post mortem* (Hodgson 1820–58, Part 2, Vol. 3, 386). It has also been possible to gain some idea of the extent of cultivated land attached to the manor of Sewingshields from the results of a field survey. This survey was undertaken at the same time as the excavations at Milecastle 35, and in general the results seem to confirm the picture obtained from the documentary evidence.

To the north and west of Sewingshields lay two great areas of waste and rough grazing land which belonged to the adjacent manor of Henshaw. On the north were the "Huntlands", so called (according to Camden) because of the great abundance of game that used to be found there (Hodgson 1820–58, Part 2, Vol. 3, 326–7, Bain 1887, Vol. 2, 125, Vol. 3, 177). While to the west lay the "Forest of Lowes" which included Greenlea and Broomlea loughs at the western end of Sewingshields Crags, and which stretched almost as far west as Haltwhistle (Hodgson 1820–58, Part 1, Vol. 3, 35; Moore 1915, 21–5). Initially these two areas seem to have been set aside for hunting by the Lords of Tynedale, but already by the 12th century they were being encroached upon for agricultural land. At first this was on a small scale; in 1177 William "the Lion" gave 4 shielings to Reginald Prat of Tynedale wherever he pleased within the "Huntlands" to occupy as meadow, pasture or arable land (Hodgson 1820–58, Part 1, Vol. 3, 2–4; Moore 1915, 25, 42). By the 13th century, however, the grants were more extensive; in 1255 Alexander III gave lands in the "Huntlands" to Hugh, son of Gilbert of Grindon in exchange for the manor of Grindon (Moore 1915, 40; Caley 1812, Vol. 1, 203). By the end of the 13th century the whole of the area was being let on an annual basis for the agistment of cattle. The profits from this amounted to £4/6/3d in 1306, "saving sufficient sustenance for the wild beasts of the park" (Caley 1812, Vol. 1, 211).

According to Mawer the name Sewingshields means "the shiels of Sigewine", and the name is of Anglo-Saxon origin (Mawer 1920, 174). This implies that the initial settlement here was no more than seasonally occupied shelters which were used by herdsmen during the summer months whilst they grazed beasts on these waste areas. There were clearly defined shieling rights over the grazing areas which were held by certain manors or by members of a particular surname group, who might live several miles away (Dixon 1972, 250–51).

Sewingshields lies at the point where the road, running northwards from the crossing point of the South Tyne at Haydon Bridge, crosses the Whin Sill outcrop on its way northwards to Wark and Bellingham. This road was still remembered in the 19th century as the "great north road", and this may have been one of the

reasons why Sewingshields developed from a shieling ground to a permanently occupied settlement of sufficient importance to have achieved manorial status by the middle of the 13th century (see note on field survey monument 19). The 14th century reference to Sewingshields as a drengage holding would, if correct, suggest that the manor of Sewingshields was already established by the 11th century (Cal of IPM 1935, Vol. 2, 315–17).

In 1266 Sewingshields was the home of one John of Halton, who was almost certainly the second son of Sir John of Halton, Sheriff of Northumberland in that year, who held the principal manor at Halton near Corbridge some 15 miles to the east (Hedley 1968, Vol. 1, 257–8). It is unclear when the family acquired the manor of Sewingshields, for although it was not included in a list of their possessions made in 1236, this may have been because it lay in Tynedale and was held of the king of Scotland. The manor could however have been a recent acquisition which reflected the growing importance of the Halton family within the county.

Sewingshields is first mentioned in a surviving document of 1279, the record of the assize court at Wark in that year (Bain 1887, Vol. 2, 168–9; Hartshorne 1858, Vol. 2, lii–lxviii). It notes that John of Halton and Thomas of Thirlwall were summoned to the king of Scotlands court at Wark to answer a charge of theft. It was alleged that in 1266 they had gone armed to Wark and had driven off 30 bullocks, 18 cattle, a bull, 15 horses and some 200 sheep belonging to one Thomas Fairburn, and worth in all £20 and 100 marks. The charge states that:

"They had taken them to their home (domum) at Sewingshields, and had put them in their park and had held them there."

The charges were withdrawn after they agreed to pay 15 marks compensation between them.

It is clear that the manor must have included a suitable building to house not only John, but sufficient men to look after his ill-gotten gains as well. The construction of a series of buildings at Milecastle 35 and of an extensive system of enclosed fields containing ridge and furrow must reflect a period of growing prosperity during the 13th century. When Sir John died in 1287, he left what appears to have been a valuable and thriving estate. The Inquisition Post Mortem records that he left not only the Manor of Halton with its two dependent vills, but also the Manor of Sewingshields held of the king of Scots by service of $\frac{1}{2}$ mark yearly. The manor was worth £8 per year, and the estate also had attached to it a field called the Wall Field containing some 160 acres which he held from the king by payment of 1 lb of pepper (Bain 1887, Vol. 2, 87–8). Until the 17th century this field was always noted separately, and it apparently lay adjacent to the manor but on the south side of Hadrian's Wall. The later reference to Sewingshields in 1362 at the death of Robert Ogle records that both the manor and the Wall Field were held of the king in chief in drengage, suggesting that they were originally both part of a single unit of Saxon origin (Hedley 1968, Vol. 1, 257–8). Although there is no mention of shielings at Sewingshields in 1287, it is recorded that John also held a shieling at Hayley (1 mile to the north) and at Middleburn, (3 miles away).

It was only after a considerable delay that these estates were inherited officially

by John's eldest son, William of Halton in 1296 (Cal of Charter Rolls, Vol. 2, 465). He now held them from Edward I. Three years later he was dead, and his son John of Halton inherited the estates in 1299 during a period of considerable border unrest. There were Scots raids in 1297, 1311, 1313 and 1314, during which much of Tynedale was laid waste (Stevenson 1839, 216). The fate of Sewingshields is unclear, but it is known that Halton itself was badly damaged in 1299, and it is unlikely that Sewingshields in its exposed position on one of the roads to Scotland and North Tynedale would have escaped damage (Borne and Dixon 1978, 131–40, *NCH* Vol. 10, 392).

This was to mark the start in the decline of the Halton family fortunes. In 1314 John was arrested for having had treasonable dealings with the Scots—perhaps he was trying to protect his estates from further damage—and only released upon the pleading of his neighbours. At some time around 1314 he sold part of the original family holding, the dependent vill of Great Whittington, to a Newcastle merchant, and it is probable that Sewingshields had already passed by that date to one of his neighbours, William Carnaby of Aydon, who was to acquire the rest of the estates after John's death in 1345 (Hedley 1968, Vol. 1, 259–60). It is unfortunate that the Inquisition Post Mortem taken at the death of John of Halton does not survive, as this would perhaps have given some indication of the effect of these Scots raids on the estates. It would seem likely that the area recovered after the opening years of the 14th century, for William Carnaby was able to repair and strengthen the house at Halton, and it is possible that Sewingshields received similar treatment (Borne and Dixon 1978, 135–6). It seems probable that at least one of the buildings on the site of Milecastle 35 was rebuilt during the 14th century, and this would seem to fit nicely with the period that William Carnaby held the estate. By 1415 the manor house at Sewingshields was described as a castle, not one of the 8 "fortalices" noted in Henry V's survey of Castles, "fortalices" and towers in the county. As later surveyors seem unsure whether to describe it as a castle or a tower, it was perhaps similar to one of the surviving large towers built at this time at Langley or Haughton (Bates 1891). It is possible that William was responsible for this work, but an equally likely candidate would be Robert Ogle who acquired the estate at some time before 1362.

The death of Robert Ogle seems to mark the beginning of the decline of Sewingshields. The manor was now held independently from the Halton estates, by a family who were large landowners in north Northumberland (Hedley 1971, Vol. 2, 81; Cal of IPM 1935, Vol. 11, 315–17). The Inquisition Post Mortem taken at his death records that he held the manor of Sewingshields as well as a piece of waste land of 160 acres called "le Wall field" on the south side of Hadrian's Wall. This is the first time that this land has been recorded as waste and this may reflect the effects of the Scots raids of the early 14th century. The manor was leased to William Thirlby, who appears to have been the Ogle family chaplain in 1407, to add to the lands he already held nearby (Olivier 1927, 117). At some time between 1463 and 1477 the manor was given to Sir John Heron of Chipchase in North Tynedale as part of the dowry of Isabel Ogle. The Herons held the manor which was by now in extreme

MILECASTLE 35 Phase 7

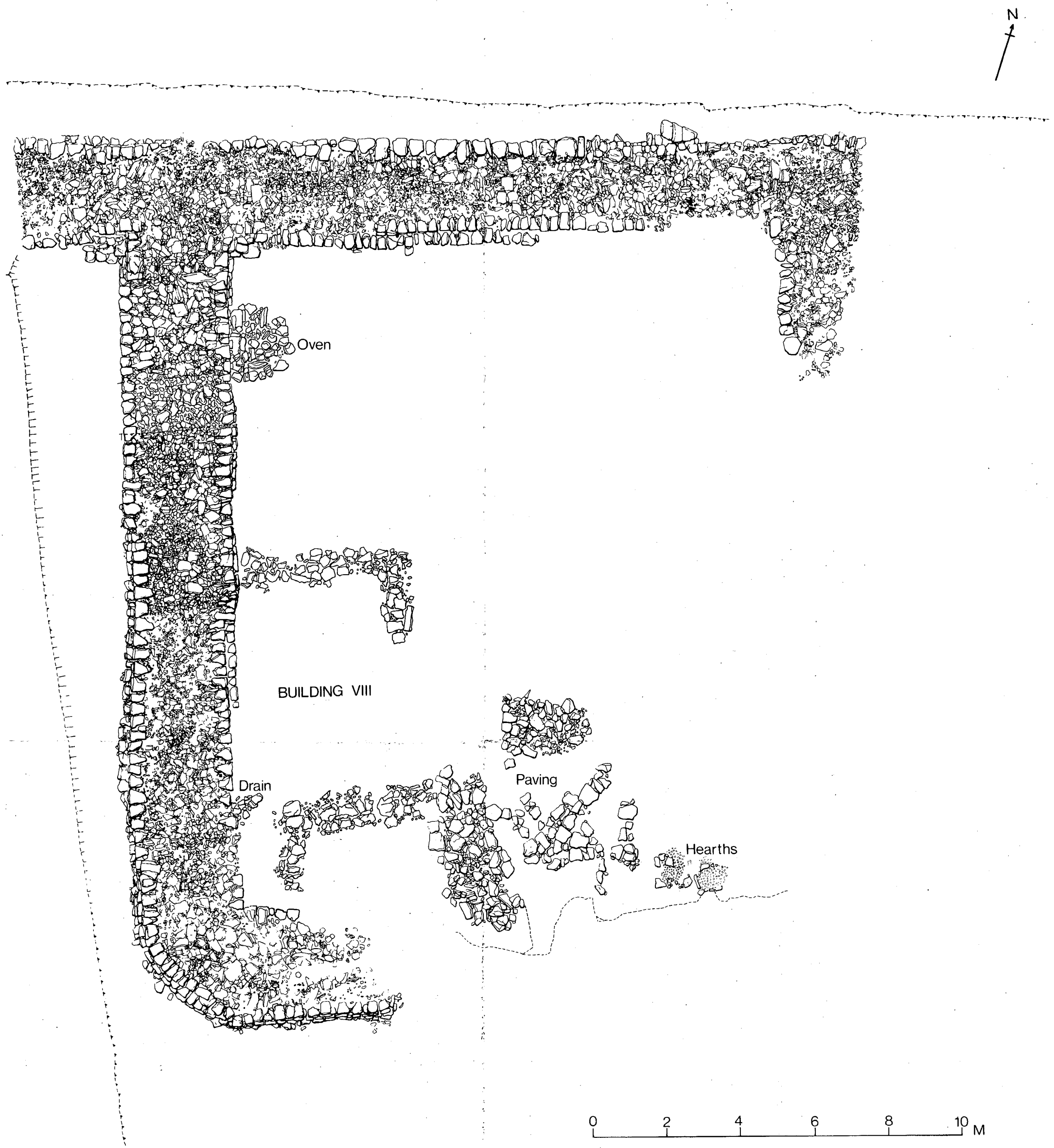


Fig. 7.

MILECASTLE 35 MEDIEVAL BUILDINGS

0 1 2 3 4 5 M

N

edge of crags

Building A

Phase 2

Phase 1

Building B

Phase 2

Phase 1

doorway

doorway

pathway

Building C

edge of trench

field boundary (9)

decay until increasing indebtedness forced them to sell it in 1693 (Hedley 1968, Vol. 2, 54–5).

The abandonment of the medieval buildings at Milecastle 35 seems to have taken place early in the 15th century. This may closely reflect the history of the castle itself. By 1604 the entire manor was only worth 6/6d a year compared with £8 in 1287, and the extent and reasons for this decline were summarized during the 16th century by Sir Robert Bowes and Sir Ralph Ellerker who compiled a survey of the defences of the frontier in 1542 (Bowes and Ellerker in Hodgson 1820–58, Part 2, Vol. 3, 228–9). They wrote:

"Carraw is only occupied by pasture in summer time. And now both the house and bounds lie waste and unplenished. And likewise westward upon the same wall is an old castle or fortress called Sewingshields of the inheritance of John Heron of Chipchase Esq. in great decay both in the roofs and the floors and hath great bounds of good ground either for corn or pasture. Albeit the same is occupied only to pasture in summer time and both the said house and ground lie waste and unplenished at present. It is thought to wise men in those parts that it were much beneficial and expedient for safeguard of the country lying between the rivers North Tyne and South Tyne if the two fortresses of Carraw and Sewingshields were inhabited and plenished with some true and honest defensible men. But the same two houses stand in such a goole passage and common entry of all thieves either coming from out of Liddlesdale or from Tynedale lying both north of the said two fortresses or else from out of Gilsland and Bewcastle lying also westward from the said houses, so that for dread of such incursions of thieves, true poor men that get their living either by labour in husbandry or by pasturing of their cattle, dare not adventure their lives, bodies and goods in such extreme uttermost houses where small relief can come to them in their extreme necessities."

It is clear that this area suffered heavily during the period of border unrest, for which the Scots were only partly to blame. Bowes and Ellerker recommended that 2 men should be posted at Sewingshields Crags to give warning of thieves approaching from the north, but by this time the damage had been done. The survey of 1604 ordered by James I reveals the full extent of the decay in this area, and marks the beginning of the return to prosperity here (Sanderson 1891, 47–77).

In view of the close relationship between the buildings uncovered at Milecastle 35 and the development of the manor itself, the absence of hearths and other domestic fittings noted in the following report can best be explained if the buildings were only occupied for short periods by herdsmen based at the nearby castle. Their main purpose would have been for storage and as temporary shelters which were only used when it was particularly important to keep an eye on the livestock of the manor.

Milecastle 35, Excavation of the Medieval phases (fig. 8)

The excavations began during the summer of 1978 when a small area of turf was stripped from the north side of the probable site of the milecastle. Immediately below the turf were the fragmentary remains of stone walls and the slight depressions that

resulted from stone robbing, that marked the positions of the medieval buildings. These were set amidst a thin deposit of fine sandy loam which had formed after these buildings had been abandoned (plate 8). Within the confines of the robbed walls of the milecastle, were two buildings lying parallel to each other across the sloping hillside. A third lay at right-angles to them immediately beyond the line of the robbed east wall. (For reference purposes the three groups of buildings have been labelled A, B and C, and their relevant contexts are listed at the end of this report.)

A small enclosure defined by a low stone wall lay on the west side of the milecastle, and other possibly medieval features nearby included several field boundaries with associated enclosures, and traces of ridge and furrow ploughing. The terminal of one of these boundaries was exposed in the south-east corner of the excavated area and was found to consist largely of tumbled rubble. This was not excavated as it lay beyond the walls of the milecastle and was not going to be affected by the programme of consolidation proposed for the Roman levels on the site.

There is no reason to suppose that the present vegetation which is typical of the acidic, rather poor soils that form a thin covering on the dolerite and sandstone outcrop of the crags is very different from what would have existed here during the period of the medieval occupation at Sewingshields. Lower down the slopes, poorly drained marshy land would have predominated, and although this land has been repeatedly drained, substantial areas of marshy ground still remain for much of the year in all but the driest weather.

Before the site was reoccupied during the medieval period, between 0·30–0·40 m of soil (dark grey fine sandy loam [5YR 4/1]) had built up amongst the ruins. This was almost completely removed from the northern part of the site before the first phase of the northern medieval building, (Building A) was constructed. The walls of the building had cut through the Roman deposits almost down to the underlying rock which was in some places less than 0·65 m below. By contrast in the southern half of the ruined milecastle, the area over the final phase of the Roman central path to the south gate of the milecastle was now deliberately built up with turves, to the height of almost 1 m over the levelled remains of the ruined Roman buildings on either side. It is probable that the turves cleared from the northern part of the site prior to the construction of Building A Phase 1, were used here, and such was the depth of deposit that many turves preserved their individual structure within this layer. By the time that the first building here was replaced (Building B), the total build-up of soil over the Roman path was almost 1 m.

Building A

This was a solidly built rectangular structure of two phases, both of which post-dated the robbing of the milecastle walls. It proved to be the most heavily robbed of the medieval buildings at Sewingshields; but despite this it was possible to identify two separate phases of building, with the second one lying on a slightly different alignment across the remains of the earlier one. By comparison with the other medieval buildings, remarkably little fallen stone remained. This is seen as support for the interpretation of the disturbed areas within its walls as sites of stone robbing. Although

it proved impossible to discern structural features within the interior of the second phase, a tentative reconstruction of the interior of the first phase has been made. Paucity of the surviving evidence (Plate IXa) does mean that the reconstruction is partly conjectural.

Building A Phase 1

The internal dimensions of the first phase of this building were 10·62 m × 3·20 m and its walls were on average 0·80 m thick. They consisted mainly of a double row of roughly dressed dolerite blocks, although a few of the more finely dressed sandstone facing stones were also incorporated. It is likely that the core of these walls had been packed with small stones, a type of construction used in the best preserved of all the medieval buildings, Building B Phase 2. Insufficient walling remained to confirm this however as no more than a single course survived *in situ.*

A number of shallow depressions (marked on the plan, fig. 8) indicated where the most severe later disturbance had taken place, and a series of these marked the course of the robbed south wall. The best preserved part of this building was the north wall, which partly overlay the rubble heaped to the south of the robbed north wall of the milecastle. This wall was set directly on to the rubble which consisted of irregular dolerite blocks derived from the core of the milecastle walls, and which had been rejected by the stone robbers.

Part of the west wall reused the only surviving fragment of walling to show at this level of one of the Roman buildings in the interior of the milecastle. Three dressed facing stones with a single outer facing stone formed the most northerly surviving fragment of a Roman building wall, and this became the foundation for the northern section of the west wall of the medieval building.

A short break 0·80 m wide in the north wall was probably the site of a narrow doorway; and if the apparent 1·20 m gap in the south wall was not the result of later stone robbing, it may have indicated the position of a second door opposite the northern one. Within the building was a short alignment of roughly dressed stones which butted against the centre of the north wall at right-angles to it, and which curved eastwards towards the site of what may have been a substantial stone partition dividing the building into two separate rooms. Unfortunately no convincing traces of such a partition survived the heavy robbing that had destroyed so much of the eastern part of this building. However an identical curving alignment was seen in Building B Phase 2 which butted against a central stone dividing wall, and it seems probable that this was similar to the partition in Phase 1 of Building A.

The site of a second partition may have been indicated by a single row of small stone fragments which ran from north to south immediately to the east of both doorways. These fragments seemed too insubstantial to have been part of the foundations of a partition, and it is suggested that they collected at the foot of a slight, perhaps timber, screen which rested directly on the earth floor of this building. It again proved impossible to identify any trace of timber settings or postholes within the fine dark soil, to confirm this. In the north-west corner of this western room were a number of closely set angular blocks laid on edge. These appear to have been the remains of a roughly paved surface which stopped just to the west of the north

door. Except for this small paved area, there was no evidence that the building had anything other than an earth floor.

There was also no sign of a hearth or indeed of any burnt stone within either phase of this building, nor of ash or charcoal deposits that would have been expected if the building had contained a hearth. Indeed identification of a floor level within either phase of this building proved impossible; partly as a result of the close similarity between the soils within and around this building, and partly because of the absence of hearths or ash deposits associated with it.

Building A Phase 2

In this phase the north wall again proved to be the best preserved, and this showed that the building had been rebuilt using the same constructional techniques and to approximately the same dimensions, although on a slightly different alignment. Again no more than a single course of its walls survived, and little remained of any internal features. The surviving east wall had a doorway 0·75 m wide at its southern end, and traces of what appeared to be an adjacent short partition or buttress projected at right-angles into the room on its north side. This did not seem to have been a structural feature and may just have been to reduce draughts. Outside the door a shallow earth-filled depression marked the line of the robbed east wall of the milecastle. This ran between Buildings B and C as far as an area of rough cobbling to the south-east of the milecastle site. This cobbling and other cobbled areas that were associated with the robbed milecastle walls seemed to have been the result of selective stone robbing. The cobbles were in fact the stones that had been left after the rough dolerite blocks from the wall core and the finer sandstone facing stones had been removed. This cobbling covered a low mound of mortar which had been carefully collected during the demolition of the east wall of the milecastle, probably during the 4th century.

Building B

After the abandonment of the milecastle at the end of the period of Roman occupation, a considerable depth of soil had built up over the site. Under the present climatic conditions this suggests that a considerable period of time elapsed before the site was reoccupied. Prior to the medieval occupation of the southern part of the site, a considerable amount of infilling took place over the steeply sloping roadway that had led to the south gate of the milecastle, to raise the ground level to that of the ruined buildings on either side. Here the build-up layer had consisted of a mixture of two distinct soils; a dark grey sandy silt loam (10YR 3/2) with patches of a lighter coloured fine sandy silt loam (10YR 3/3). These patches were the remains of turves which had been incorporated into the deposit and which had presumably come from the northern end of the site as it was being cleared and levelled before the construction of the first phase of the northern building (Building A). The date of this levelling was confirmed by the medieval finds that came from its upper levels.

On either side of this levelled area the remains of the Roman buildings could be

recognized, lying flush with the top of this build up. The northern end of the Roman path which had run to the narrowed south gate of the milecastle had been re-used where it showed above the new levelled surface. It formed the foundation for the east wall of the first phase of the southern building (Building B).

Building B Phase 1

A single row of carefully laid facing stones branched from the west side of this path to form the northern side of the building. The other walls do not appear to have been of the same quality, or perhaps they were more heavily robbed later. A rough alignment of stones resting directly on the rubble filled robber trench that had been cut along the remains of the south wall of the milecastle marked the course of the south and west walls of the building. The robber trench had been cut down to the foundations of the south gate of the milecastle and had followed the inner face of the remaining wall to the west. All but the lowest courses of the facing stones had been removed before the trench had been abandoned and filled in. Few facing stones can have been left exposed near the site of the milecastle by this time, if it was considered worthwhile to rob the buried remains of the milecastle walls. These walls had already been reduced to ground level during the Roman period of occupation, and the remaining stonework had been buried under rubble.

The site of a possible door in the west wall of the building was marked by a break in its west wall at the south end, although no evidence remained of any paving or an earth floor associated with it. Unfortunately the construction of a new building (Building B Phase 2) on the same site caused considerable damage not only to the earlier structure, but also to the related stratigraphy.

It is possible that these were the remains of a rather insubstantial and irregularly shaped roofed building with what must have been dangerously thin walls. Alternatively it may just have been a small open enclosure with low stone walls that was perhaps contemporary with the first phase of Building A. A third alternative is that these were the remains of a more primitive turf-walled structure, and that the surviving stonework represented the foundation for a broader turf wall, no trace of which survived (Beresford 1979, 110–17).

Building B Phase 2 (plate 8)

The outline of the second phase of this building was immediately visible after the topsoil had been removed, with the walls clearly showing amidst a small amount of tumbled stone. As in the other buildings, these walls consisted of a double row of larger dolerite blocks with a few re-used facing stones. Despite the use of the poorly dressed dolerite blocks, the inner and outer faces of the walls were surprisingly neat, and a core of small stones filled the gaps within the walls.

The walls varied in thickness between 0·60 m and 1·00 m and the internal dimensions of the building were 10·85 m × 3·60 m. The building was divided into two rooms by a stone partition constructed in a similar manner to the outer walls and abutting them. A single flat slab ran the full width of the middle of the partition, and this was interpreted as a sill stone marking the position of a narrow doorway

a. Building A, emerging during an early phase of the excavation in 1978. Looking north. Scale: 2 m.

b. Stone head (see below p. 99 no. 159).

between the two rooms. A crude path over the rubble of the robber trench over the south wall of the milecastle led to a narrow doorway 1·10 m wide in the south wall of this eastern room. On the inside of this was a roughly laid paved area stretching almost 1·00 m into the room, but there were no signs of similar paving or of cobbling elsewhere in the building.

Immediately to the west of this doorway lay a small curved setting of rough stonework which had been built against the walls in the south-west corner of the room. It consisted of a single row of stones enclosing a roughly circular area some 0·70 m in diameter. It was not clear whether the stones which rested against the adjacent walls had been deliberately placed, or had slipped on to the remains of the outer walls as the building decayed. A single rectangular slab lay horizontally in the centre of this room and may perhaps have served as the base for a timber roof support. It appeared to have been deliberately placed, and to have been found *in situ*.

It is just conceivable that extremely fragmentary remains of rough cobbling or paving could have been removed from this room when the rubble within the building was excavated. This rubble had been interpreted during excavation as the tumbled stone from the walls, but in the absence of clearly defined floor levels, it is possible that amongst the rubble were the remains of very rough, uneven and irregular areas of paving. If there had been a paved surface within this room it would have been about 0·25 m higher than the path leading out of the south door. The surface of the path was level with the base of the walls of the building on either side of the doorway. It seems most likely that the eastern room had an earth floor which was roughly level with both the wall footings and the path, even though this means that the central stone and the threshold of the door through the central partition were up to 0·25 m higher.

Despite careful excavation in the western room, no trace of a convincing floor level could be found here either. It was therefore impossible to be sure whether any of the structural remains of the earlier building, which lay directly below the walls, had been incorporated into the new floor to serve as foundations for partitions, or perhaps as rubble drains. After the tumbled stone had been removed from within this room, a narrow rubble alignment 0·55 m wide and 1·80 m long was revealed, running almost at right-angles to the north wall. The southern end of this feature petered out near to the doorway at the south end of the west wall, and the base of the alignment was level with the walls of the earlier building, except where it overlay its north wall. The rough quality of the stonework and the depth of the alignment in relation to the later walls, suggested that it should perhaps have been seen as a rubble soakaway rather than as the base of an internal partition. It would have been possible to re-use the remains of the east wall of the earlier building as an additional drain or soakaway running out below the south wall. If there had been an earth floor within this room with its surface lying flush with the top of the alignment and the east wall of the earlier building, it would have been approximately at the same height as the doorway through the central partition.

The slightly wider doorway leading out of this room at the west end (1·30 m), and the slightly poorer quality of the masonry used at this end of the building are

further hints that perhaps this end of the building was used as a byre. It had been thought that the slight difference in quality of the stonework was the result of this room having been added later to the rest of the building. On excavation however, it was found that the entire length of the north wall and the adjoining parts of the eastern and western walls of the building rested on a continuous foundation of closely packed small stones than ran the full length of the two rooms. The south wall, which did not have a similar foundation had settled slightly at its western end which rested directly on the back-filled robber trench over the robbed south wall of the milecastle. The special foundation under the north side of the building showed that it was thought necessary only to support the walls where they rested on the soil that had been built up to the east of the earlier building. It also confirmed that both rooms were built at the same time.

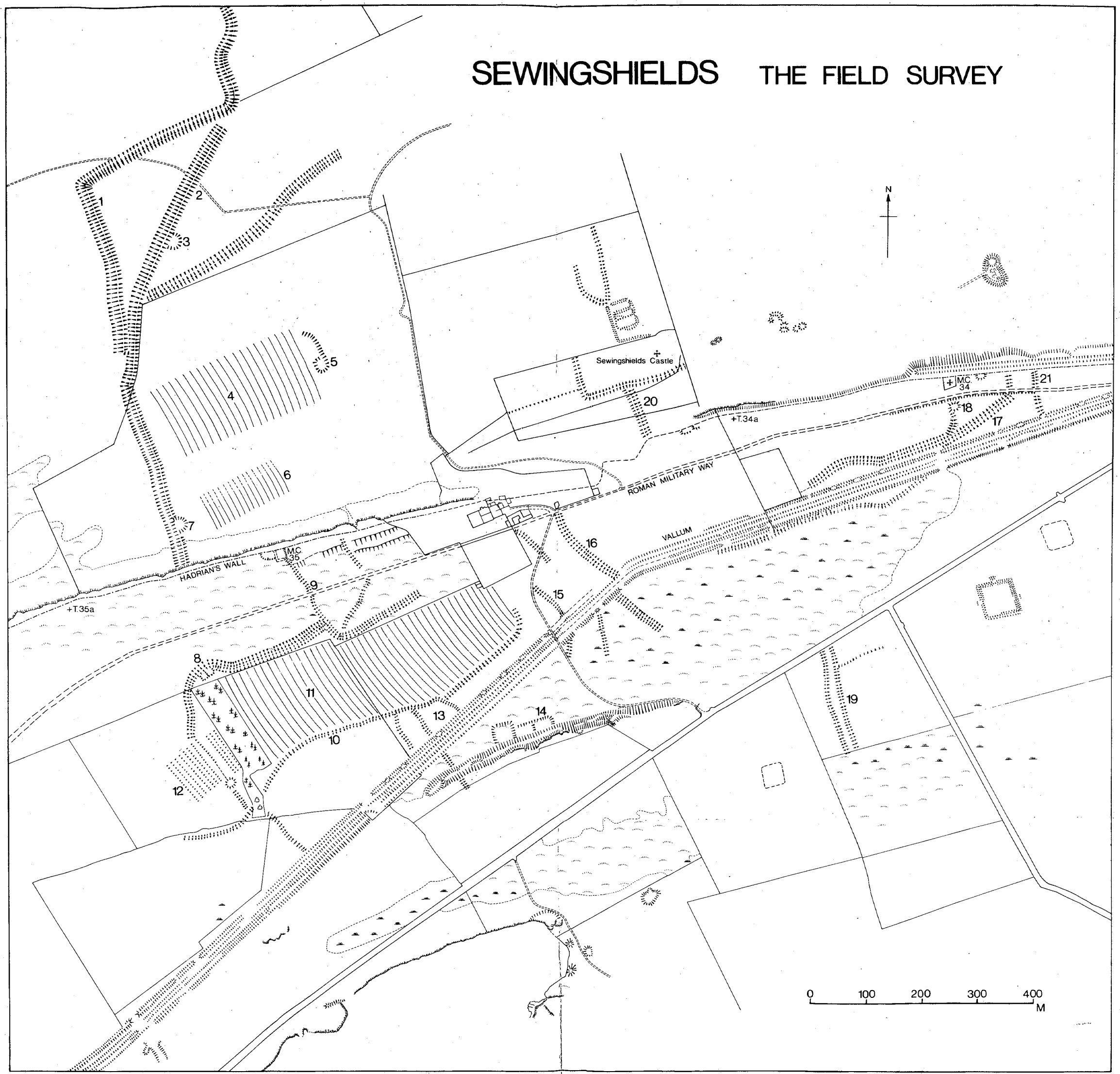
The rubble layer under the south wall of this building came from a late reworking of the medieval robber trench over the milecastle wall. The trench had first been opened prior to the construction of the first phase of this building, and the new rubble filling sealed not only the earlier back-filling and part of the south wall of the earlier building which rested on it, but also covered a beaten earth track that ran eastwards from its south-east corner. This later rubble deposit provided a level surface on the south side of the new building, and the path from its south door consisted of a single row of flat slabs set directly into the rubble. These slabs were mostly re-used facing stones laid adjacent to each other to form a narrow path which ran diagonally down the slope of the rubble towards the south-west corner of the site before turning sharply near the foot of the slope and running to the roughly cobbled area on the south-east of the milecastle south of Building C.

Immediately adjacent to the path and the south door was a small semi-circular structure 1·60 m × 1·85 m, which abutted the south wall of the east room and which rested directly on the rubble filled robber trench. This consisted of a roughly laid rubble wall one course high, and the interior of this room was filled with tightly packed rubble when first excavated. This rubble infill was presumed to be stone tumbled from the walls, and was excavated accordingly. It was noted that here the rubble was more densely packed than the rubble in the other rooms of the building, and was also different from the rubble filled robber trench below. This feature was initially thought to be an additional small room built on to the eastern room at a later date, and probably entered from outside. It would however be possible to interpret it as a semi-circular rubble-filled base for a hay or peat stack, conveniently placed on the sheltered side of the building just by the south door. A similar structure consisting of a single circle of stones 1·30 m in diameter lay to the north of the west end of this building, although the rubble core was less densely packed. The absence of an apparent entrance, and the rubble packing seems to suggest that this too was the base of another stack stand.

Building C

Interpretation of Building C was made more difficult by a series of robber trenches which had severely damaged its northern end. The building lay immediately to the

SEWINGSHIELDS THE FIELD SURVEY



east of the robbed east wall of the milecastle and to the south of Hadrian's Wall. A narrow trench 1 yard (0·91 m) wide ran eastwards from the line of the robbed east wall, and is probably part of an earlier excavation. The interpretation of this building rests upon the acceptance that this trench had completely removed the north wall of a third substantial building that was similar in size and layout to Building B Phase 2.

This building lay immediately below the turf line, and was filled with rubble from its collapsed walls, when it was first revealed. Part of the remaining section of the west wall had settled into the shallow depression that marked the course of the robbed east wall of the milecastle, and this was accidentally removed before its significance had been realized. The slightly odd alignment of the south and west walls seems to have been due to the fact that the building had partly slumped off the rubble foundation layer which had been used to level up the sloping hillside prior to its construction.

On excavation it appeared that the internal plan of the building was slightly irregular. It was divided into two unequal parts by a narrow stone partition formed from a single thickness of dressed stones. This survived only to a height of one course so that it was impossible to locate the doorway accurately. From the rest of the plan it would appear to have been at the eastern end, adjacent to the east wall. An irregular alignment of rubble ran the length of this southern room across the gently sloping floor and out through the southern doorway. This was interpreted as a drain, and if correct, it would suggest that this end of the building was used as a byre. In that case the series of narrow stone alignments at right-angles to the west wall of this room may mark the bases of separate stalls. Patches of small stone fragments and pebbles within the south end of this building are probably the last traces of a very worn and uneven cobbled surface formed from the rubble foundation layer that was laid down over the post Roman build-up of fine silty loam on the sloping hillside. This layer survived best at the north end of the building and was added to provide a roughly levelled surface for this building and for the adjacent building to the north.

In the centre of the lost northern wall of this building was a semi-circular feature consisting of an outer row of stones which were set on edge and radiating outwards from a central core of rubble. The external dimensions were 1·70 m × 1 m and this feature was exactly paralleled by a second structure that lay next to the north wall of Building A Phase 1. Both these features are smaller than the external stack stands, and have no close parallels. The tops of both could have been flush with the floors of the buildings they were associated with, and a medieval date seems likely. The feature associated with Building A has, however, been claimed to be the base for a ladder to the top of the north wall of the milecastle, and the close similarity between these two structures does imply that both have a similar function and date. Unfortunately in both cases the stratigraphy associated with these settings was disturbed, so that their exact relationship to the adjacent buildings cannot be proved. If indeed they are of medieval date, possible suggestions for their use include: bases for hearths, roughly paralleled elsewhere (Thomas 1959, 315–17; Jarrett 1970, 203–7) or more

likely that they were the stands for barrels which would have held milk or water (P. Leith, pers comm).

To the north-west of this building was a semi-circular feature similar in size to that on the south side of Building B Phase 2. This had an almost identical rubble packed base and was probably another stack stand. A circular rubble packed structure standing one course high to the north-east of this building was similar to that on the north side of Building B and was presumably also a stack stand. This feature was partly destroyed by the heavy stone robbing along the line of Hadrian's Wall here. This robbing left only fragmentary remains of what appeared to have been a second building at right-angles to Building C, that had been built in the shelter of Hadrian's Wall. This stood on a continuation of the same rubble foundation layer under Building C, and as this layer continued 5 m to the east of the last identifiable fragments of this structure, it was probably originally of identical size. So little of this building survived the later robbing that reconstruction of its plan is impossible.

Discussion

From the available archaeological evidence it can be seen that with the possible exception of Building B Phase 1, all the other buildings would fit quite happily into the longhouse tradition of house construction found in this area. Reconstruction of these buildings is therefore comparatively straightforward as they belong to a common building tradition that survived into the 19th century in Northumberland. From the volume of rubble associated with the second phase of Building B and with Building C, it is suggested that they had drystone walls that stood between 3 and 4 feet high. They would have had turf, or possibly thatched roofs supported by a rough timber framework resting on top of the walls. No evidence for the type of roofing has survived. Numerous examples of this type of building have been recorded in both Northumberland and Cumberland, although most appear to be later in date and few have been excavated (Dixon 1982, 18–19; Jarrett 1970, 186–226).

Conditions within these buildings have been graphically described by W. S. Gilly writing in 1841 as part of his campaign to bring to the attention of the government of the day the squalor that the agricultural labourers of Northumberland still had to endure (Gilly 1841, 14–19).

> "Of eighty-three tenements in Norham ... some of them mere hovels, ... In many, human beings and cows are littered together under the same roof. ... They are built of rubble or unhewn stone, loosely cemented; and from age, the badness of the materials, the walls look as if they would scarcely hold together. ... This earth floor ... is one of the causes to which Erasmus ascribed the frequent recurrence of epidemic sickness amongst the cottars of England, more than three hundred years ago. It is not only cold and wet, but contains the aggregate filth of years from the time of its first being used. ... for they are, as I have already called them, mere sheds. They have no byre for their cows, no sties for their pigs, no pumps or wells, nothing to promote cleanliness or comfort. The average size of these sheds is about 24′ by 16′. ... And in this space are crowded eight, ten and even twelve persons."

Only the first phase of Building B was constructed in a different manner. There was little tumbled stone from the walls of this building and there was only a single alignment of stones to mark the remains of the north, west and south walls. This may have been caused by the partial demolition and clearance of the building before the construction of Building B Phase 2. The difference in shape, with the curved west wall, suggested that the building may have had a different function. It has already been suggested that this building may have had turf walls set on to a narrow stone foundation, a type of construction found until recently amongst the shielings of the Western Isles (Gailey 1962, 222–42; Fairhurst 1967, 139–59; Fairhurst 1968–9, 166–7; Fenton 1978, 5–27). The ruins of turf buildings have also been noted by the RCHM in Tynedale, although none have as yet been excavated (Ramm, McDowall and Mercer 1970, 9–11).

The date of the finds from Sewingshields seems to confirm that the site was initially occupied during the 13th century, at a time when the documentary evidence suggests that the manor of Sewingshields was flourishing. These finds also confirm that the site was abandoned during the general decline of the area that resulted from the border raids of the 14th–16th centuries. It is impossible to be certain about the relative dates for the different phases of the buildings at Milecastle 35 within this period owing to the virtual absence of securely stratified medieval deposits. The distribution of both pottery and small finds, however, does imply that only one building was occupied during the 13th and the 15th centuries. It is also clear that the majority of the finds were associated with Building B Phase 2 and that in contrast, Building C was virtually sterile.

With the exception of two sherds, all the 13th century pottery was found around Building B Phase 1, and this seems to confirm the architectural evidence that this was the first medieval building on the site. In view of the constructional differences found in this phase of the building, it is unfortunate that neither the pottery nor the range of small finds provide any clear evidence for its function. The small finds included an iron and a silver finger ring (and no. 158), and an iron key of 13th-14th century date (fig. 14, no. 75). It is clear however from the position of the robber trench which damaged the south wall of this building, that it had been demolished by the time the trench was dug during the latter half of the 14th century.

The construction of the first phase of Building A has been tentatively dated to the end of the 13th century, and in the absence of later finds, it is assumed that the second phase of this building had gone out of use around the end of the 14th century. It is impossible to assign a date to the construction of the second phase of this building, nor to be certain which phase the various finds should be allocated to. The small finds included iron knives (fig. 14, nos. 65 and 58), an iron socket or collar (p. 84, no. 51) and a possible dung hook (fig. 15, no. 102). Several nails from this building are assumed to be from the timber framework supporting the turf or thatched roof, as their distribution does not seem to be related to the possible timber partition in the western room of the Phase 1 building.

From the limited pottery evidence, Building C was occupied during the 14th century;

and if the evidence of a single sherd of Langerwehe pottery is accepted, the building had been levelled by the early 15th century. Certainly the absence of nails and the suspiciously small amount of rubble found within the building when it was excavated suggests that it was either robbed or deliberately dismantled, perhaps to provide building material for Building B Phase 2, which was apparently constructed at about this time.

From the date of the finds sealed below the walls of Building B Phase 2, it is unlikely that this phase of the building was constructed much before the end of the 14th century and there is no evidence to suggest that occupation continued here after the early 15th century. Despite the apparent brevity of its use, there was an unusually large number of associated finds. These included strap and belt buckles, small knives and two swivel loops as well as fragments of several different types of jugs and bowls and at least one imported Langerwehe vessel. The finds from this phase of the building imply that it served a slightly different purpose from the earlier buildings of the site, and in view of the number of serious border raids in Tynedale during the early 15th century, it is possible that it was being used, at least occasionally as a look-out point by herdsmen taking advantage of the view from the crags. Certainly this was one of the recommended watching points in the survey of 1542 (Bowes and Ellerker in Hodgson, 228–9).

Further evidence for the close relationship between the buildings here and the manor of Sewingshields was provided by the field survey which was extended to include the network of enclosures and field boundaries which occur on both sides of Hadrian's Wall at this point. The field boundary which terminates at the south-eastern corner of the milecastle and the enclosure built against its west side during the medieval period are both part of this system. It is suggested in the report on this survey that the whole area between the line of the vallum and the line of Hadrian's Wall at Sewingshields was the field known as "the wall field", and that the buildings at Milecastle 35 were added when this field was acquired by the owners of the manor, or that they were added when the field system south of Hadrian's Wall was laid out.

It should of course be stressed that the suggested relationship between the buildings on the site of Milecastle 35 and the castle at Sewingshields is at the moment no more than an attractive hypothesis. It would be made more convincing if there were similar finds from the site of the castle itself. Unfortunately it is likely that the remains of the castle were severely damaged during the 19th century, and despite the report of an excavation seeking Arthurian gold, there are no recorded finds from the site (Richardson 1846, 41–6).

Sewingshields, the Field Survey (fig. 9)

During the initial planning of the excavation, it was envisaged that a survey of the earthworks associated with the two miles of Hadrian's Wall between Turret 33b and Turret 35b would have concentrated on a small area on either side of the milecastle. The occurrence of earthworks 200 m to the north of Milecastle 34 had already been noted by Professor Jobey (Jobey 1961, 96–7) and it was decided not to investigate

these further as they appeared to be of pre-Roman date. The initial survey, therefore, concentrated on the area between the vallum and the line of Hadrian's Wall where the vallum diverged from it to skirt round the foot of Sewingshields crag. It was hoped to locate the course of the military way here and see whether it followed the line of the vallum or ran parallel to Hadrian's Wall.

During 1978 it was realized that a number of slight earthworks survived here, and that some of these appeared to relate to the areas under excavation. They included two possible field terraces which ran parallel to, and just to the south of Hadrian's Wall, on the west side of Sewingshields Farm, and a possible field boundary marked by a bank and ditch which ran southwards from the south-east corner of Milecastle 35. It was therefore decided to extend the area covered by the survey in order to record the full extent of these earthworks and to ascertain their relationship to both the milecastle and the site of Sewingshields Castle on the north of Hadrian's Wall. It was also hoped to identify the section of linear earthwork of uncertain age and length which ran northwards from the foot of Sewingshields crag, known as the "Black" or "Scots" Dyke.

The field survey was combined with a study of the available air photographs for the area (from Cambridge University Department of air photography and Hunting Surveys Ltd) and the results were then checked on the ground in 1982. It revealed a complex pattern of field boundaries and small enclosures which seemed to be restricted to the area occupied by Sewingshields manor and these results are shown on figure 9 and are discussed below.

The field terraces and the military way

Terracing was discovered within the area between the vallum and Hadrian's Wall which was earlier than and cut by part of the medieval field system. The idea that these terraces might be of Roman date was strengthened by the unusual nature of the late Roman occupation of the nearby milecastle. It was therefore decided to cut a 5 m wide section through both of these terraces and to continue the section downhill to cut the possible line of the military way, in an attempt to define and date these features.

Removal of the turf at the northern end of the section (Trench II) showed that each of these terraces was defined by a low mound of rubble about 0·50 m high and 2·0 m. These were set 11·0 m apart on the edge of slight breaks in the sloping hillside. It is not clear whether these mounds were the collapsed remains of low dry-stone retaining walls, or were just mounds of stones cleared from the flatter areas of the hillside. On the north side of the mounds a thin layer of acidic, fine, sandy loam had collected to a depth of between 0·15 and 0·35 m. Beyond this, the ground rose more steeply and patches of bare rock were exposed directly below the turf. No evidence was found to show whether they had been cut deliberately. Only two terraces were noted here, and both were about 10 metres wide and ran approximately horizontally along the hillside for about 140 and 100 metres respectively. A second trench was opened in order to investigate the construction of the lower terrace in more detail. This trench (Trench IV), measured 10 m by 10 m and it confirmed that

some larger boulders were used in the mound of the lower terrace, but that their distribution was random. Three sherds of what may be late Roman pottery were recovered from the rubble within this trench and it is suggested, but is by no means certain, that the terracing is of this date.

The southern part of the section (Trench IIb) cut through the probable line of the military way. Removal of the recent metalling of what is now a farm track revealed that the original surface had been badly damaged and was completely eroded in many places. Irregularly shaped sandstone and dolerite blocks were set along the southern side of the 4 metre wide track, and these supported the metalled surface on the sloping and often marshy ground. These blocks were identical to those used in the construction of Hadrian's Wall. Little remained of the earlier road surfaces, and these remains were contaminated by the imported quarry chippings used to repair the track in the 19th century. It was therefore impossible to show that this was not just a modern farm track, and in view of the level of disturbance it was decided not to cut further sections through it. Lack of time prevented the road being traced from the south gate of Milecastle 35 to show where it joined the military way.

The "Black" or "Scots" Dyke

The evidence for this linear earthwork was described in detail by G. R. B. Spain (Spain 1922, 135–40). He suggested that a continuous bank and ditch of pre-Roman date ran from the South Tyne, northwards into lowland Scotland. According to his theory, it was constructed as a defence against the Roman invasion but had suffered so much from the ravages of time that only short, disconnected lengths remained. To prove this he cut sections through a number of the remaining fragments, one of them at Sewingshields. Here he noted that the earthwork ran from the foot of the crags, on the line of the present boundary, between the parishes of Simonburn and Henshaw. Some 200 yards to the north of Sewingshields crag, he says "the ditch is 6 feet deep and the mound well preserved". A drystone wall, probably of 19th century date marks the course of the parish boundary here, and is shown on Spain's published section, on top of the bank. No trace could be found of this earthwork during the field survey, although the drystone wall still stands. Neither is there any evidence to suggest that this, or any other length of manorial or parish boundary referred to by Spain, ever formed part of a prehistoric defensive earthwork. It is possible that Spain was confused by an impressive bank and ditch which formed the western boundary of the medieval field system at Sewingshields (fig. 9, nos. 1 and 2). This was clearly visible from the crest of Sewingshields crag as it ran northwards, parallel to but almost 300 metres eastward of the line of the parish and manorial boundary.

The field system

It is unfortunate that no documentary record survives of the precise boundaries of the manor of Sewingshields. Sufficient information is available, however, to enable them to be located approximately. On the west side of the manor, the boundary seems to have followed the line of the present parish boundary where it runs north-

wards from the foot of Sewingshields crags—just beyond the western edge of fig. 9 (Sanderson 1891, 53). To the north, the boundary seems to have run almost parallel to the line of Sewingshields crag, on the south side of Halleypike Lough, before following the course of the Crook Burn (Bain 1887, Vol. II, 88).

The course of the eastern boundary is recorded in more detail as it adjoined the lands of the vill of Carraw which was held by Hexham Abbey (Raine 1844, 15). It ran southwards from the Crook Burn to Hadrian's Wall to the east of Turret 33b. Originally the southern boundary of the manor seems to have followed the line of Hadrian's Wall, but by the 13th century an additional field of 160 acres had been rented on the south side. It is suggested that this field consisted of the area between the vallum and the line of Hadrian's Wall. The field system would have been added after the field was acquired by the manor at some time during the 13th century on the evidence of the pottery from the buildings at Milecastle 35. The accuracy of the medieval assessment is remarkable considering the difficulty of surveying this 172 acre area.

Within the bounds of the manor there was a remarkable unified system of arable and pasture areas which were separated by banked and ditched field boundaries. A number of small enclosures were found built against these, and it is probable that the buildings clustered at Milecastle 35 were not the only ones erected at the more distant corners of the manorial holding. The pattern of boundaries and of enclosures around Milecastle 34 may be sufficiently alike to imply that there were similar buildings there as well.

The earthworks are described briefly in numerical order, the numbered plan forms fig. 9.

1. This bank and rock-cut ditch formed the boundary of an extension to the field system here. The ditch was at least 3 m deep in places and up to 4 m wide, and the bank which was on its east side still survives up to 2 m high at the south end, where it joined the earlier boundary bank at right-angles. The junction between the two ditches has been enlarged by a shallow quarry, which was probably the source of some of the stone used in the 19th century field walls which follow the banks here. On the north side of the enclosed area the bank has been heavily eroded and the ditch has silted almost completely.
2. An earlier but almost identical bank and ditch which formed the original western boundary of the area of cultivated land at Sewingshields. This boundary continued northwards beyond the line of (1), however its course has been lost with the enlarging of Halleypike Lough during the 19th century. The size of these two earthworks would not only hinder the removal of livestock, but would also prevent deer from the huntlands getting into the fields. Neither of these boundaries seems to have followed the actual limits of the area of the estate, and it may be that the ground beyond these earthworks was used for rough grazing.
3. One of a number of almost identical sub-rectangular enclosures built against the boundary here. This consisted of a low bank about 0·50 m high and 1·0 m wide which enclosed an area which was 10 m × 9 m × 11 m internally. The bank was badly weathered and there was no sign of an entrance. Faint traces of an external

ditch could be seen. Presumably this was the source of the earth used in the bank. As with all these earthworks there was little evidence that stone was used in the banks other than as rubble within the core. Without excavation it is impossible to be sure of their function. They may have been small pens or shelters for animals, or may have been the sites of small buildings.

4. Traces remain of slightly sinuous ridge and furrow ploughing on the sides and crest of this ridge. It was impossible to define the full extent of the ploughing.
5. A slightly larger example of one of these enclosures which was 11 m × 21 m × 9 m internally, with a low, weathered bank and an external ditch. Again no trace of the entrance remained or of the bank running from this enclosure round the north side of the ploughed area.
6. A similar area of ridge and furrow ploughing on the crest and south slope of the first of these slight rises to the north of Sewingshields. The southern edge of the ridge and furrow and of what is possibly its boundary bank lies within the area of marshy ground at the foot of Sewingshields crag. There is also evidence that this marshy area was drained at least twice, almost certainly as part of the improvements carried out during the 19th century.
7. Another small enclosure 8 m × 7 m × 8 m internally and otherwise identical in form and construction to the others.
8. A bank and ditch marking the north and west sides of one of the ploughed fields on the south side of Hadrian's Wall. The bank survived to almost 0·70 m in places and the rock-cut ditch on the north side was about 1·20 m wide. This bank and a similar one to the east of the manor, (17) may have served as drains, as they seem to have been slightly more substantial than the other boundaries here with the exception of (1) and (2). The east end of this earthwork is lost, and a small enclosure is faintly discernible at the western end.
9. Two parallel and then converging banks with eastern ditches that run from the line of Hadrian's Wall and from the south-east of the milecastle respectively. It is possible that they formed an enclosure where animals could be kept at certain times of the year when they needed to be more closely watched. Perhaps enclosure on the west side of the milecastle was for the same purpose.
10. The bank and ditch boundary on the south side of the two fields of ridge and furrow on the south side of Hadrian's Wall. The eastern and western ends of this feature are lost, however it seems probable that it enclosed both the two fields (11) and (12). Several enclosures are formed by bank and ditch boundaries running between this boundary and the vallum to the south.
11. Traces of ridge and furrow occur within the area defined by boundaries (8) and (10).
12. An adjacent field of ridge and furrow separated from (11) by the slight remains of (8). The edges of this field are no longer discernible.
13. Low bank and ditch boundaries marking one large and two small enclosures on the north side of the vallum. They are almost certainly contemporary with the bank and ditch to the north (10).
14. One square and two rectangular enclosures on the south side of the vallum

which are built against a rocky outcrop. Unlike the other enclosures within the field system these are more regular and have virtually right-angled corners. One is 22 m × 21 m while the others are both 10 m × 18 m. It is possible that these are a different age from the other earthworks.

15. A group of short lengths of bank and ditch boundaries which have been damaged by the reconstruction of the modern road to Sewingshields Farm in the 19th century. It is unclear whether this road followed the course of the earlier road that crossed Hadrian's Wall and the line of the Whin Sill at Sewingshields (see 19).
16. A slightly sinuous bank with a shallow ditch on the west side which ran from the line of Hadrian's Wall to the vallum. The northern end of this was heavily damaged, but a short stretch still survives in the wood adjacent to the farm cottage. There is no sign of ridge and furrow on either side of it.
17. A bank with a rock-cut ditch on the north side which runs from the line of Hadrian's Wall towards, and then parallel to the vallum. It is possible that the southern end of this was largely for drainage purposes as there seems no other reason why it continued along the line of the vallum.
18. A bank with the ditch on the east side which ran from the south side of the site of Milecastle 34. There was a small oval or sub-rectangular enclosure on what appeared to be a specially levelled platform some 20 m to the south of it. It measured 8 m × 8 m internally and was heavily eroded.
19. The course of a hollow way has been noted from air photographs, towards Sewingshields. There is also evidence for an adjoining field boundary, and for what may be traces of ridge and furrow to the west. It is probable that this marks the course of the pre-enclosure road from the vill at Grindon. This was apparently an important road which ran from the crossing of the South Tyne at Haydon Bridge, northwards to the now deserted medieval village at Grindon, before crossing the Whin Sill at Sewingshields on its way to Wark and Bellingham in North Tynedale. The road seems to have gone out of use during the period of border unrest, but was still recorded as "the Great North Road" in the 19th century (NCRO, QRA. 24).
20. Little remains of the castle at Sewingshields which overlooked the crossing of the Whin Sill here. Probably little more than a large tower, it had been abandoned by 1542, and the remains were levelled during the 19th century. Only the fish ponds and traces of adjacent field boundaries are visible today. There are no recorded finds from the site.
21. This bank with its eastern ditch ran from the line of Hadrian's Wall to the vallum. It appears that this marks the eastern boundary of the field known as "the wall field" which was held on the south side of Hadrian's Wall. It was however less impressive than the western boundary of the manor.

Traces of further earthworks to the north of Sewingshields castle including some areas of ridge and furrow ploughing, were too faint to record.

Hadrian's Wall at Sewingshields (fig. 10)

As the uncovering of the curtain at Sewingshields presented a rare opportunity to

The Curtain approx. 180m. East of Milecastle 35

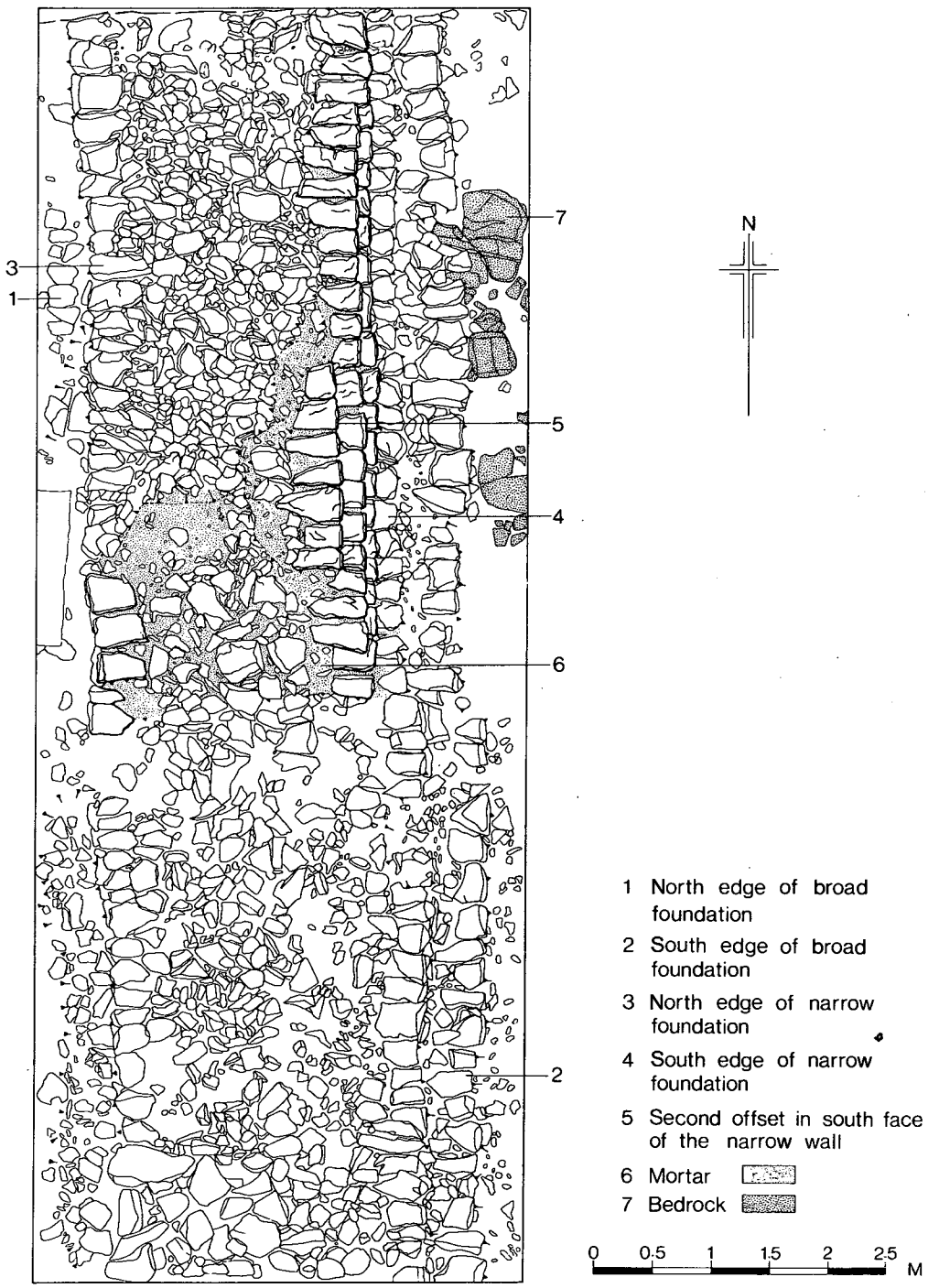


Fig. 10.

conduct a formal archaeological excavation, it was felt that great care should be taken to recognize any activity related to its construction or later history. It was decided, therefore, to excavate the curtain within a trench 10 m wide. This was to include the systematic investigation of the tumbled remains on each side of the surviving Wall. Practical difficulties, however, dictated that this method was maintained only for the first 50 m or so of curtain at the eastern end. Thereafter it was found less time-consuming to excavate short sections across the curtain to the standard of the control length and to remove quickly the tumbled remains in between with a machine, leaving the curtain within a cleared strip approximately 7 m wide.

During 1978 and 1979 a total of 245 m of curtain was excavated which, joined with lengths already uncovered, made 320 m stretching both east and west of the site of Milecastle 35.

Along most of this length foundations for the original Broad Wall still survived, although only the Narrow Wall was completed. These foundations protruded only to the south of those of the Narrow Wall, except at a single point at the eastern end of the length, where they spread to the north as well (fig. 10). When the narrow foundation was laid the stones of the earlier work were ignored, even though, where both were visible, the earlier foundation usually appeared more neat and regularly laid. The line of the Narrow Wall followed that of the earlier foundations except on the east side of the Cat Gate (a major fracture in the Whin Sill), where the narrow foundation was moved on to the southern edge of the earlier line to enable the fracture to be crossed more easily. The broad foundation was found on occasion to be up to 3·6 m wide, but its usual width was around 3·4 m. This contrasts with a range of widths between 2·6 and 3·0 m for the narrow foundation. The curtain was found to be partly of standard "A" type, with a single offset above the first course (Breeze and Dobson 1978, 58) and partly in short lengths of a narrower style, with a second offset above the second course of the south face. Below the offsets the curtain was on average 2·48 m wide. Above the first offset it was no more than 2·40 m wide and where a second offset was used the curtain above it was little more than 2·0 m wide.

The lengths of curtain with double and single offset alternate along Sewingshields Crags, and although no clear junction was excavated during 1978–9, previously exposed remains of the Wall to the west indicate simple, straight joints between the two styles. None of the curtain excavated in 1978–9 survived to a height of more than six courses of facing stones, but it was noticeable that the lengths of curtain with double offsets included a large proportion of facing stones with the long axis vertical rather than on the more common horizontal alignment. The few sherds of pottery found during the excavation of the curtain do not constitute sufficient evidence for any later building or repair work, but some local repairs may have been necessary to the curtain during the long period of its use, especially in such an exposed position as Sewingshields. There is no evidence at all for damage by enemy action which might have occasioned rebuilding. The presence of several sherds of medieval pottery indicates a date for the robbing of many of the facing stones at Sewingshields, but at the western end of the length exposed the mortar bonding the facing stones into

the wall core was so hard that the stone robbers were forced to remove the worked faces and leave the long tails of the facing stones in place. This helped to make clear the original method of construction of the curtain: after each course of facing stones had been laid, the core, consisting mainly of large, irregular dolerite blocks, was filled in and the whole generously bonded with mortar. None of these facing stones were recognized during the excavation of the medieval contexts on the site of Milecastle 35.

Where only the foundations of the curtain remained intact it was possible to examine the various methods of their construction. In one place a layer of heavy rubble almost a metre thick and bonded with clay was packed along the southern side of the foundation in order to provide a level base (plate VIb). Elsewhere the dolerite bedrock had to be smashed down or incorporated into the foundation. Mortar was used to bond the curtain itself but clay was used to bond the foundations and was sometimes spread in a thick layer over the foundation stones, sealing them completely.

On either side of the Cat Gate, a series of small stake-holes was found running immediately alongside the northern edge of the foundations. These could only have been sunk easily before the foundation was laid and it is therefore possible that they represent the marking out of the course of the curtain in difficult terrain. There is a local tradition (Daniels 1978, 136) that the Scots were able to creep under the Wall at the Cat Gate, but it is far more likely that it was continued right down to the base of the gully and up the other side.

THE SMALL OBJECTS

Lindsay Allason-Jones

It is almost impossible to compare the material from Sewingshields with that from any other milecastle as it is the only one which has been completely excavated. It is improbable however that Sewingshields is average: the quality and quantity of ironwork is particularly noticeable but there is no obvious explanation for this. Many metal-working hearths have been found on the site but no moulds, half-finished objects or wasters to indicate what was being manufactured. The largest proportion of material is weaponry, some broken, but there is no evidence that the weapons were being made or repaired on the site.

The Roman objects are predominantly military in character and although found largely in 4th century contexts are of 2nd–3rd century date. Nothing of demonstrably 4th century date has been recovered.

The medieval material is of high quality suggesting that the site was more than a mere shieling. All the medieval material that can be dated is of the 13th–14th centuries. There is no material attributable to the period between the 4th and the 13th centuries, nor is there any material datable to the post-medieval period until the 19th century when it is likely that visiting antiquarians were responsible for the litter. This argues against continuous occupation.

The medieval finds are mostly from the second phase of Building B. Material from Building A is solely related to its construction. As with the Roman deposits the bulk of the finds consist of recognizable objects rather than rubbish but it is to be expected that any rubbish would be disposed of over the cliff to the north of the site.

BRONZE

1. Bronze Brooch. L:49 mm, W of head:21 mm, W of foot:8 mm, Total H:18 mm from pin to bow (fig. 11).
   Knee brooch of leaded bronze. The hollow bow is facetted and narrows to flare elegantly into a semicircular foot. The foot is decorated with an incised marginal line and a series of notches, the latter being reflected around the edge of the fan-shaped head. The catch-plate is broken and the pin is missing. Fragments of an iron spring are held by the one remaining perforated lug.
   This is an unusually elegant example of the knee brooch type which is regarded as the typical brooch of the German Limes in the later 2nd century. Examples from Segontium (Wheeler 1924, fig. 7, no. 1) and Corbridge (Foster and Knowles 1911, fig. 24) have facetted bows and fan-shaped heads but lack the notched decoration and the semi-circular foot. SS/80/V/415.355 Context 4th century.
2. Bronze Brooch. D:36 mm, T of plate:0·5 mm (fig. 11)
   Bronze disc brooch with an incomplete hinged pin held between two perforated lugs by a bronze rivet. The catch-plate and the lugs have been cast in one with the disc and have not been rivetted on. The turnover of the catch-plate is missing. A small lump of lead/tin alloy in the upper face suggests that the brooch has had a decorative plate soldered on.
   The most common design on similar brooches found in the Hadrian's Wall area is a repouséed, gilded silver plate with a swirling, curvilinear triskele motif contained in a beaded border. Examples are known from South Shields, Coventina's Well, Vindolanda and Chesters (Allason-Jones in Miket 1983, no. 50) as well as at Corbridge (Knowles and Forster 1909, 406, fig. 22).
   SS/80/V/481.409
3. Bronze Chape. H:39 mm, W:46 mm, Total T:9 mm (fig. 11).
   Incomplete, bronze, pelta-shaped chape with the decorative edges emphasized by chip carving. The back-plate has a small, centrally placed square hole roughly pierced through.
   See Allason-Jones and Miket 1984, 3.401 for British parallels and Oldenstein 1976, 112 ff., for examples from the German Limes. SS/80/V/551.696
4. Bronze Belt-Chape. L:24 mm, W:13–19 mm, T:2–6 mm (fig. 11).
   Rectangular bronze strap-end or belt-chape, heavily silvered on both faces and incised with an angular letter **P** with chevron motifs all round. The face has bevelled long edges and transverse grooves across the narrow broken terminal. The open end still holds traces of leather held in place by two circular-sectioned iron rivets.
   Complete examples with similar decoration from London and elsewhere are described by J. B. Ward-Perkins (Ward-Perkins 1939, 197–9). On evidence from

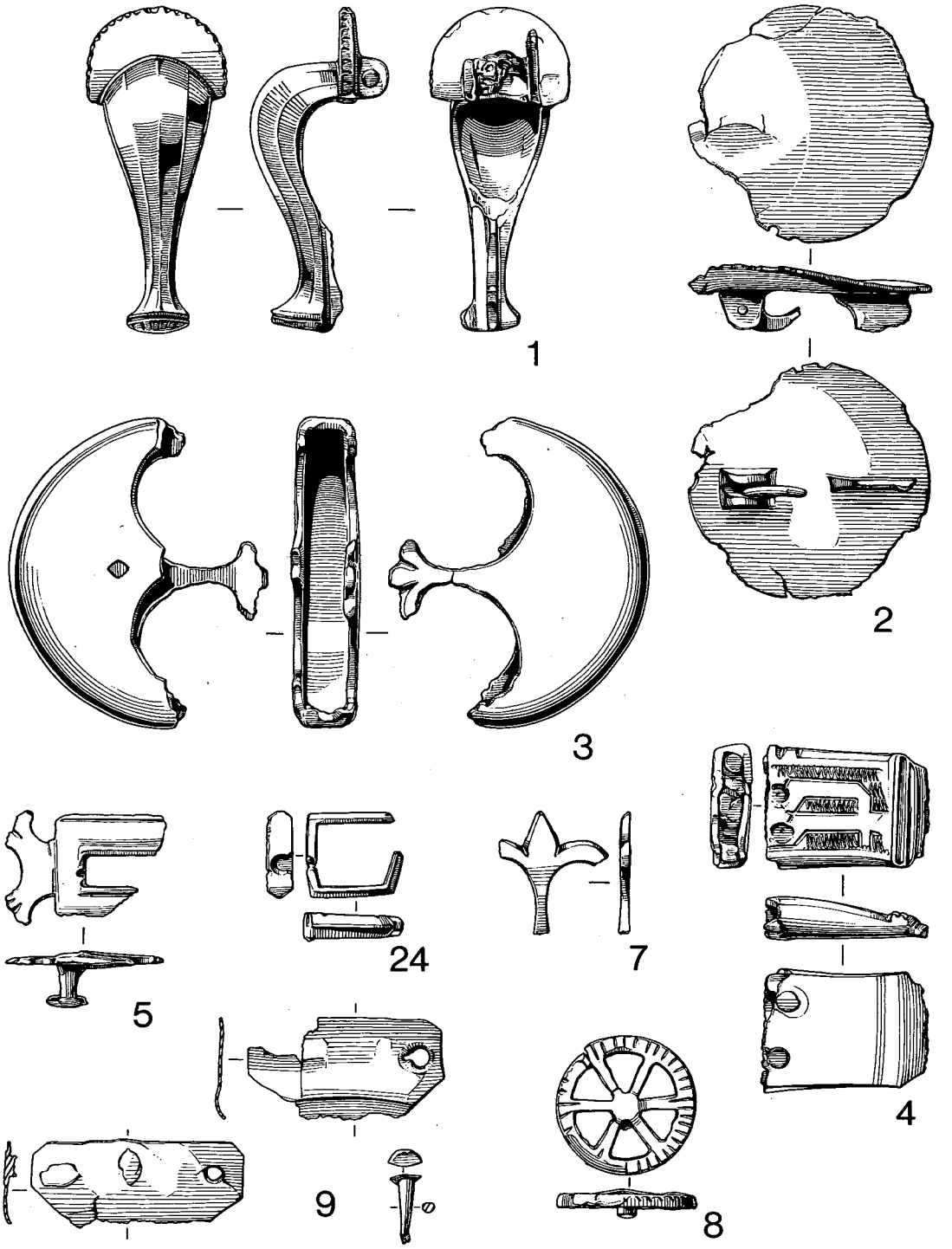


Fig. 11. (1:2)

monumental brasses, Ward-Perkins suggests that this type of belt-chape was in fashion between the years 1390 and 1410. SS/78/V/065.7

5. Bronze Belt-Plate. Surviving L:24 mm, W:15 mm, Total T:8 mm (fig. 11).
Fragment of a bronze rectangular belt-plate. The central open rectangle has a raised lip. From one end there is a projection whose decorative edges are emphasized by chip-carving. A disc-headed shank projects from the reverse.

A similar plate is known from South Shields (Allason-Jones and Miket 1984, 3.632) whilst a series of plates was found in a late 2nd century context in the recent excavations at South Shields (Allason-Jones in Miket 1983, no. 97). Oldenstein has dated plates found on the German Limes from the last third of the 2nd century to the first half of the 3rd century A.D. (Oldenstein 1976, nos. 780–3). SS/80/V/465.552

6. Copper Alloy Buckle. L:48 mm, W:46 mm, T:5 mm.
Copper alloy belt buckle of a double D shape with heavy cabling along the upper face of the outer shank. The central bar is plain and of subrectangular section. The outer shank is of hemispherical section. The whole has been plated with tin. Post-medieval. SS/78/V/059.5 Post-Building B, Phase 2.

7. Bronze Openwork Plate. L:18 mm, T:1 mm (fig. 11).
Fragment of a flat bronze openwork plate with the decorative shape emphasized by chip carving on one face. SS/80/V/466.707

8. Bronze Stud. D:20 mm, T. of wheel:3 mm (fig. 11).
Bronze stud with a circular openwork face cut to look like a six-spoked wheel. The rim is decorated with incised nicks four of which project down the "spokes". The "hub" is raised slightly above the rim. A rectangular-sectioned shank projects from the back and immediately turns at a right angle. The stud may therefore be the face from a button-and-loop fastener, cf.: Wild 1970, Type V.

Small bronze wheels, as models, brooches, studs or necklaces, have been found throughout Roman Britain and Gaul and are usually associated with the Celtic god Taranis. The god himself is shown on a baked clay mould from Corbridge (Green 1978, pl. 52), and "wheels" have also been found at Housesteads (Green 1978, pl. 47) and Corbridge (Green 1978, pl. 46) as well as at Sewingshields Turret (Woodfield 1965, 155). A stone mould for making wheel-shaped objects found at Gateshead (Green 1978, p. 19) suggests that the Sewingshields stud may be a local product. SS/80/V/478.682

9. Bronze Plates. L:30 mm, 24 mm, T:0·5 mm, L. of rivets:9 mm (fig. 11).
Two rectangular bronze plates with the corners cut across, two more generously than the others. One plate is pierced by three disc-headed bronze rivets made from rolled bronze sheets. The second plate is incomplete and has only one rivet hole. Fragments of oak are still attached to the plates suggesting that they are box fittings rather than armour or harness mounts. SS/80/V/506.461

10. Bronze Disc. D:36 mm, T:0·5 mm.
Thin, undecorated bronze disc found in a metal-working hearth. SS/82/V/.801

11. Bronze Openwork. L:25 mm, T:1 mm.

Fragment of a bronze openwork mount.
2nd-3rd century A.D. SS/80/V/545.693

12. Bronze Stud. D. of head:20 mm, Total H:26 mm, W. of shanks:8 mm, T. of shank:2 mm (fig. 12).
Bronze, hollow domed stud with a rectangular-sectioned shank pierced at the end by a circular hole (4 mm diam.). Two grooves run from the hole to the head. Cf. South Shields: Allason-Jones and Miket 1984, 3.937. SS/80/V/553.712
Context first half of 3rd century.
13. Bronze Stud. D:36 mm, H:26 mm (fig. 12).
Large, bronze bell-shaped stud with a wide skirt which is decorated with one incised marginal line on the upper face and two underneath. The incomplete, rectangular-sectioned, bronze shank has been cast in one with the head. The various suggestions as to the purpose served by these studs are discussed in Allason-Jones and Miket 1984 (3.889 ff.). Recent discoveries at Piercebridge (unpubl.) have made their use as doorstuds or drawer handles highly improbable. SS/80/V/037.70 Building B Phase 2.
14. Bronze Stud. D:23 mm, Total H:34 mm (fig. 12).
Bronze bell-shaped stud—much squatter than the previous example and lacking the decoration. The rectangular-sectioned bronze shank has been cast in one with the head. SS/80/V/484.558
15. Bronze and Iron Stud. D:25 mm, Total H:18 mm (fig. 12).
Iron stud with a disc head and a square-sectioned tapering shank. A slightly domed bronze disc is attached to the head by lead solder. There are traces of wood on the shank and the organic remains found on the face proved to be grass seeds (inf. AM Lab.). SS/80/V/400.297
16. Bronze and Iron Stud. D:29 mm.
Iron stud with a disc head and a square-sectioned shank. A bronze disc is attached to the head by lead solder. SS/80/V/465.677
17. Bronze and Iron Stud. D:23 mm.
Bronze disc stud head caulked to an iron shank by lead. SS/79/V/269.218
18. Bronze Dome. D:18 mm, Total H:9 mm (fig. 12).
Hollow bronze dome. A loop passes through a central hole with the ends folded back and held by a small rectangular bronze plate (6 × 5 mm). Similar bosses are to be seen on helmets of Imperial-Italic Type H attaching the helmet handle to the neck flange (Robinson 1975, pls. 179, 182, 186). SS/79/VIII/005.2
19. Bronze Rod. L:24 mm, Max. T:10·5 mm (fig. 12).
Circular-sectioned bronze rod with a knobbed terminal and four horizontal ribs. At the base of the rod there is a small hole suggesting that this is the end of a knife handle or a medical instrument, cf.: Milne 1907, pl. XLIII, Naples Museum. SS/80/V/453.357
20. Bronze Terminal. L:13 mm, T:4·5 mm.
Bronze rod of rectangular section with a bulbous terminal. SS/80/V/545.693
21. Bronze Pin. L:12 mm, Max. T:5·5 mm (fig. 12).
Fragment of a circular-sectioned bronze pin? The double disc head sits on a

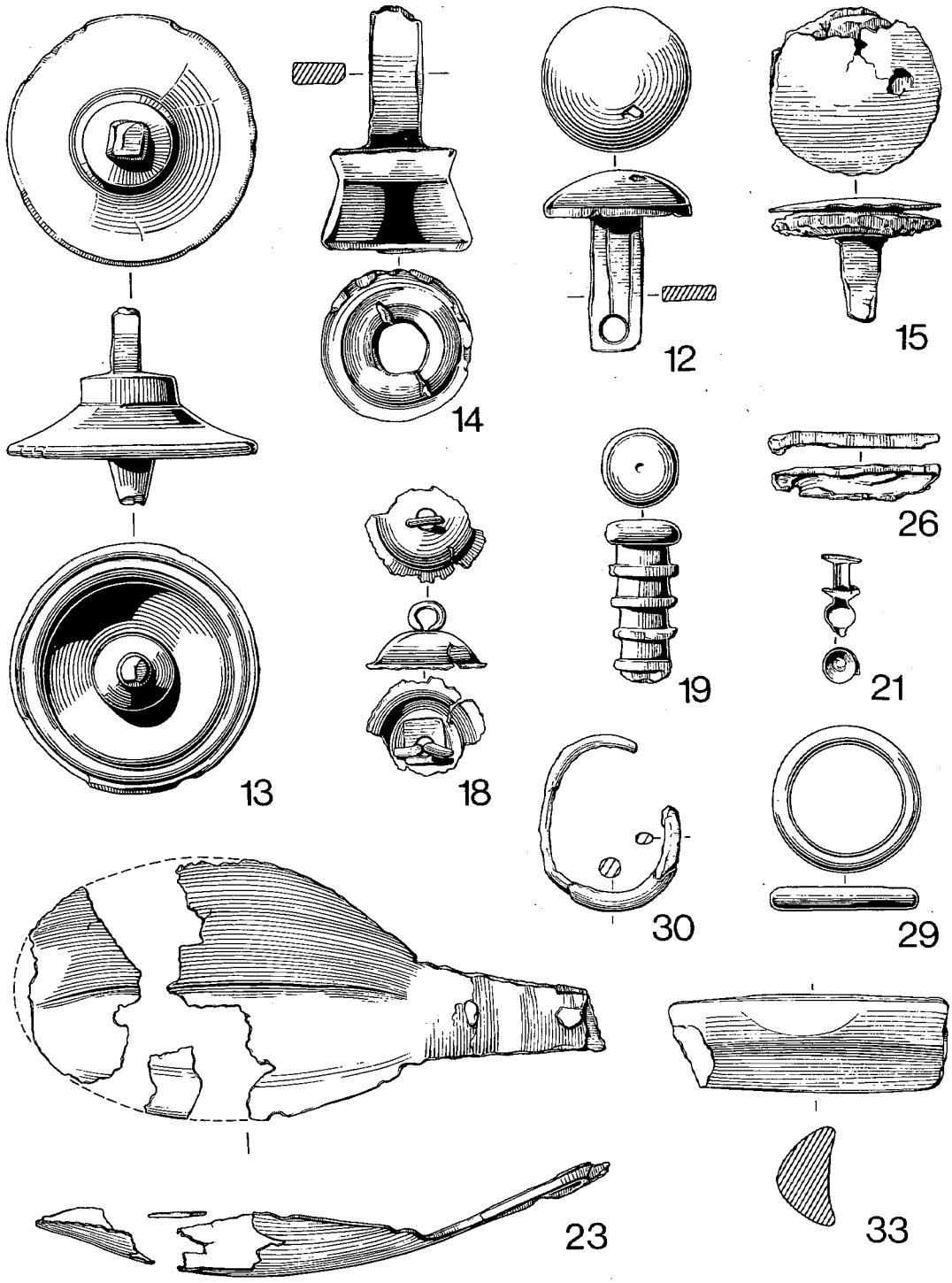


Fig. 12. (1:2)

globular neck. The head is roughly finished when compared to the neck suggesting that it was intended to hold some other material in position and would be hidden. SS/80/V/484.651

22. Bronze Pin. D of head:9 mm, D of shank:4 mm.
Globular head of a bronze pin which has had a circular-sectioned shank. Kenyon 1948, Type C1. SS/80/V/484.652 Context 4th century.
23. Bronze Spoon. Surviving L:65 mm, W:38 mm (fig. 12).
Bronze spoon with a large, shallow, oval bowl. The flat shank has been attached to a flat iron handle by two disc-headed bronze rivets. The spoon has white metal plating which stops part of the way up the shank suggesting that it has been applied by dipping.
Medieval. SS/80/V/475.385
24. Bronze Loop. L:14 mm, W:13 mm, T:3·5 mm (fig. 11).
Open bronze square with three triangular-sectioned shanks. The fourth shank is flat and is pierced off-centre by a countersunk hole of 2 mm diam. Probably a swivel loop. SS/78/V/059.9
25. Bronze Tack. L:16 mm, Max. W:3·5 mm, T:2 mm.
Short, rectangular-sectioned tapering rod. Fragment of tack? SS/80/V/414.322
26. Bronze Strip. L:24 mm, Max. W:5 mm, T:2·5 mm (fig. 12).
Tapering bronze strip with raised broken sides and three incised lines along one edge. Possibly half of a rectangular sectioned tube. SS/80/V/469.675
27. Bronze Ring. D:50 mm.
Fragment of a bronze ring of circular section. SS/78/V/040.66 Building B, Phase 2.
28. Bronze Ring. D:30 mm, W:4 mm, T:4 mm.
Annular bronze ring of circular section worn in two opposing areas. SS/80/V/450.362 Context 4th century.
29. Bronze Ring. D:21 mm, W:3 mm, T:3 mm (fig. 13).
Annular bronze ring of sub-oval section. SS/80/V/478.509
30. Bronze Ring. D:23 mm, W:3 mm, T:3 mm (fig. 13).
Penannular bronze ring of circular section. Incomplete and much corroded. SS/80/V/478.685
31. Bronze Strip. L:33 mm, W:9 mm, T:1·5 mm.
Curved bronze strip with rounded ends, possibly pierced by a rivet at each end. SS/80/V/458.414

LEATHER

32. Fragment of leather which retains only one original curved edge. The fragment is too distorted to be measured accurately. There are no holes for sewing. SS/78/V/16.2.

GLASS OBJECTS

33. Glass Armlet. Internal diameter:65 mm, W:7 mm, T:7 mm (fig. 12).

Fragment of an armlet of opaque white glass with a bluish tinge. The armlet is of triangular section with a slightly concave inner face.

Kilbride-Jones (1938a) Type 3A. Local examples of Type 3A armlets include those from Housesteads (Bosanquet 1904) and Milking Gap (Kilbride-Jones 1938b). The settlement at Milking Gap has been dated from A.D. 122 to 180 with the most intensive occupation from A.D. 122 to 150. SS/80/V/545

34. Glass Bead. Surviving L:7 mm.
Small fragment of an opaque green glass, globular bead.

Guido classifies this type of bead as Group 7iii and states that, although many of this type of bead comes from post-Roman contexts, the majority can be dated to the third century or later (Guido 1978, 70, 168). SS/80/V/476.462.

35. Glass Counter. Surviving L:17 mm, Max. W:15 mm, T:6 mm.
Incomplete, black, opaque glass counter, bun-shaped but oval rather than circular. Similar counters have been found at South Shields (Allason-Jones and Miket, 1984, 4.11) and Corbridge (Daniels 1968, 119). SS/80/V/483.443

36. Glass Counter. D:16 mm, T:6 mm.
Circular, bun-shaped counter of black, opaque glass, similar to above. SS/80/V/481.498

IRON

37. Iron Finger Ring. D:24 mm, Intaglio:10 × 8 mm (fig. 13).
Iron finger ring of Henig's (1974) Type XII, holding an oval blue glass paste intaglio. The intaglio has a flat face and a bevelled edge and is incised with a standing figure facing to his left, holding a staff or a spear in his right hand and extending his left. He is flanked by legionary standards which curve to fit the oval shape of the intaglio. The ground level is indicated by a single line.

The figure may be intended to represent Jupiter, cf. Little Brickhill: Henig 1974, no. 15, but on coin reverses male figures between legionary standards are interpreted as emperors, e.g.: Mattingly and Sydenham 1938, vol. IV, part II, pl. I, no. 20 (Diadumenius), pl. X, no. 1 (Maximinus I).

The ring is incomplete but the intaglio is in good condition with deep schematic carving. Late 2nd–early 3rd century. SS/80/V/478.624

38. Iron Finger Ring. D. of ring: 22 mm, Bezel:18 × 14 mm (fig. 13).
Large, incomplete iron finger ring with a raised bezel to hold an oval inset now missing. The walls of the bezel slope inwards and there is a roughly circular projection in the centre to key the stone into position. Medieval. SS/80/V/409.304

39. Iron Spearhead. L:370 mm, Max. W:98 mm, D. of socket:22 mm (fig. 13).
Large iron spearhead with a narrow blade which expands markedly at its base. The split socket still contains some fragments of wood.

This is an unusual type and Manning has suggested that comparable spearheads from Chesters (e.g. Chesters Museum No. 1603A unpub.) are of such an exaggerated form that they cannot have been functional (1976, p. 19). The silver standard tip from Caerleon can be seen as an extreme version of this type

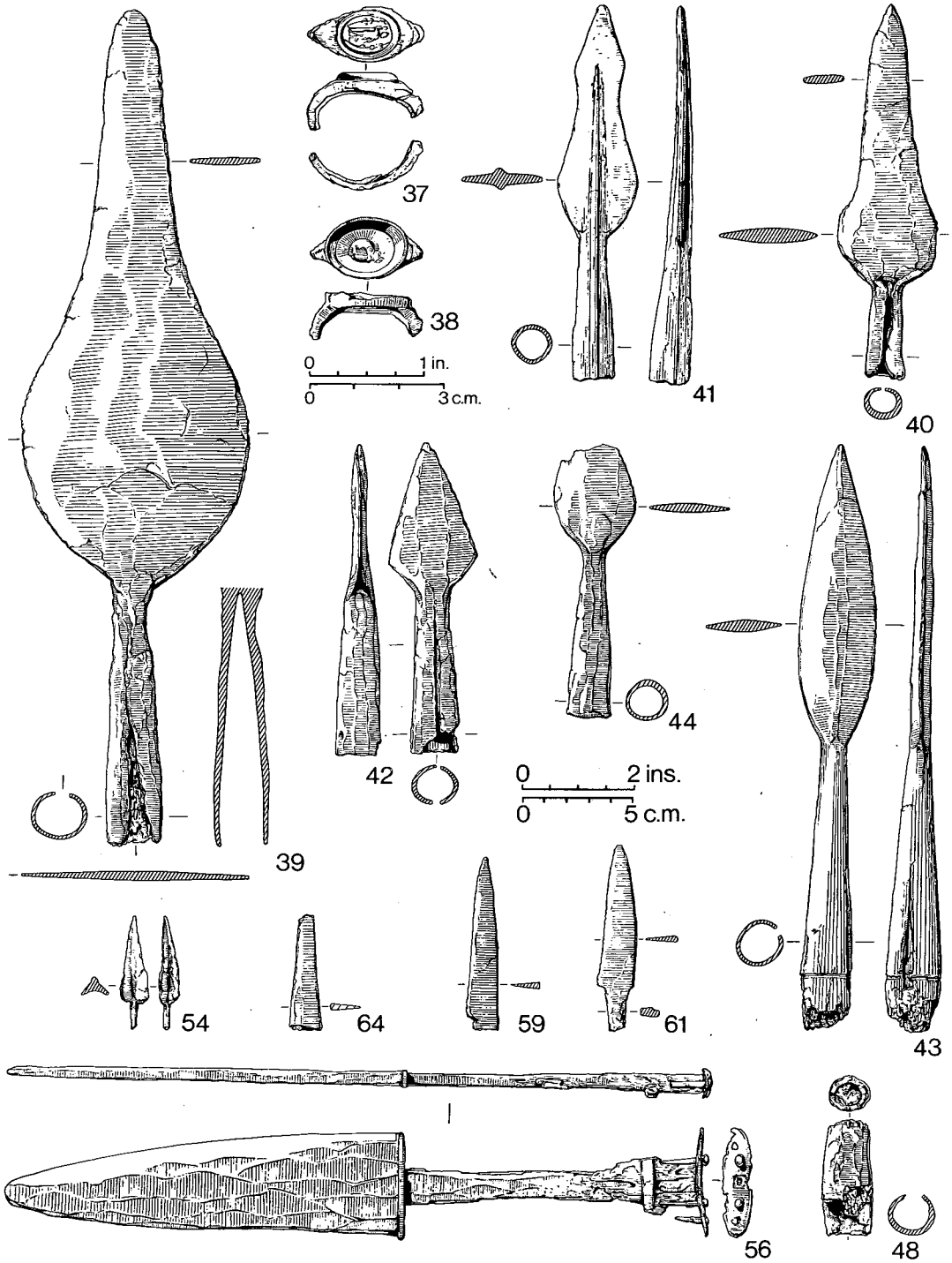


Fig. 13. (1:3)

and Boon in his discussion suggests that it is the tip of a legionary *signum* or possibly the head of the wand-of-office of a *beneficarius* or other senior officer (Boon 1972, p. 67). SS/79/V/269.208

40. Iron Spearhead. L:167 mm, D. of socket: 16 mm, W. of blade:44 mm (fig. 13)
Iron spearhead with a narrow blade which expands at its base. The socket is split. This is a smaller, less exaggerated version of 39 above. Several examples are known from Chesters (Chesters Museum nos. 1669, 1654, 1642, 1628, 1630; unpubl.) and Vindolanda (inf. P. Bidwell), Cf.: Manning 1976, nos. 16–18. SS/80/V/466.724

41. Iron Spearhead. L:167 mm, Max. W:36mm, D. of socket:17 mm (fig. 13).
Iron spearhead with a circular-sectioned socket which is neither split nor pierced by a rivet. A tapering rib runs up the centre of both sides of the blade but stops 30 mm short of the tip. The edges of the blade taper from a marked shoulder at the base but then expand again at the end of the central rib before tapering sharply to the point.

Similar spearheads are known from Vindolanda (inf. P. Bidwell) and Richborough (Bushe-Fox 1949, pl. LVIII, no. 279) but none of these examples has the mid-ribbing. See also Stockstadt: *Obergermanische Raetische Limes* 33, Taf. IX, no. 26. SS/80/V/484.649

42. Iron Spearhead. L:138 mm, W. of blade:38 mm, D. of socket:19 mm (fig. 13).
Angular iron spearhead whose split socket is longer than the head. The edges are straight and the blade angle is low and obtuse. The socket is pierced by a 3 mm diam. circular hole.
Cf.: Unknown Provenance: Manning 1976, no. 11. SS/79/V/260.222

43. Iron Spearhead. L:259 mm, W. of blade:35 mm, Max. D. of socket:22 mm (fig. 13).
Long leaf-shaped iron spearhead with a split socket which still holds part of the wooden shaft. The wood is close-grained and suggestive of hickory. This is the type of spearhead which was in common use in the Roman army after the 1st century A.D. Manning has suggested that they are more likely to have been used in hand-fighting or by the cavalry rather than as throwing spears (Manning 1976, p. 18).
Cf.: Housesteads: Manning 1976, no. 1.
Newstead: Curle 1911, pl. XXXVII, no. 1.
There are also several unpublished examples from Corbridge and Chesters in the site museums. SS/80/V/561.740

44. Iron Spearhead. Surviving L:122 mm, W. of blade:36 mm, D. of socket:19 mm (fig. 13).
Incomplete leaf-shaped iron spearhead of a similar type to 43 above. The socket is of circular section and is neither split nor pierced.

This spearhead was found with a tiny rim fragment of a Central Gaulish samian vessel (Dr. 18/31R) of Hadrianic or early Antonine date attached to it. (Identified by Dr. K. Greene and J. N. Dore.) SS/82/V/570.1002

45. Iron Spearhead. L:144 mm, D. of socket:17 mm.
Short, leaf-shaped iron spearhead with a split socket. Very corroded. SS/80/V/484.438 Context 4th century.
46. Iron Spearhead. Surviving L:53 mm.
Point from a leaf-shaped (?) iron spearhead. SS/80/V/478.686 Context 4th century.
47. Iron Bolthead. L:71 mm, Max. T:12 mm (fig. 14).
Iron artillery bolt-head with a square-sectioned head. The socket is split and merges with the head without any noticeable shoulder. This is a common type in the military zone.
Baatz 1966, Type 1.
See Manning 1976, pp. 21–2 for discussion as to purpose and dating and for parallels. SS/80/V/472.449
48. Iron Socket. L:48 mm, D:21 mm (fig. 14)
Incomplete iron ferrule or socket from a spearhead or artillery bolt. Fragments of the ash shank are still in position. SS/79/V/214.149
49. Iron Socket. L:25 mm.
Incomplete, split iron socket with a splayed end. SS/80/V/403.344
50. Iron Socket. L:53 mm.
Circular-sectioned iron socket from an artillery bolt or arrowhead. The socket is neither split nor pierced. SS/78/V/142.91
51. Iron Socket. L:80 mm.
Very corroded iron socket from a spearhead or an artillery bolt. SS/78/V/035.59
52. Iron Ferrule. L:43 mm.
Circular-sectioned iron ferrule. The ferrule is very corroded but X-rays reveal what appear to be two circular nails hammered through one above the other. SS/78/V/115.101 Building B, Phase 2.
53. Iron Ferrule. L:100 mm, D. of socket: 20 mm (fig. 14).
Complete iron ferrule of circular section tapering to a point. Fragments of wood survive but these are too small for identification. SS/80/V/489.446
54. Iron Arrowhead. L:52 mm (fig. 13)
Triple-ribbed iron arrowhead with symmetrically placed ribs and a short square-sectioned tang.
This is a common type of Roman arrowhead and appears to have been used throughout the period.
Cf.: Housesteads: Manning 1976, no. 36.
Newstead: Curle 1911, pl. XXXVIII, nos. 1–7. SS/79/V/136.124
55. Iron Arrowhead. Surviving L:28 mm.
Fragment of a triple-ribbed iron arrowhead similar to 54 above. SS/78/V/152.92
56. Iron Dagger. L:305 mm, W. of blade:45 mm, L. of plate:48 mm (fig. 13).
Complete iron dagger with a short triangular blade and a tapering rectangular-sectioned tang. Fragments of the wooden handle survive.

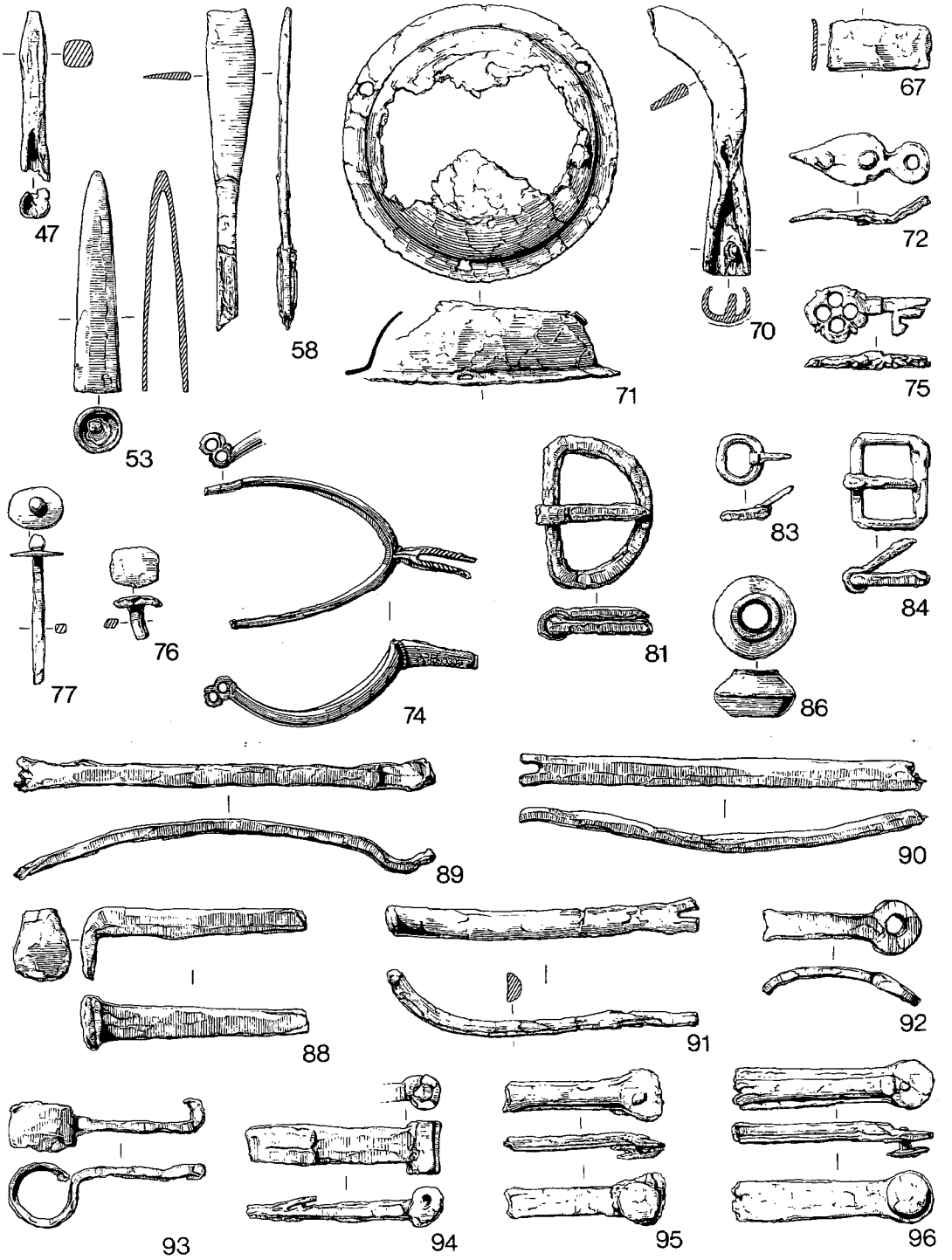


Fig. 14. (1:3)

The iron tang pierces an elliptical bronze end-plate through a square hole and additional security is provided by four globular-headed bronze nails which run through the end plate and 25 mm down the handle. An iron band, 5 mm deep, runs around the handle 22 mm from the end—presumably to stop the handle splitting from the pressure of the nails. The end-plate is of a type unknown in the Hadrian's Wall area.

The edges of the blade are slightly curved suggesting that it is a less exaggerated but similar type to that found at Hod Hill (Brailsford 1962, fig. 12, B2, p. 5). However there is no indication that the Sewingshields handle was in two sections.

Traces of wood on the blade imply that the dagger was lost with its scabbard although no chape or binding were discovered.

(The dagger had not emerged from conservation when this report was prepared for publication. Several details were therefore not available for comment.) SS/80/V/478.647

57. Iron Blade. L:195 mm, Max. W:68 mm, T:1.5 mm.
Large flat triangular iron blade with curved edges which taper markedly from a shoulder 30 mm to the point. Two pieces have been cut from the base to form a wide tang. It is difficult to see what purpose this could have served—it is too thin to be a spearhead and has no cutting edge. It is possible that it is a larger edition of the lock hasp from Barrow Mead (Goodall, I.H., in Crossley 1981, fig. 57.8). SS/80/V/478.647
58. Iron Knife. L:142 mm, Max. W:22 mm (fig. 14).
Iron knife with a straight cutting edge and a curved back. The blade and the long slim tang are separated by a curved lip on both sides. Enough fragments of the two-piece wooden handle survive to suggest that it was covered with stamped dot-and-ring motifs.
13–14th centuries. SS/80/V/428.321
59. Iron Knife. L:77 mm, Max. W:14 mm, Max. T:4 mm (fig. 13).
Iron knife with a straight edge. The tang is inset from the edge but continues the curved line of the back. SS/82/V/568.1000
60. Iron Knife. L:146 mm.
Iron knife with a long rectangular-sectioned tang set on the mid-line of the blade. Both the back and the cutting edge are straight and taper to the point. Manning 1976, Type 1.
Cf. Housesteads: Manning 1976, no. 121. SS/78/V/104.79 Building A Phase 1 or 2.
61. Iron Knife. L:83 mm (fig. 13).
Iron knife with a straight cutting edge and an arched back. The tang is set a little above the mid-line of the blade.
Manning 1976, Type 1. SS/79/V/271.211
62. Iron Knife. L:71 mm, W:24 mm.
Iron knife blade with a straight back and a curved cutting edge. The tang is set closer to the cutting edge than the back. SS/80/V/518.487

63. Iron Knife. L:72 mm.
Fragment of an iron knife blade with a straight back and a curved cutting edge. SS/79/V/248.216
64. Iron Knife. L:50 mm, Max. W:14 mm, Max. T:2·5 mm (fig. 13).
Fragment of an iron knife blade with both straight edges tapering to the point. SS/80/V/412.312
65. Iron Knife. L:47 mm.
Small fragment of an iron knife blade with a straight back and a curved cutting edge. SS/78/V/035.46 Building B, Phase 2.
66. Iron Knife. L:40 mm, W:22 mm.
Fragment of an iron knife blade—too corroded for further identification. SS/80/V/406.294 Context late 4th century.
67. Iron Knife. L:45 mm, W:22 mm, Max. T:1·5 mm (fig. 14).
Fragment of an iron knife blade with a straight back. SS/80/V/551.692
68. Iron Knife. L:130 mm.
Incomplete iron knife blade with a straight back. Very corroded. Manning 1976, Type II. SS/78/V/120.82
69. Iron Knife? L:70 mm, W:50 mm.
Incomplete triangular iron blade with a strip tang set on the mid-line. SS/80/V/465.635
70. Iron Reaping Hook. L:118 mm, D. of socket:21 mm (fig. 14).
Socketed iron reaping hook with an incomplete curved blade. The socket has been formed by hammering the end of the blade into a fan shape and wrapping it around the shank. An iron disc-headed rivet has been hammered through to hold the shank. The blade is triangular in section with one face slightly convex.
Cf: Newstead: Curle 1911, pl. LXI, no. 8.
See Manning 1976, p. 30, for a discussion of reaping hooks. SS/79/V/287.273 Context late 4th century.
71. Iron Shield Boss. D:126 mm, H:30 mm (fig. 14).
Circular iron shield boss. The centre of the hollow dome is missing. The surrounding flange is undecorated and pierced by three circular rivet holes.
Cf.: Newstead: Curle 1911, pl. XXXIV, no. 3.
Verulamium: Wheeler and Wheeler 1936, pl. LXIVa, no. 5, 219—from a 3rd century deposit. SS/79/V/319.214 Context 4th century.
72. Iron Escutcheon. L:61 mm, Max. W:24 mm (fig. 14).
Iron leaf-shaped bucket or bowl escutcheon with a loop projecting at an angle from the top. The body is pierced by two disc-headed iron rivets. SS/80/V/561.734
73. Iron Mount Ring. L:22 mm.
Oval iron ring with an expanded plate pierced to take a rivet. Rings of this type are found on the back of openwork mounts in order to fasten them to leather straps and are to be found in iron and bronze. SS/78/V/059.12 Building B Phase 2.

74. Iron Spur. L:114 mm (fig. 14).
Iron spur with a split shank to hold a rowel. Only one of the two hemispherical sectioned branches is complete and ends in a bicircular terminal pierced by two circular holes. The shank is decorated by bands of incised cross-hatching with a band of horizontal lines in a line border around the neck.
London Museum Catalogue 1967, Type F, cf. London: 108, fig. 34, no. 3. 14th century. SS/78/V/065.24
75. Iron Key. L:54 mm, Max. W:26 mm, Max. T:7 mm (fig. 14).
Small iron key with a quatrefoil openwork head. The ward is incomplete but appears to have been an open rectangle.
13th–14th century A.D. SS/79/V/264.205 Building B Phase 1.
76. Iron Stud. D:20 mm, H:18 mm (fig. 14).
Disc-headed iron stud with an off-centre square-sectioned shank.
SS/80/V/565.751.
77. Iron and Bronze Stud. L:74 mm, D. of head:24 mm (fig. 14).
Square-sectioned iron shank tapering to a bronze disc at the neck with a globular head covered in bronze. SS/79/XII/002.2
78. Iron and Bronze Stud. L:12 mm, D:15 mm.
Pin with an iron disc head and a circular-sectioned bronze shank.
SS/80/V/467.412
79. Iron Tack. Surviving L:15 mm, W. of head:8 mm.
Small iron tack or pin with a globular head and a square-sectioned shank.
SS/80/V/437.330
80. Iron and Bronze Nail. L:28 mm, D. of head:9 mm.
Rectangular-sectioned iron nail with a hollow domed bronze head caulked with lead. SS/79/V/256.220 Building B Phase 2.
81. Iron Buckle. L:67 mm, W:49 mm, T. of shank:8 mm (fig. 14).
Large D-shaped iron buckle of rectangular section but with a circular sectioned bar. An oval-sectioned pin has one end flattened and wrapped around the bar to form the hinge.
Cf.: Somerby: Goodall, I. H., in Crossley 1981, fig. 59, no. 2. SS/79/V/065.194
82. Iron Buckle. L:54 mm.
D-shaped iron buckle of circular section lacking its pin. SS/78/V/062.19
83. Iron Buckle. D:11–12 mm, W:2 mm, T:2 mm (fig. 14).
Small oval iron buckle with a square-sectioned pin with one end flattened and wrapped around the shank to form the hinge.
Oval buckles are common throughout the medieval period although rare during the Roman occupation. However there is a 2nd century example from Turret 33B: Manning 1976, no. 119. SS/78/V/066.18
84. Iron Buckle. L:43 mm, Total W:33 mm, T:5 mm (fig. 14).
Rectangular iron buckle with an oval-sectioned shank and pin. The pin has an expanded end wrapped around the shank to form the hinge. There are traces of an iron collar on the shank opposite the hinge.
Cf.: Somerby: Goodall, I. H., in Crossley 1981, fig. 59, no. 1. SS/78/V/003.3

85. Iron Buckle Pin. L:60 mm.
Iron buckle pin of rectangular section lacking the curled hinge. SS/78/V/065.8
86. Iron Collar. D:35 mm, H:20 mm, D. of hole:15 mm (fig. 14).
Barrel-shaped iron collar with a raised lip around one end of the central hole. The hole follows the shape of the outer walls.
Dagger pommel? Cf. *London Museum Catalogue* 1967, p. 43. SS/80/V/510.629
87. Iron Rod. L:111 mm.
Iron rod of rectangular section with one end splayed and pierced by a circular hole (D:6 mm).
Pivoting latch hook? Cf.: Portchester: Cunliffe 1977, fig. 108, no. 56.
SS/78/V/147.104
88. Iron Rod. L:101 mm, Max. T:13 mm, W. of head:24 mm (fig. 14).
Rectangular-sectioned iron rod with a flattened head bent at right angles to the shank. Possibly the lower part of a mount for a bucket handle, cf.: Brampton: Manning 1966, nos. 30 and 31. SS/80/V/484.454
89. Iron Bar. L:186 mm, W:10 mm, T:7 mm (fig. 14).
Curved iron bar of rectangular section. One end has been torn from two circular-sectioned rivets, the other end is curved and hollowed in the manner of a window latch. SS/79/V/248.233
90. Iron Bar. L:186 mm, W:13 mm, T:7 mm (fig. 14).
Long curved iron bar of hemispherical section. The only surviving end is bifurcated but is too thick to be used as a nail extractor (cf. Saalburg: Mercer 1929, 278). SS/80/V/ .640
91. Iron Bar. L:135 mm, W:13 mm, T:7 mm (fig. 14).
Iron bar of hemispherical section with one end bifurcated as no. 90 above but with a more generous curve at the other end. SS/80/V/346.295
92. Iron Bar. L:68 mm, Max. W:24 mm, Max. T:5 mm (fig. 14).
Curved iron bar tapering to an expanded disc with a central hole. Bucket escutcheon? SS/80/V/561.742
93. Iron Key? Total L:81 mm, T. of rod:5 mm, Ring: D:27 mm, T:21 mm, W:2 mm (fig. 14).
Iron rod of oval section with an incomplete hooked end. The other end expands to a large ring at right angles to the hook.
Incomplete key? Cf. Gadebridge: Neal 1974, fig. 71, no. 390. SS/80/V/465.637
94. Iron Bolt. L:98 mm, W:45 mm, Max. T:14 mm (fig. 14).
Rectangular-sectioned iron bar tapering in thickness. There is a tube set across the thicker end which holds a disc-headed iron rod. The thinner end has two short barbs projecting from one side. Possibly the bolt of a barb-spring padlock, cf. Gadebridge 1974, fig. 69, no. 348. SS/80/V/474.399
95. Iron Binding. L:70 mm, Max. W:13 mm, Max. T:7 mm (fig. 14).
Iron bar with a thick median rib. One end is broken across a rivet hole and the other ends in a disc terminal pierced by a disc headed rivet from the under face. The head of the rivet is held 4 mm away from the terminal by fragments of wood. SS/80/V/476.688

96. Iron Binding. L:88 mm, W:19 mm, T:8 mm (fig. 14).
Iron bar with a thick median rib. One end is broken across a rivet hole and the other ends in a disc terminal pierced by a disc-headed rivet from the under face. The head of the rivet is held 4 mm away from the terminal suggesting that it has held a thin sheet of wood or leather, cf. no. 95 above.
SS/80/V/553.715
97. Iron Binding. L:60 mm, D. of disc: 31 mm, Max. T:8 mm (fig. 15).
Iron bar with a thick median rib. One end is broken but the other ends in a pierced disc terminal. SS/80/V/466.718
98. Iron Binding. L:258 mm, W:17 mm, T:8 mm (fig. 15).
Large U-loop of iron with a thick median rib running the entire length of the outer face. One end is missing but the other terminates in a flattened leaf-shape which is pierced by a disc-headed rivet. Both arms of the U are pierced by two square rivet holes countersunk from the inner face. At first sight this appears to be a drop-hinge with nos. 95, 96 and 97 as drop-hinge terminals, cf.: Brampton: Manning 1966, no. 38. However it is clear from the countersinking of the holes on no. 98 and the thin sheet of wood still held between the rivet head and the terminal on no. 95 that these objects cannot be interpreted as drop-hinges. The more probable explanation, offered by Professor W. H. Manning, is that they are the strengthening and grip bars from shields. The cross-section of such bars is normally rectangular or D-shaped and the Sewing-shields examples appear to be a variation on the latter. The flattened end with the rivet or flat-headed nail is very typical of shield bars and the thickness of wood suggested by the position of the head of the rivet would seem to agree with the identification. The countersinking of the rivet holes is not intended to conceal the head of a nail but may be intended to act as a guide to the tip of the nail which has to be driven into the hole through the thickness of the shield. This unusual arrangement would reduce the chance of the point missing the hole if there was a slight miscalculation in its initial positioning.

A complete example was found amongst the remains of a 1st century shield from Doncaster (Buckland, 1978, 247 ff., fig. 4) and others are known from Newstead (Curle 1911, pl. XXXIV, 1 and 2, p. 182; Buckland 1978, fig. 8) and Hod Hill (Richmond 1968, fig. 58, A4). SS/80/V/428.321
99. Iron Hammer Head. L:65 mm, W:27 mm, T:17 mm (fig. 15).
Incomplete iron hammer head with a square end. The walls of the head are straight and enclose the oval shaft hole without deviation. SS/78/V/108.107
100. Iron Bar. L:60 mm.
L-shaped flat iron bar with a disc-headed rivet through the end of the longer arm. SS/78/V/035.57 Building B Phase 2.
101. Iron Bar. L:50 mm, W:20 mm, Max. T:8 mm (fig. 15).
Curved iron bar with horizontal ribs along the upper face ending in a thicker pointed head. SS/80/V/465.636
102. Iron Implement. L:102 mm (fig. 15).
Iron three-pronged implement with a curved "barb" on each of the two outer

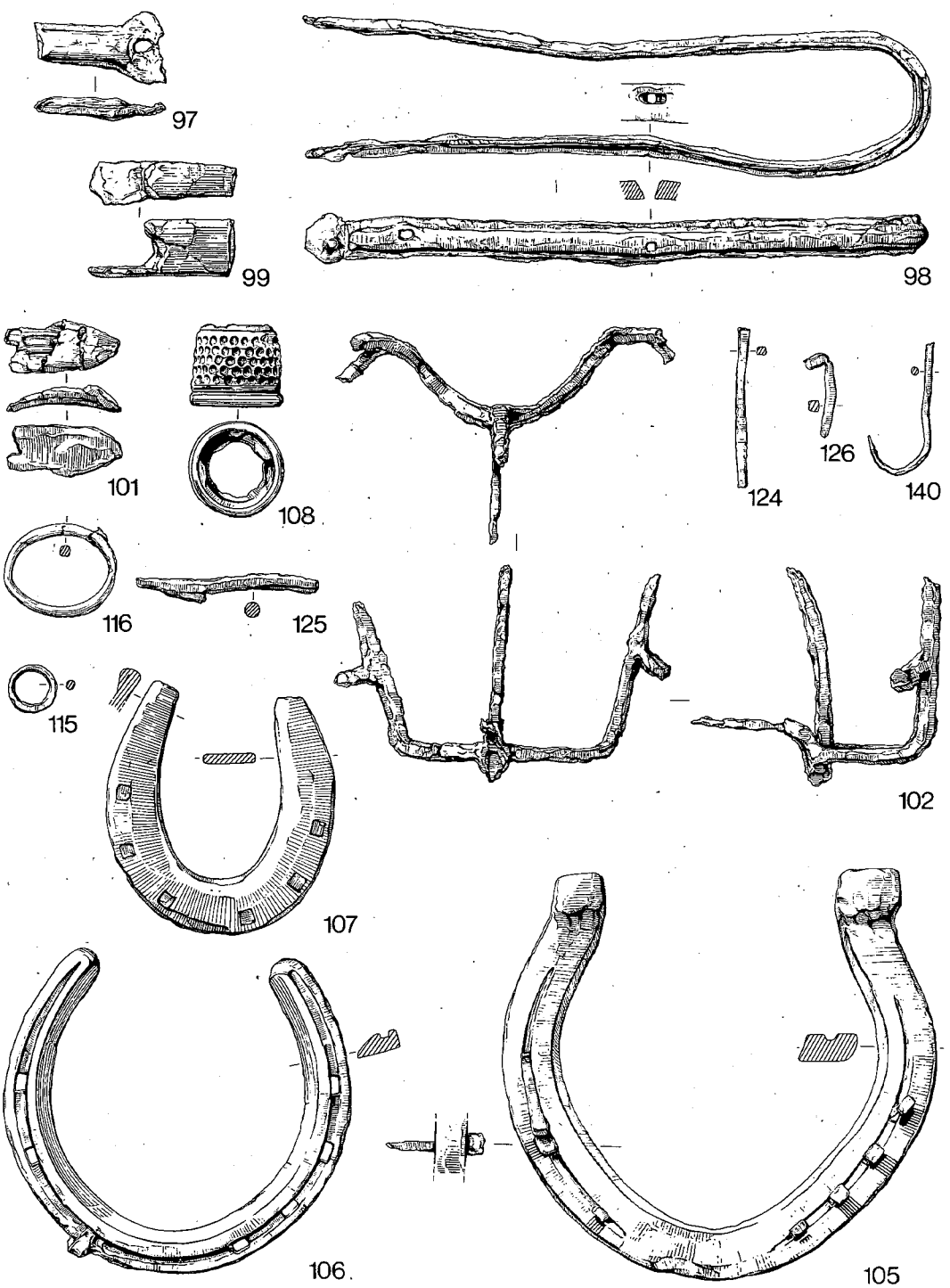


Fig. 15. (1:3)

prongs. Each prong is of rectangular section and is curved. The shank is incomplete. A similar object from Fishbourne is described as a "fork or part of a candlestick": Cunliffe 1971, fig. 60, no. 51. More recently tools of this type were used as dung-drags (Vince 1974, 5), or flesh hooks (Goodall, I. H., in Crossley 1981, fig. 58, 2). SS/78/V/035.63

103. Iron Loop. L:19 mm, Max. W:18 mm, T:6 mm.
Small, horseshoe-shaped iron loop of oval section. SS/80/V/415.316

104. Iron Horseshoe. L:112 mm.
Iron horseshoe with the seven square-sectioned nails still in position. The shoe is fullered which according to the *London Museum Catalogue* 1967, 115, is a late medieval or post medieval feature. However, two horseshoes found at the Roman fort at South Shields are also fullered suggesting that fullering may be an early practice.

None of the horseshoes from Sewingshields were found in securely dated contexts. They are likely to be of post-medieval date. SS/78/V/002.65

105. Iron Horseshoe. L:276 mm (fig. 15).
Large iron draught horse shoe with seven rectangular-sectioned nails still in position. The shoe is fullered and the nails are positioned with three on one branch and four on the other. The branches have heavy calkins and a shallow toe-clip. There is evidence that the toe-clip was introduced in the 1820s: see Sparkes 1976, 23–4. SS/78/IV/001.1

106. Iron Horseshoe. L:145 mm (fig. 15).
Fullered iron draughthorse shoe with seven rectangular-sectioned nails set three on one branch and four on the other. There are no calkins but there is a shallow toe-clip. SS/78/II/U/S.17

107. Iron horseshoe. L:80 mm (fig. 15).
Fragment of an iron horseshoe with only two rectangular nail-holes clearly surviving. SS/78/V/062.22

108. Iron Thimble. H:17 mm, D:21 mm (fig. 15).
Complex thimble consisting of an iron shell with a thin layer of copper separating the outer wall from the lining of lead, tin or pewter. The body of the shell is covered with dimples stopping short of a single incised line above a brass ring fixed around the rim. Above the dimpled area there are two incised lines. Although it appears that the top is missing, tailors' thimbles in the 19th century were often made without a top and the general complexity of the structure suggests that it was a professional tool. Cf.: Homes 1976, 106–7, pl. 82.
SS/78/V/008.1

109. Iron T-staple. L:67 mm.
Fragment of an iron T-staple of rectangular section. These are known to have been used to hold box flue-tiles but could also have been used in other ways.
SS/78/V/065.14

110. Iron Socket. L:60 mm, D:22 mm.
Fragment of an iron socket of circular section. SS/80/V/476.422

111. Iron Socket. L:32 mm, D:23 mm.

Fragment of an iron socket or collar of circular section. SS/78/V/035.42 Building B Phase 2.

112. Iron Ring. D:34 mm.
Fragment of a flat iron ring. SS/78/V/040.30 Building B Phase 2.
113. Iron Collar. L:46 mm, D:40 mm.
Fragment of a deep iron collar. SS/78/V/059.23 Building B Phase 2 collapse.
114. Iron Ring. D:30 mm.
Oval sectioned annular iron ring. SS/78/104.47
115. Iron Ring. D:31 mm, W:3 mm, T:4 mm (fig. 15).
Annular iron ring of oval section. SS/79/V/U/S.200
116. Iron Ring. D:49 × 41 mm, W:5 mm, T:4 mm (fig. 15).
Annular oval iron ring of oval section. SS/79/V/261.213
117. Iron Ring. D:31 mm, T:10 mm, W:7 mm.
Large annular iron ring of oval section. SS/80/V/452.430 Context 4th century.
118. Iron Ring. D:15 mm, W:3 mm, T:11 mm (estimated).
Small annular iron ring of oval section. SS/80/V/478.440
119. Iron Strip. L:113 mm.
Curved iron strip of semicircular section with a rounded end. SS/79/V/340.284
120. Iron Rod. L:42 mm.
Incomplete iron rod of rectangular section. SS/78/V/065.15
121. Iron Bar. L:57 mm.
Iron V-shaped bar of square section. SS/78/V/127.72
122. Iron Bar. L:85 mm.
Rectangular-sectioned iron bar. SS/78/V/147.106.
123. Iron Bar. L:116 mm.
Long iron bar of oval section. SS/78/V/176.98
124. Iron Bar. L:94 mm, T:4 mm (fig. 16).
Iron bar of rectangular section expanding to oval section. SS/79/V/248.209 Context post 335 A.D.
125. Iron Bar. L:79 mm, W:7 mm (fig. 15).
Oval sectioned iron bar with a rectangular-sectioned barbed end. SS/79/V/302.258
126. Iron Rod. L:37 mm, W:5 mm, T:4 mm (fig. 15).
Curved, rectangular-sectioned iron rod with one end cut and bent at a right angle. SS/80/V/483.444
127. Iron Rod. L:97 mm, W:8 mm, T:7 mm.
Iron rod of rectangular section tapering to an expanded square-sectioned end sawn through. SS/82/570.1001
128. Iron Plate. L:46 mm.
Fragment of a flat iron plate. SS/78/V/040.28 Building B Phase 2.
129. Iron Plate. L:18 mm, W:16 mm, T:2 mm.
Fragment of an iron plate. SS/78/V/072.29 Building B Phase 2.
130. Iron Bar. L:124 mm, 160 mm.
Two lengths of circular-sectioned curved iron bars. SS/78/VII/004.8

131. Iron Bar. L:65 mm.
Rectangular-sectioned iron bar with slightly expanded ends. SS/78/V/0005.43
132. Iron Bar. L:112 mm, W:30 mm.
Fragment of an iron bar or blade. SS/78/V/037.58 Building B Phase 2.
133. Iron Bar. L:267 mm, T:20 mm.
Square-sectioned iron bar narrowing towards one end. SS/78/V/077.87
134. Iron Bar. L:84 mm, W:15 mm.
Iron bar of square section. SS/80/V/478.539
135. Iron Strip. L:50 mm, W:20 mm, T:2 mm.
Incomplete, rectangular-sectioned iron strip. SS/79/V/299.245
136. Iron Strip. L:57 mm, W:33 mm.
Curved iron strip tapering towards one end. SS/80/V/506.553
137. Iron Collar. L:22 mm, D:22 mm.
Fragment of an iron ring or collar. SS/80/V/466.709
138. Iron Hook. L:40 mm.
Large, rectangular-sectioned iron hook flattening and expanding to the end. SS/78/V/037.62 Building B Phase 2.
139. Iron Hook. L:30 mm.
Iron hook fragment of rectangular section. SS/78/V/128.78
140. Iron Hook. L:60 mm, T:3 mm (fig. 15).
Sharp iron hook tapering from a circular-sectioned rod. SS/79/V/ .198
141. Iron Hook. L:65 mm.
Very corroded iron hook of rectangular section. SS/80/V/561.737
142. Iron Hook. L:100 mm, Max. W:18 mm.
Iron Hook expanding to a rectangular-sectioned bar. SS/80/V/540.752
143. Iron Strip. L:49 mm, Max. W:10 mm, T:4 mm.
Flat iron strip with one expanded end which is cleft or has been pierced by a large circular hole? SS/78/V/065.21
144. Iron Plate. L:50 mm.
Fragment of distorted iron plate. SS/78/II/003.1

HOBNAILS

Altogether there are 611 hobnails from Sewingshields, found predominantly in a 4th century context. Working on an average of 80 hobnails per sole (cf. Charlesworth and Thornton 1973; Groenman-van Waateringe 1967) this suggests 7–8 shoes with perhaps two shoes in layer 478 where 164 hobnails were found. Unfortunately the hobnails were found loose in no obvious pattern. No boot plates were found and the hobnails were too corroded for accurate measurement. They all appear to have had domed heads and short, tapering shanks. Of the four types of shoe found on Roman sites in Britain, the *calceus*, the *solea* and the *caliga* have soles made from layers of leather held together by iron hobnails.

JET AND SHALE

145. Jet Finger Ring. D:19 mm, Max. W:4 mm, T:5 mm (fig. 16).

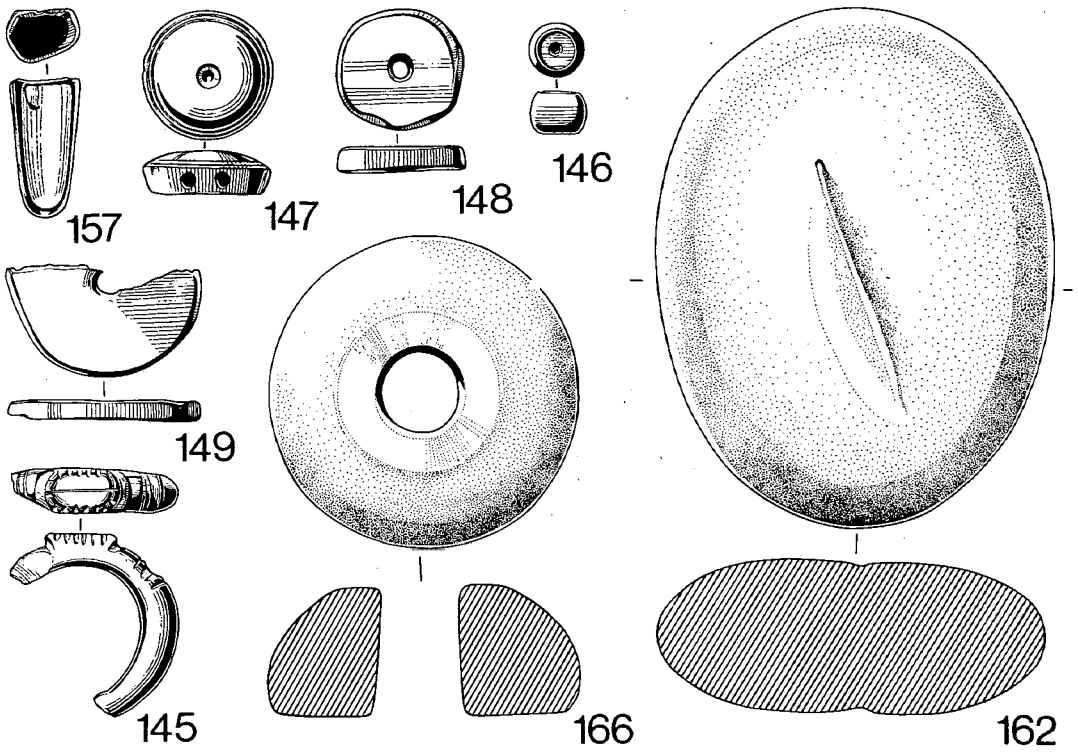


Fig. 16. (1:2)

Incomplete jet finger ring with a raised central panel decorated with marginal notches. The shoulders have heavy ridge-and-groove motifs. The shank tapers away from the central panel and is semi-oval in section.

This ring is very similar to one from South Shields (Charlesworth 1961, pl. III, no. 1, 3rd–4th century) but with the extra notched decoration of another ring from South Shields which is dated to the 2nd century. (Charlesworth 1961, pl. II, no. 8). SS/79/V/248.212. Context post 335 A.D.

146. Jet Bead. D:6 mm, H:5 mm (fig. 16).
Small, undecorated jet barrel bead.
Cf.: Railway Excavations, York: *Eburacum* RCHM 1962, pl. 70, p. 143 (IV Region (b), ix). 3rd–4th centuries. SS/80/V/407.310

147. Jet Bead. D:16 mm, T:5 mm (fig. 16).
Jet disc bead decorated with a central dimple and two incised marginal concentric circles. The edge slopes back from the domed face and is pierced by two circular holes of 2 mm diam. These holes have been drilled from both sides and are badly aligned.
Cf.: South Shields: Allason-Jones and Miket 1984, 7.62, 7.63. Corbridge: Corstopitum Museum 75.539. SS/79/V/287.235 Context late 4th century.

148. Shale Bead. D:16 mm, T:3 mm (fig. 16).
Small, roughly fashioned shale disc bead with a central circular hole of 3 mm diam. SS/78/II/009.11
149. Shale Bead. D:25 mm, T:2 mm (fig. 16).
Incomplete, roughly fashioned shale disc bead with a central circular hole of 3 mm diam. SS/78/IV/001.3

LEAD

150. Lead Seal. 20 × 15 mm, T:3 mm.
Oval lead seal pierced through by a cord hole. An oval stamp or signet has impressed letters in relief on the reverse: AESEC. The obverse is shaped suggesting that it has been pressed into an oval mould or box and has the letters CIT in relief. The central letter has two oblique strokes emerging from the top bar.
This seal has been discussed by R. S. O. Tomlin (Tomlin and Hassall 1981, 394) where he suggests that the obverse reads *C(ohors) (Prima) T(hracum)* or *T(ungorum)*, and the reverse *Ae(lius) Sec(undus)*. SS/80/V/478.689
151. Lead Sheet. L:45 mm, Max. W:50 mm, T:4 mm (av.).
Incomplete, triangular plate of lead with a triangular depression at the apex. The upper face is convex with the edges turned up. SS/80/V/466.464
152. Lead Sheet. T:2 mm.
Three irregular fragments of lead sheet. SS/78/V/040.31
153. Lead Caulking. D:32 mm.
Lead caulking which has secured a bronze domed stud head to a square-sectioned iron shank. SS/80/V/465.677
154. Fragment of lead "dribble". SS/80/V/417.315

CLAY

155. Pottery Ball. D:15 mm.
Small ball made from pottery of a fine pale pink fabric. This at first sight appeared to be a permian globule but was shown by geological analysis to be man-made (T. Pettigrew, Tyne and Wear Museums Service). SS/79/VI/002.1
156. Clay. D:43 mm.
Ball of unbaked clay with a small thumb-print in the middle. SS/79/V/301.250

SILVER

157. Silver Dagger Chape (fig. 16).
Slender, silver chape with a rounded end intended for a finely pointed blade. A triangular nick is cut from the waved edge at the back. Dagger chapes of the 14th–15th centuries were used only on the sheaths of military daggers or very elaborate civilian daggers.
Cf.: *London Museum Catalogue* pp. 248 ff. SS/79/VIII.3
158. Silver Ring. D:18–20 mm, W:3 mm, T:3 mm.
Silver penannular ring of oval shape and sub-circular section. Medieval. SS/78/V/114.71

STONE

159. Stone Carving. H:135 mm, W:190 mm, D:260 mm (plate IXb).
Square-faced building stone with a pronounced taper towards the back. On the front there is a carving of a stylized human face set in a recessed circle. The eyebrows are prominent and are carved in a unit with the nose. The mouth is a slit. The eyes are suggested rather than clearly carved. The carving is subtle and well-planned so that the face is most clearly seen when viewed from above suggesting that the stone was set low in the milecastle wall.

The human head was regarded by the Celts as being symbolic of divinity and imbued with powers to deflect evil. It has been suggested that one of the effects of the Roman invasion was to stimulate the Celts into portraying cult heads in stone (Ross 1967, 61–126). It is, however, strange that a military installation built by Roman legionaries should include a Celtic religious motif. It is more probable that the head was carved on to the wall sometime after the milecastle was built. Another "Celtic head" was recently found at Lemington close to Milecastle 9 implying that the relationship between head and milecastle is not unique. (see Smith, D. J., in Burgess and Miket, forthcoming.) SS/78/V/204.202

160. Stone Gaming Board. L:320 mm, W:375 mm, T:36 mm, the actual marked area is 220 × 270 mm, with squares of 33 × 33–26 × 26 mm (fig. 17).
Several fragments of an incomplete, rectangular gaming board of micaceous sandstone. The fifty-six squares are arranged in eight rows by seven columns and are roughly incised.

See Allason-Jones and Miket 1984, 12.1, and Potter 1979, 76–9, for discussions of the possible games played on such boards. Stone boards found in Roman Britain are more usually marked with 8 × 8 squares. SS/78/V/131.1008

161. Stone Gaming Board (?). Marked area: 101 mm × 80 mm (fig. 17).
Square gaming board(?) incised on to a wedge-shaped boulder of whinstone. The lines make up twenty squares in four rows and five columns with an extra diagonal line running down the second column. As the surface is slightly dished and the area which has been marked out is very small it is possible that this was just a doodle rather than a gaming board. SS/78/V/ .1009

162. Strike-a-light. L:66 mm, W:51 mm, T:19 mm (fig. 16).
Ovoid whinstone pebble which has been used as a strike-a-light on both faces resulting in a deep groove with burn marks on both sides. This type of strike-a-light, known as a "tracked stone", is discussed by Childe (1936, 233ff.). Using parallels in Scandinavia, Ireland and Scotland he suggests a date range of 200–500 A.D. SS/79/V/ .203

163. Whetstone. L:74 mm, W:42 mm, T:29 mm.
Fragment of an oval-sectioned whetstone of coarse micaceous sandstone. SS/78/V/076.37

164. Whetstone. L:95 mm, W:27 mm, T:24 mm.
Sandstone whetstone of roughly rectangular shape and section with rounded ends. SS/79/V/104.116

165. Whetstone. L:120 mm, Max. W:23 mm.

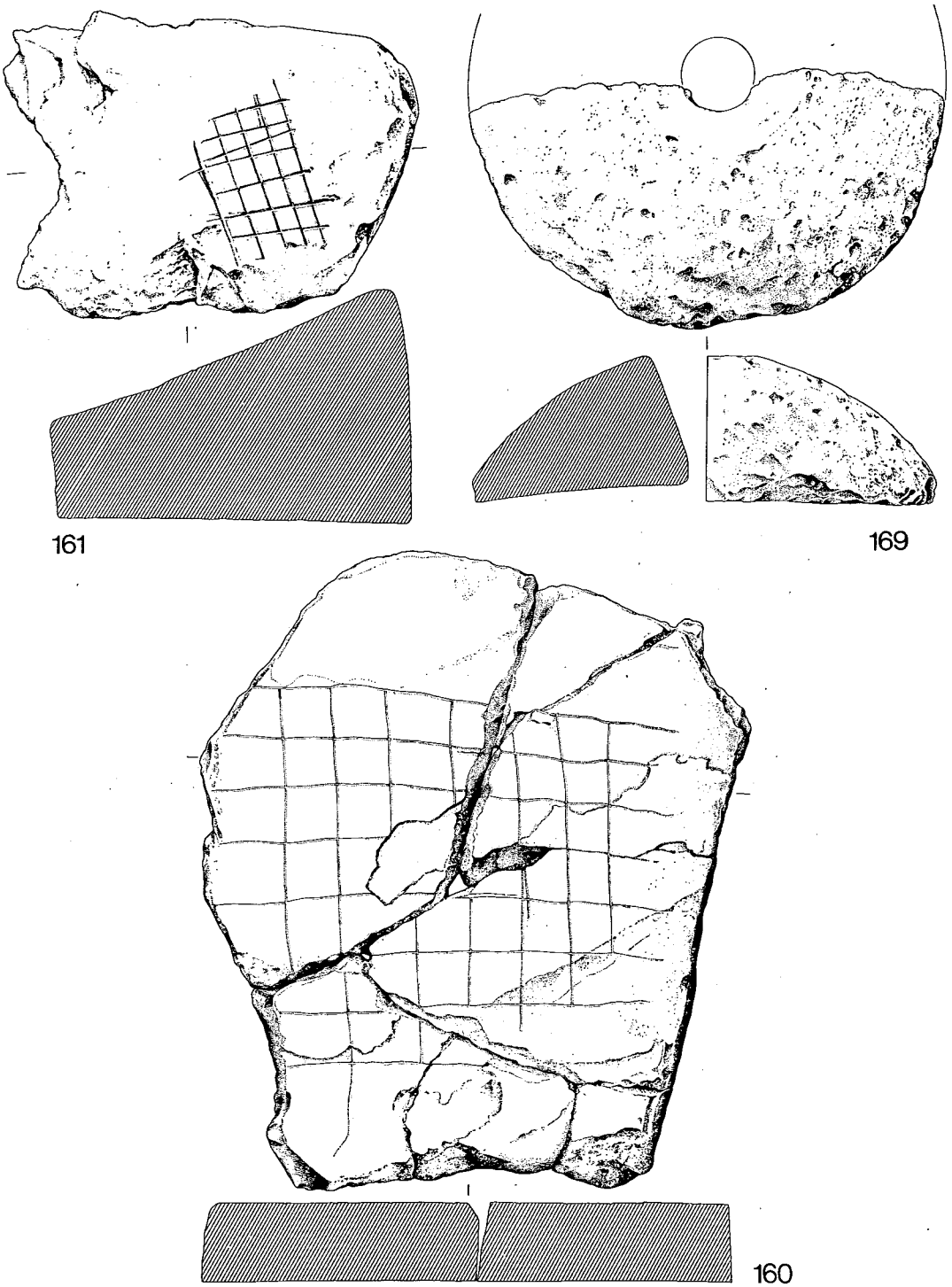


Fig. 17. (1:4)

Irregularly shaped whetstone of micaceous sandstone. SS/80/V/315.308

166. Spindlewhorl. D. of base:40 mm, D. of top:20 mm, H:16 mm, D. of hole:11 mm (fig. 16).
Well carved bun-shaped spindlewhorl of fine-grained sandstone. The hole has been drilled from both sides. SS/80/V/1007 NE Corner of milecastle.

167. Stone Counter. D:16 mm, T:3 mm.
Roughly circular counter of slate with a bevelled edge. SS/80/V/510.679

168. Stone Altar. H:460 mm, W:235 mm, T:265 mm.
Small sandstone altar with a shallow circular focus with a central boss. The boss has been chiselled to give a rayed effect. One face has a rectangular die, 200 mm × 190 mm, bordered by a shallow double groove. The base is rough and broken and may never have been trimmed whilst the capital projects slightly forward of the die. The capital is incomplete and worn but there is a suggestion of an incised zig-zag down the right edge.

The opposing face has been trimmed to match the main face with a punch. The right side has also been dressed and both back and side show signs that a double line border was intended but possibly never completed. The fourth side is roughly chiselled. There is no indication of an inscription on any face.

Despite subsequent battering the whole appearance of the altar is that of an unfinished product.

THE MILLINGSTONES (figs. 17 and 18)

A. T. Welfare

Six millingstones were recovered from the milecastle, (169/170/171/172/173/174), and all derive from rotary querns. Sadly, only one is more or less complete (171), the damage it has sustained being restricted to the zone beneath the lateral handle-socket; while of the fragments, two may perhaps originate from a single stone (173/174). As is so commonly the case, the total number of upperstones (169/170/171/172) is greater than that of lowerstones (173/174), but this is only a reflection of the inherent weakness in the design of the former, and the fact that the upperstone is always at greater risk of damage being the active member in a quern (WELFARE 1983).

Two of the fragmentary upperstones formed part of beehive querns (169/170). Such are recurrent if sporadic finds in Roman military contexts, but unlike some, however (but cf. 171), neither of those from the milecastle exhibit exotic characteristics that could be classed as out of place within the local British milieu (WELFARE, forthcoming). Indeed, the principal characteristics of the more complete of the fragments (169), namely its overall shape, its hopper-feedpipe, its spindle-socket and its "flat" grinding face, can be fairly readily matched in stones recovered from farmsteads not far distant from the Wall. Likewise, despite the fact that it has almost wholly lost its superstructure, the small diameter of the feedpipe in the other fragment (170), together with the details of its face, are commonly replicated in the

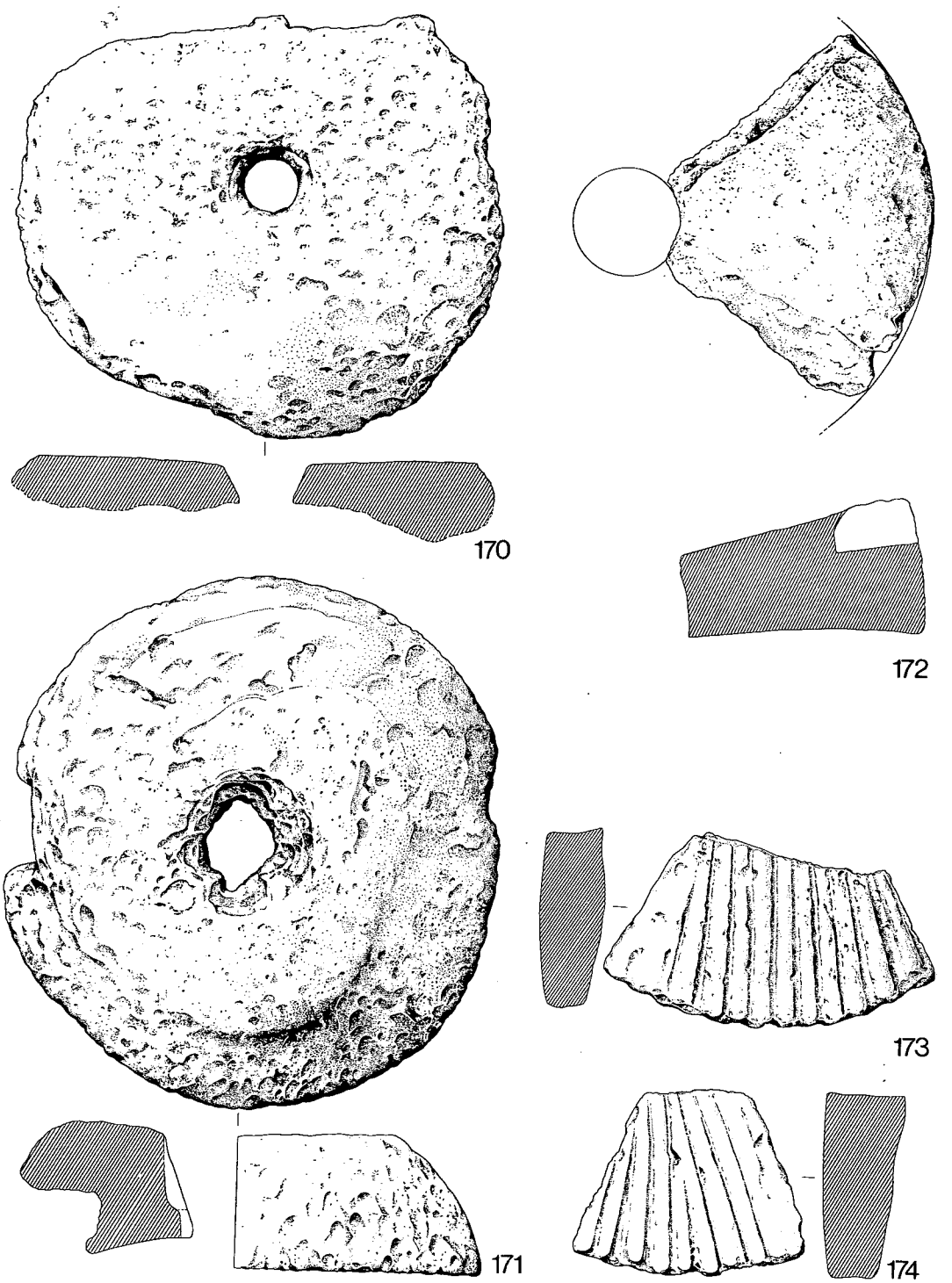


Fig. 18. (1:4)

beehive series of the region. The latter fragment arguably possesses one relatively unusual feature, and that lies in the suggestion of the single radial furrow in the eye; but the very fact that this is an isolated example intimates that it is an accidental phenomenon made up of coalescent pockmarks.

The currency of the beehive quern has long been a matter of uncertainty, and of those found on the Wall the context of few are so well known as to be of very much value. Potentially, the most useful in this respect are those from the forts of Wallsend and Chesterholm, and those from the Randylands milecastle (M/c 54); but the stone from the first of these sites could derive from the Pre-Roman occupation in the area, while those from Chesterholm were all reused in later building projects. The evidence from Randylands intimates that these querns were still in current usage in the later 2nd century A.D., but otherwise the only reasonable indication of their continued use into the later Roman period is supplied much more obliquely by another stone from Chesterholm (WELFARE forthcoming).

The third upperstone from the milecastle (171) is of greater interest, for, while it shares certain features with the local beehive series, its rynd-chase and its depressed face are derived from quite another tradition. One interpretation might have it as a hybrid that was manufactured locally in response to the differing and more elaborate taste of the Military market; but analogies are hard to find, and it seems rather doubtful that it could have been developed in this region. Indeed, in terms of its general overall shape, its best match lies further afield, for, in this respect at least, it has a striking affinity with one of the stones that were retrieved from the gravel pits of Magdeburg-Salbke (LIES 1963). Even so, there are important differences between the two stones (most particularly in the shape of the central perforation, and perhaps in the type of rynd employed) and these should not be minimized.

The patch of weathered cortex upon the upper surface of this stone is of some interest also. It can perhaps be viewed as a blemish, and as such it could be an indication that the stone was not the product of a quarry having exacting standards. Indeed, like so many beehive querns, it could have been manufactured originally from a boulder. Sadly it was found unstratified and so its date is quite uncertain.

The final upperstone (172) is more properly consonant with developed Continental forms, but unfortunately the original shape of its superstructure is a matter of uncertainty. It is plain that the upper part of a biconical eye is lost, and a slight scar upon the upper surface helps confirm this. Nevertheless, the extent of the loss is difficult to gauge as the circumference of the stone appears undamaged; and further, the fragment of what may have been a lateral handle-chase seems visible in one fracture. Such are commonly met with in querns in the south of England but they seem rather rarer in the north. However, in the vicinity of the Wall, upperstones having this kind of fitting are known from Corbridge, Chesters and Housesteads, and a few unprovenanced examples are accessioned in the Museum of Antiquities of the Society of Antiquaries and of the University of Newcastle upon Tyne. As to its period of usage, all that can be said is that it is perhaps more likely to have seen service in the later Roman period.

The possibility that both of the lowerstone fragments (173/174) derive from a single

original has already been mentioned above. Not only are they strikingly similar in design, but their pattern of wear is markedly alike. In their form, they are not especially dissimilar from the common forms of lowerstone that were manufactured in the famous quarries of the Belleberg lava field near Mayen in the Eifel, but this is simply a reflection of a common tradition of design. It would probably be wrong to interpret such a stone as the derivative of a *lava* prototype. Doubtless, in a sedimentary guise they might have appealed to the Military almost as much as their lava counterparts. It seems hardly necessary to add that none of the upperstones previously described will have been used with such a lowerstone.

Both of the fragments were found in 4th century layers, but they could have been derived from earlier contexts. In consideration of their small size, it would be unwise to date them any more closely than to the 2nd–late 4th century A.D.

THE MILLINGSTONES

169. A single fragment comprising approximately 50% of an upperstone, which has an overall thickness of 8·9 cm, and a maximum diameter of 29·0 cm. The elevated convex upper surface has been neatly dressed with pocking, and at its summit lies a V-shaped hopper-feedpipe. This has a diameter of 10·5 cm, but it reduces to only 3·7 cm at the face. Internally, the base of the feedpipe to a depth of 2·5 cm presents a rather smoother surface than higher in its profile. At its base is found the vestige of a spindle-socket 0·85 cm deep. The "flat" face which displays no certain traces of an artificial dressing has sustained its maximum wear about the skirt, where a glossy polish has developed.
Hand specimen
A medium grained sandstone with iron inclusions. The rock is bedded approximately at right angles to the face.
The pocking of the upper surface is rubbed and blurred. Unstratified.

170. A single fragment consisting of little more than the face of an upperstone, which has a thickness varying between 5·3 cm and 1·0 cm, and a maximum diameter of 29·5 cm. The present upper surface is rough and irregular. In the centre is the remnant of a feedpipe, the diameter of which expands from 3·1 cm to 5·5 cm at the face. The face itself is "flat", and has been prepared with a dressing of pockmarks. This is perhaps most concentrated about the eye, where something like a single stumpy furrow is in evidence. The maximum wear has been sustained about the skirt, but small patches of glossy polish are spread at intervals across the breast and skirt.
Hand Specimen
A medium to coarse grained sandstone.
The superstructure of the stone is almost wholly lost, and its circumference is chipped. It may have been intentionally cut-down for reuse as building material. Unstratified.

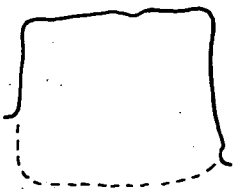


Fig. 19. The aperture of the handle-socket of No: 171.

171. A complete circular upperstone, having a thickness that varies between 8·0 and 6·9 cm, and a maximum diameter of 31·9 cm. The upper surface is somewhat irregular in shape, but for the most part smoothly finished, save where an untrimmed, weathered patch of cortex still survives. It has a diameter that varies between 24·6 cm and 19·8 cm. At its centre lies an inverted and truncated cone-shaped eye, having a maximum diameter of 8·7 cm, and this reduces to a minimum of 4·3 cm at the face. Its shape is somewhat distorted by a well-made rynd-chase (9·1 cm × 3·5 cm), inset from the upper surface. Two grooves are etched at right angles to this, and both run down to reach the face. The circuit of the convex outward splaying sides is interrupted by the rectangular aperture of a lateral handle-socket (6·3 × 3·1 × 5·7 cm). The depressed grinding face displays a furrowed dressing over almost half its surface area, but has not elsewhere been roughened artificially. The wear it has sustained appears to have been everywhere fairly evenly distributed save at the eye, where two deep concentric grooves are etched.

Hand Specimen

A medium grained sandstone.

The lower part of the handle-socket is lost, and the circumference has been chipped. Unstratified.

172. A single fragment comprising approximately 17% of an upperstone, which has a thickness varying between 8·2 and 7·5 cm, and an estimated diameter of c. 32·5 cm. The upper surface slopes inwards to the eye at an angle of c. 10°, but it displays no clear indication of having been artificially dressed. At its centre lies the truncated remnant of a biconical eye, while in one of its fractures a section of a lateral handle-chase with hollow chamferred sides survives. The depressed grinding face, which betrays no traces of an artificial dressing, has sustained its maximum wear about the skirt, where isolated patches of high polish are in evidence.

Hand Specimen

A coarse grained sandstone.

The fragment, which appears to have been cut down, has a roughly rectangular spall missing from its sides. Context SS/80/V/306

173. A single fragment comprising approximately 9% of a lowerstone which has a thickness varying between 2·4 cm and 1·6 cm at the circumference, and an estimated diameter of c. 38·0 cm. The elevated, gently convex, upper surface has been dressed with furrowing, and the maximum wear has been sustained about the skirt. The sides of the stone are approximately vertical, but seem only dressed to shape. The depressed, convex base is irregular in shape.
Hand Specimen
A coarse grained sandstone.
Context: SS/79/V/254

174. A single fragment comprising approximately 8% of a lowerstone, which has a thickness varying between 3·1 cm and 2·8 cm at the circumference, and an estimated diameter of c. 38·0 cm. The elevated, gently convex grinding face has been dressed with furrowing, and the maximum wear has been sustained about the skirt. The sides of the stone are approximately vertical but are only dressed to shape. The depressed base is somewhat irregular.
Hand Specimen
A medium to coarse grained sandstone.
Context: SS/80/V/402

ACKNOWLEDGEMENTS

I would like to express my gratitude to my mother, Mrs D. P. A. Welfare, who kindly undertook the typing of this report at very short notice; to Miss L. Allason-Jones who was so good as to patiently answer my queries on chronological matters; and to Miss A. MacSween for her helpful advice and encouragement.

A.T.W.

THE GLASS FROM SEWINGSHIELDS

by Stephanie Large B.A.

Discussion
In the three seasons of excavation 36 pieces of glass were recovered. Of these 15 were pieces of matt-glossy window glass dating to the first/second centuries.

Because of the fragmentary nature of the glass only 8 vessels can be postulated which date to the Roman period. Two colourless vessels were found in 1978 and are cups or bowls both dating to the second century. Both are good quality tableware. Fragments of a maximum of 5 square bottles were identified and one of these pieces had been reused as a counter. A handled vessel, either a jug or a bottle, was also identified.

Two pieces of heat-distorted glass were found. There was one piece of glass that appeared to be post-Roman.

Catalogue

SS 78 I 020.1. Fragment of window glass. Greenish-blue. Matt-glossy. 3 mm thick. C1/C2.

SS 78 V 076.38. Fragment of window glass. Greenish-blue. Matt-glossy. 2 mm thick. C1/C2.

SS 78 V 104.80. Fragment of window glass. Greenish-blue. Matt-glossy. 3 mm thick. C1/C2.

SS 78 V 108.100. Fragment of window glass. Greenish-blue. Matt-glossy. 3 mm thick. C1/C2.

SS 78 V 152.105. Fragment of window glass. Greenish-blue. Matt-glossy. 2·5 mm thick. C1/C2.

SS 78 II 003.2. Fragment of vessel. Colourless, Iridescence on outside. Convex curved side, ground on outside; strain cracks. Blown. Bowl or cup. Same vessel as 5 and 6. C2.

SS 78 II 003.3. Fragment of rim and side of vessel. Colourless. Slightly overturned rim; edge rounded on outside. Strain cracks.

SS 78 II 003.5. Fragment of side of vessel. Colourless. Iridescence on outside. Blown. Same vessel as 2. Joins with 6.

SS 78 II 003.6. Fragment of side of vessel. Colourless. Iridescence on outside. Blown. Same vessel as 2. Joins with 5.

SS 78 II 009.10. Melted trail.

SS 78 V 086.36. Fragment of side of vessel. Bluish. Blown. (?) square bottle.

SS 78 V 035.41. Fragment of base of square bottle. Bluish. Part of raised design.

SS 78 V 043.44. Fragment of side and base of vessel. Colourless. (?) cup. Wheel cut line. C2.

SS 78 V 035.52. Fragment of vessel glass. Bluish-green. (?) bottle.

SS 78 114.60. Fragment of vessel glass. Bluish-green. Curved.

SS 78 V 120.93. Fragment of side of vessel. Bluish-green. Square bottle.

SS 78 V 138.97. Fragment of rim and handle of vessel. Bluish-green. Rim folded out, up and in and flattened. Scar at junction of cylindrical neck and scar for upper handle attachment under rim. Jug/bottle (?).

SS 79 V + .197. Fragment of window glass. Colourless. Matt-glossy. 2 mm thick. C1/C2.

SS 79 V 002.7. Fragment of window glass. Greenish-blue. Matt-glossy. 2 mm thick. C1/C2.

SS 79 V 145.126. Fragment of glass. Colourless.

SS 79 V 214.214. Fragment of vessel. Bluish-green. Matt on both faces. Surfaces scratched. Appears to have been reused as a counter. 6 mm thick. May have originally been a bottle.

SS 79 V 256.231. Fragment of vessel. Bluish-green.

SS 79 V 256. Fragment of two sides of vessel. Bluish-green. Vertical scratches on outside. Square bottle.

SS 80 V 428.345. Fragment of window glass. Greenish-blue. Matt-glossy. 4 mm thick. C1/C2.

SS 80 V 450.359. Fragment of window glass. Greenish-blue. Matt-glossy. 4 mm thick. C1/C2.
SS 80 V 476.421. (?) Fragment of window glass. Greenish-blue. (?) Matt-glossy. Distorted by heat. 4 mm thick. C1/C2.
SS 80 V 484.424. Fragment of window glass. Greenish-blue. Matt-glossy. 3 mm thick. C1/C2.
SS 80 V 401.477. Fragment of window glass. Greenish-blue. Matt-glossy. 3 mm thick. C1/C2.
SS 80 V 401.482. Fragment of window glass. Colourless. Matt-glossy. 2·5 mm thick. C1/C2.
SS 80 V 510.646. Fragment of window glass. Greenish-blue. Matt-glossy. 5 mm thick. C1/C2.
SS 80 V 402.302. Fragment of vessel. Greenish-blue. (?) Bottle glass. Not Roman.
SS 80 V .401. Fragment or edge of window glass. Greenish-blue. Matt-glossy. C1/C2.
SS 80 V 484.437. Lump of greenish heat-distorted vessel glass.
SS 80 V 476.462. Chip of opaque glass.
SS 80 V 402. Chip of vessel glass. Bluish-green.
SS 80 V 294.336. Fragment of neck and shoulder of vessel. Greenish. Bottle.

TECHNOLOGICAL FINDS FROM SEWINGSHIELDS

Justine Bayley
Ancient Monuments Laboratory

The material submitted for examination comprised AML nos. 810390–93, 810419–26 and 820391–2. The finds are individually described below. In many cases qualitative analyses were carried out by energy dispersive X-ray fluorescence (XRF).

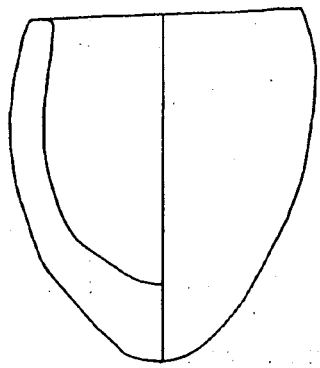
810390 Fragment of hearth lining—fired clay, vitrified on one side from contact with the fire.

810391 Curved fragment of sheet iron. There is nothing to suggest a technological use for this object.

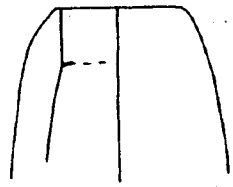
810392 An almost complete hand-made crucible (see fig. 20 no. 1 sketch reconstruction). It is unusual in that the inner surface is oxidized while the rest of the crucible is reduced. The outer surface is partly vitrified but the overall impression is of a very lightly-used vessel. Little metal survives on it but XRF analysis detected copper, zinc, lead and tin which suggests the melting of a mixed copper alloy, possibly mixed scrap metal.

810393 Fragment of a (?) tuyere (fig. 20 no. 2) with internal diameter of c. 3 cm. This is part of a shaped, reduced-fired, hollow clay object which is vitrified on the outer surface. The vitreous surface is coloured red in parts and XRF analysis detected copper and zinc. This suggests the tuyere was used in a fire that was heating crucibles of brass and/or other copper alloys.

810419 Two joining fragments of (?) clay mould. This has obviously been heated in



1. Crucible (AM 810392)



2. Tuyere (AM 810393)
Fig. 20. (1:2)

a fire as the outside has been fluxed and vitrified but the fabric does not look refractory enough for it to have been a crucible and the shape is wrong.

810420 Fuel ash slag containing substantial quantities of copper alloy (XRF detected copper, lead and tin). The slag would have formed in a fire in which the metal was being melted in a crucible.

810421 Solidified pool of molten lead.

810422 Debris from hearth including coal, fuel ash slags, fragments of sheet bronze (XRF detected copper and tin).

810423 Sample from hearth containing small (1–5 mm) slag droplets, some magnetic and dark grey flakes of hammer scale. Both are most likely to have been produced in a blacksmith's hearth.

810424 Reduced fired clay, probably a mould fragment, including part of the ingate. XRF detected only copper in a green corrosion product blob. The fabric contains some vegetable temper and is not refractory enough to withstand long heating, unlike a crucible, for example.

810425 Piece of fuel ash slag.
810426 Block of material from hearth structure.
820391 Two thin rock (? shale) fragments with a fleck of copper corrosion products trapped in the surrounding mud.
820392 Thin sheet metal disc. Copper with traces of zinc, tin and lead (XRF).
(. 801) see above p. 77, no. 10.

Most of the finds of technological significance are connected with the melting and casting of copper alloys, though the available evidence does not suggest anything more than small-scale working. The hearth sample (AM 810423) implies that iron was also being smithed but the lack of iron-working slags suggests only a very minor level of working, perhaps essential repairs being done on an amateur basis.

THE SAMIAN

by J. N. Dore

D = diameter at rim in cms
% = rim% (see Coarseware for explanation)
CG, EG = central and east Gaulish, respectively
Total sherds: 51
Unidentifiable: 24
Cup of unidentifiable form: 1 base sh. probably CG
Dr. 27: 2 rim sh. (D14 7%, D13 4%) both probably CG and Hadrianic
Dr.33: 1 almost complete vessel, no stamp, EG (D11 86%)
1 rim sh. EG (D? c. 2%)
1 wall sh. CG
2 base sh. EG
Dr. 18/31: 1 wall sh. CG (or possibly 18/31R)
Dr.18/31R: 1 rim sh. CG (D23 8%)
1 wall sh. CG (or possibly 18/31)
1 base sh. CG (or possibly 31R)
Dr.31R: 2 rim sh. (D26 4%, D23 5%) CG
3 base sh. CG (one possibly 18/31R)
Dr.37: 1 rim sh. EG (D? c. 2%)
6 wall sh. (4 CG, 2 EG)
2 base sh. CG
Curle 21: 1 base sh. EG
Samian from important contexts, and illustrated, decorated sherds (nos. in left hand margin refer to illustrations—fig. 21)
79 V 147
Unidentifiable sh. CG, probably Antonine
79 V 248
1 wall sh. Dr. 18/31 or 18/31R CG
79 V 254

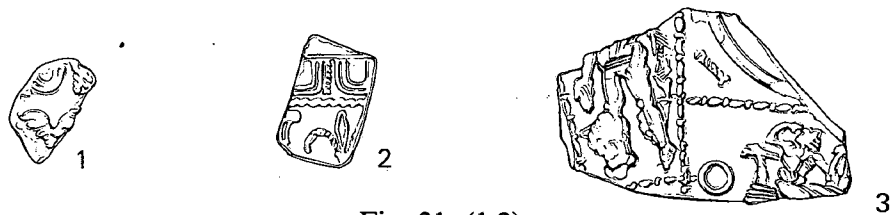


Fig. 21. (1:2)

1 unidentifiable
79 V 259

1. Wall sh. Dr.37 EG; ovolo is probably *Ricken and Fischer* E25; bifid motif is *ibid.* P145; both were used by a number of potters. Late 2nd or early 3rd century.
   79 V 261
   1 unidentifiable
   79 V 288
2. 1 wall sh. Dr.37 CG; trifid motif is probably Rogers G.57, Stanfield and Simpson fig. 31 no. 9 and the ovolo is probably *ibid.* no. 1 (Iustus); the rather coarse wavy line border also suggests Iustus; A.D. 160/170–90.
   80 V 346
   1 unidentifiable
   80 V 403
   1 rim sh. Dr.37 EG
   80 V 409
   1 wall sh. Dr.37 EG (probably Rheinzabern) late 2nd century.
   80 V 431
   1 wall sh. Dr.37 CG Antonine
   80 V 455
   1 base sh. Dr. 31R CG
   80 V 460
   1 unidentifiable
   80 V 467
   1 base sh. Dr.18/31R or 31R CG
   80 V 472
   1 base sh. Dr.33 EG, 1 unidentifiable
   80 V 478
3. Wall sh. Dr.37 CG; figure types are Dechelette 52 and 327; borders are similar to those used by Censorinus. Antonine.
   1 base sh. Dr.33 CG Antonine
   80 V 499
   1 base sh. Dr.31R CG
   80 V 516
   1 rim sh. Dr.31R (D23 5%) CG
   80 V 545
   1 rim sh. Dr.27; probably CG (D13 4%)

THE COARSEWARE

by J. N. Dore

Introduction

Some 3,250 sherds of Roman pottery were recovered. Table B shows the distribution of total rim percentage across vessel classes (each rim sherd is quantified by expressing its rim length as a percentage of a complete circumference). The jar and bowl/dish classes have been further broken down by fabric.

The main body of the report comprises a catalogue of material from important excavated contexts. Within each context entry the arrangement is as follows: total number of sherds; information on illustrated vessels including fabric description, date, diameter at rim in cm, and rim percentage; summary information on other material from the group, which may be of interest but which is not illustrated. Numbers in the left margin refer to illustrations. Only the smallest rim sherds from each context were not illustrated. The last eight illustrated vessels in the catalogue (nos. 97–104) are unstratified but are included to ensure that the illustrated sample represents as fully as possible the range of forms found on the site.

For vessels in BB1 the fabric varies so little from the published standards that full fabric descriptions have been omitted (for such standard descriptions see Farrar, 1973 and Gillam, 1976). The fabric of BB2 vessels is not quite so consistent however so fuller descriptions have been given with an indication at the end of the entry that such a fabric would normally be termed BB2. The fabrics referred to in the catalogue as calcite gritted all conform to the following description: hard dull grey to reddish-brown; abundant angular grains of limestone between 0·5 and 5 mm in diameter with the main fraction 1–2 mm (most have leeched out to give the characteristic pock marked appearance to the fabric), also occasional grains of rounded quartz 0·5 mm diameter and less; surface dark grey to black, wiped smooth (?cloth wiped); the vessel walls tend to be of uneven thickness while the rims are neater and more symmetrical suggesting possibly initial construction by hand following by finishing on a wheel.

A total of 272 sherds of globular amphora were recovered representing a minimum of 5 and a maximum of 24 vessels. Two sherds were submitted to Dr. D. F. Williams of the Dept. of Archaeology, University of Southampton (DoE Ceramic Petrology Project). He reported that both sherds were from the globular amphora form Dressel 20, the source of which was the Guadalquivir region of Spain.

Dates have been given in general periods rather than in actual years to avoid the impression of precision created by the latter. Fig. 22 shows a possible distribution of the datable pottery sample (rim sherds) between the late first and late fourth centuries. Each column represents a third of a century. Values for each column were obtained by dividing the value for each rim sherd (1) by the number of columns which its date-range spans and summing for each column the values so gained (i.e. a sherd dated early to mid 2nd century would score 1/2 in each of the first two columns for the 2nd century). This ensured that the smaller and less closely datable sherds scored less heavily in individual columns than closely datable sherds. All rim

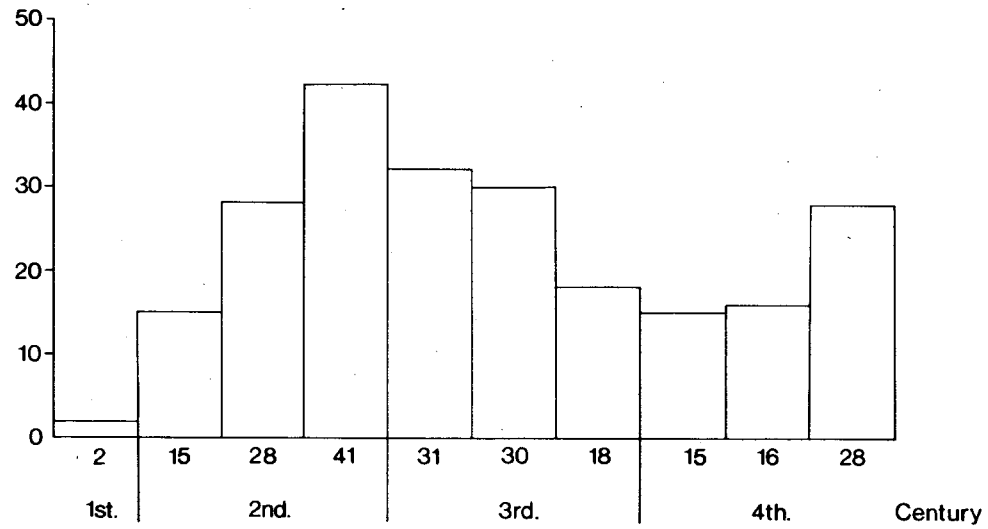


Fig. 22.

sherds were used, not just those in the illustrated sample. Results obtained using rim percentages were not significantly different.

Fig. 22 then is one possible distribution of dated pottery from the site over a period of time. The components influencing the apparent shape of this distribution can be simply stated as: 1) the capability of modern dating; 2) the market tendency of the pottery industry over the period covered by the distribution; 3) the occupation pattern of the site in question. Although we would often like to concentrate on this last component and to see a simple correlation between a sample distribution and varying intensity of occupation the interrelationship of the three components is complex making it difficult to isolate any one from the influence of the others.

At Sewingshields the main problem concerns the third and fourth centuries. The feeling gained from the structural evidence is that intensity of occupation declined as the third century progressed. Does the shape of the pottery distribution reflect this? Fig. 22 shows a peak in the last third of the second century followed by gradually decreasing values in the third and early fourth centuries and a slight rise in the later fourth. Thus there is a general indication of correlation with declining occupation. Values for the third century may, however, overrepresent actual occupation. Although they have been given the widest possible date range (late 2nd–early 3rd century) the types of vessels in **BB2** fabric are not those usually regarded as the most typologically advanced which are encountered in the north and could all possibly fall within the earlier part of that range. Likewise, many of the types dated to the late 3rd century and later may be fully 4th century. Thus 3rd century values may have been inflated by the overspill of widely dated types from the 2nd and 4th centuries. The almost total absence from the site of colour-coated wares of the 3rd and 4th centuries is significant although as it also seems to have been scarce at other milecastles and

as there is little fine pottery generally from the site this could be related more to differential distribution of the ware caused by market tendencies. Something more likely to be related to intensity of occupation is the small amount of BB1 from the site and in particular the scarcity of later 3rd century types. The total absence of bowls and dishes in BB1 is interesting but inexplicable. On the whole, therefore, it would seem likely that the pottery distribution does reflect a decline in occupation during the third century.

Finally we must consider the later 3rd and 4th century types. These consist almost entirely of East Yorkshire products, mortaria, grey ware flanged bowls and calcite gritted jars, the finer painted products of the kilns being absent. The only type from the site which can be dated with any degree of certainty to the later 4th century is the calcite gritted jar with pronounced shoulder and hooked and internally grooved rim. This is the so-called "Huntcliff" type which as defined shows greater overall consistency than non "Huntcliff" calcite gritted jar forms and does seem to be confined to the later years of the 4th century. The evidence for this dating which is most usually cited is the occurrence of the type at signal stations on the Yorkshire coast (the erection of which is dated by coin hoards to the reign of Valentinian I, see Hull, 1933) and in the latest level of a barrack at Birdoswald (dated by a Valentinianic coin in the preceding level, see Richmond and Birley, 1930). In recent excavations at Corbridge (Grew, 1981, 322) occurrence of the type was confined to levels securely dated to after A.D. 364 and at Ravenglass likewise the type was confined to the latest phase on the site, dated to post A.D. 350 by a coin in burnt daub overlying deposits of the immediately preceding period (see Potter, 1979, 41, 114 *et seq.*). The association of the emergence of this and related East Yorkshire types with the restoration of the province by Theodosius in A.D. 369 remains circumstantial, however.

TABLE B

Total Rim% = 2,865								
Flagon	Beaker	Jar				Bowl/Dish		Mortarium	Lid
205	15	2,275				274		88	8
		BB1	BB2	CGr	Other	BB2	Other		
% of class		9·6	17·9	26·3	46·2	8·4	91·6		

Catalogue—Pottery from important contexts

78 V 128 Total sherds: 3

1. Sandy pale brownish-grey, dark grey surface. Probably an E. Yorks product. Late 3rd–4th century. D24 6%

78 V 147 Total sherds: 52

2. BB1 Early 3rd century D12 13%

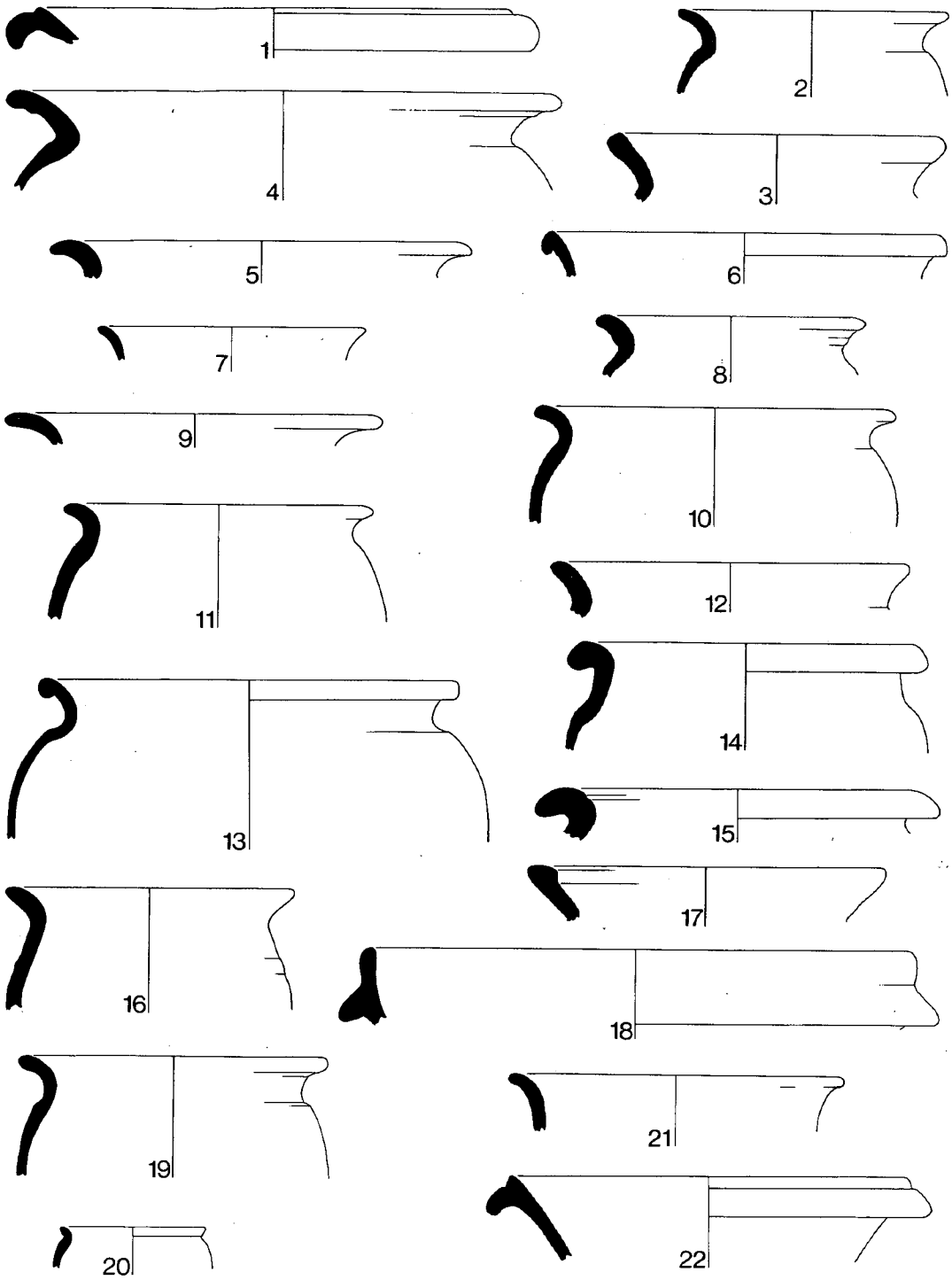


Fig. 23. (1:3)

3. Micaceous gritty brownish-grey, black surface. Probably 3rd century or later. D15 8%

Also: 1 rim sherd mortarium in sandy greyish-white fabric, D29 3%, as no. 102.
25 wall sherds Dressel 20 amphora.

78 V 170 Total sherds: 14

4. BB1, probably 3rd century or later. D25 17%

79 V 236 Total sherds: 10

5. Black calcite gritted. Late 3rd–4th century. D19 6%

79 V 247 Total sherds: 74

6. Granular dark grey with brownish-red margins, banded dark orange and black surface. Related to BB2. Late 2nd–early 3rd century. D18 7%
7. Sandy grey with orange-brown margins; dull brown burnished surface. (BB2) D12 12%

Also: 17 wall sherds black calcite gritted fabric including one almost certainly from a Huntcliff type jar.
1 wall sherd Dressel 20 amphora

79 V 248 Total sherds: 76

8. Sandy grey with smoothed surface. Mid 2nd century. D12 32%
9. Black calcite gritted. Late 3rd–4th century. D17 15%
10. Black calcite gritted. Late 3rd–4th century. D16 33%
11. Black calcite gritted. Late 3rd–4th century. D14 25%

79 V 253 Total sherds: 18

12. Granular dark grey with dull brown margins; black-burnished surface. Probably late 2nd–early 3rd century. D16 10%

Also: 1 base sherd, 8 wall sherds calcite gritted jar

79 V 254 Total sherds: 9, including sherds from an orange jar or flagon (sherds from this vessel were also found in 79 V 257) and 1 wall sherd calcite gritted.

79 V 257 Total sherds: 41 including a handle and wall sherd from an orange jar or flagon (c.f. 79 V 254), and 1 wall sherd calcite gritted and 1 wall sherd Dressel 20 amphora.

79 V 260 Total sherds: 25 including 1 rim sherd BB2 jar, D9 8% and 1 wall Dressel 20 amphora.

79 V 261

13. Granular dark grey with brownish-orange margins; patchy dark brown and orange micaceous surface. (Fabric as no. 6-related to BB2). D19 15%. Late 2nd–early 3rd century
14. Black calcite gritted. D16 15% Late 3rd century+.
15. Black calcite gritted. D18 10% Late 4th century.

Also: Grey ware flanged bowl, almost certainly the same vessel as no. 22, D23, 18%.
Grey jar, same vessel as no. 12, D17 8%

79 V 262

2 wall sherds calcite gritted

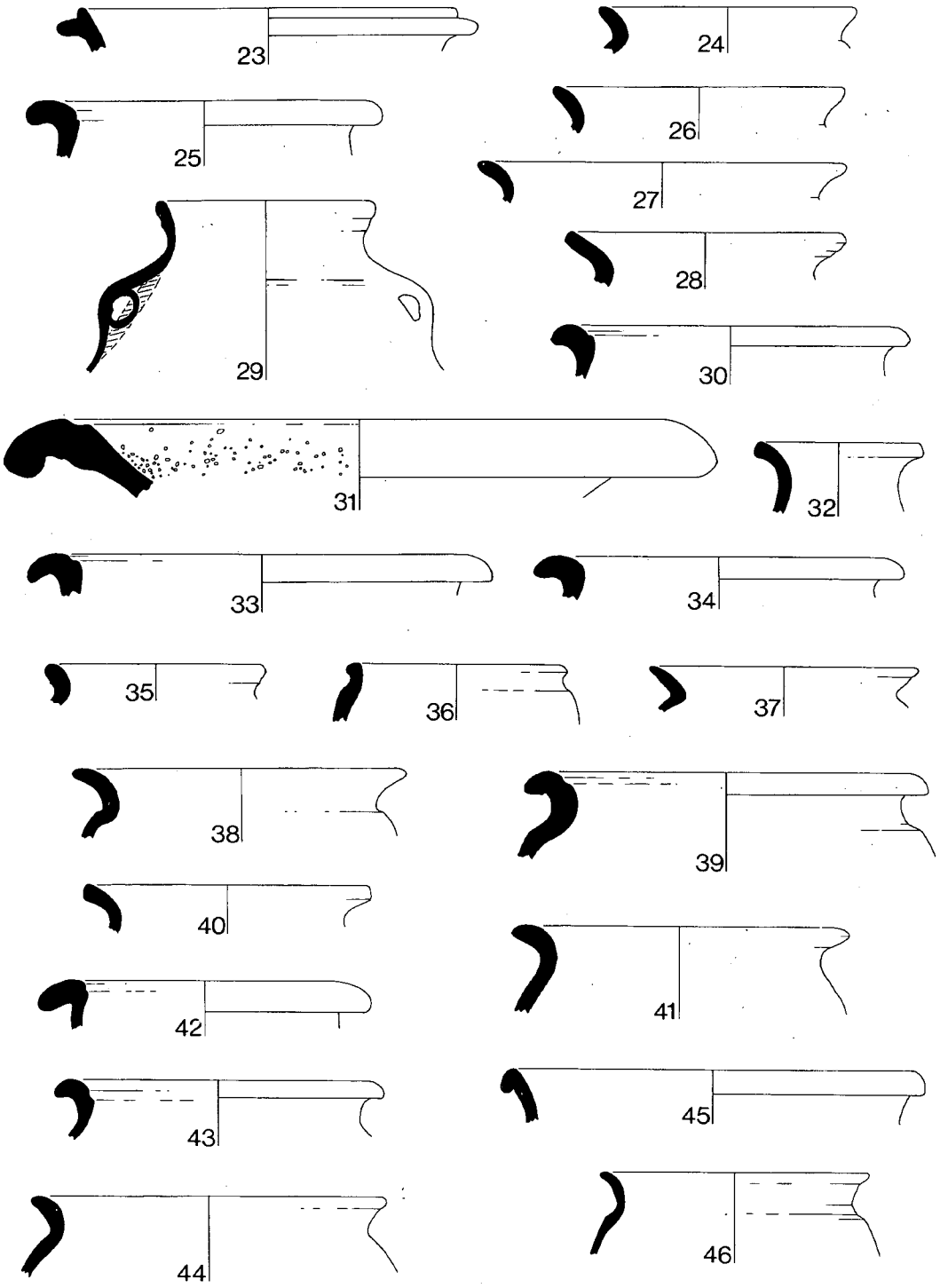


Fig. 24. (1:3)

79 V 263 Total sherds: 8
16. Sandy grey. Possibly a Norton product (see Hayes and Whitley, 1950). Probably 3rd century. D13 20%
17. Gritty pale grey with rough dark grey to black surface. D16 12%
Also: 3 wall sherds calcite gritted.
79 V 266 Total sherds: 15, all calcite gritted
79 V 269 Total sherds: 22
18. Sandy orange, highly micaceous surface; possibly an E. Yorks product; probably 3rd or 4th century. D32 4%
79 V 274
19. Soft, sandy grey. Early-mid 2nd century. D14 21%
79 V 284
1 wall sherd Dressel 20 amphora
79/80 V 287 Total sherds: 29
20. Sandy orange. Early-mid 2nd century. D6 10%.
21. Sandy mid grey with darker grey surface. Early-mid 2nd century. D15 7%
22. Hard, sandy pale grey with darker grey surface. Probably an E. Yorks product. Late 3rd–4th century. D20 16%
Also: 2 wall sherds calcite gritted
1 wall sherd Dressel 20 amphora.
79 V 289 Total sherds: 28
23. Hard, sandy pale brown, grey core with darker grey margins and dark grey to black surface. Late 3rd-4th century. D19 9%
Also: 7 wall sherds calcite gritted.
79 V 302 Total sherds: 4
24. Sandy pale grey with dark grey outer surface. Early-mid 2nd century. D11·5 20%
80 V 319 Total sherds: 37
25. Black calcite gritted. Late 4th century. D16 20%
Also: 1 rim sherd from same vessel as no. 13
12 wall sherds calcite gritted.
79 V 323 Total sherds: 5
26. Soft granular mid grey. 2nd century. D13 10%
79 V 327 Total sherds: 6, including 5 wall sherds Dressel 20 amphora and 1 wall sherd BB1 jar.
79 V 340 Total sherds: 3, including 2 wall sherds calcite gritted.
79 V 342 1 base sherd calcite gritted
80 V 343 Total sherds: 29
27. Sandy mid brown with dark grey smoothed surface. Late 2nd–early 3rd century. D16·5 8%
Also: rim fragment of mortarium in orange fabric with multi-coloured grits. 2nd century; probably north-western in origin.
5 wall sherds calcite gritted.
80 V 346 Total sherds: 30

28. Gritty dark grey with rough, micaceous dark grey surface. Similar fabric to no. 17. 3rd century+. D13·5 12%
Also: rim fragment from same vessel as no. 29
2 base sherds, 15 wall sherds calcite gritted

80 V 400
1 wall sherd mortarium, granular cream with pink core; multi-coloured grits.
1 wall sherd Dressel 20 amphora.

80 V 402 Total sherds: 27

29. Sandy pale grey with darker grey burnished surface. Probably an E. Yorks product. Late 3rd century+. D10 30%
30. Black calcite gritted. Late 4th century. D16 10%
31. Granular pale cream with pale orange-pink core. Trituration grits: multi-coloured, well rounded, up to 5 mm with main fraction c. 2 mm, quartz and ferruginous sandstone. Probably northern in origin. Mid 2nd century. D32 18%.
Also: Rim fragment of same vessel as no. 23
Wall sherd of jar or flagon in quite fine white fabric with two horizontal bands (5 mm wide) of orange-brown paint
5 wall sherd calcite gritted
4 wall sherds Dressel 20 amphora

80 V 403 Total sherds: 20

32. Sandy grey with smoothed surface D7·5 12%
33. Black calcite gritted. Late 4th century. D21 5%

80 V 405 Total sherds: 3
1 wall sherd Dressel 20 amphora

80 V 406 Total sherds: 3 including 1 wall sherd calcite gritted

80 V 408 Total sherds: 4

34. Black calcite gritted. Late 3rd century+. D16·5 11%

80 V 409 Total sherds: 49

35. Quite fine medium grey, dark grey burnished surface. Early-mid 2nd century. D12 8%
36. Sandy grey with smoothed black surface. Early-mid 2nd century. D10 6%
37. Sandy dull orange-brown with blue-grey core and burnished black surface (BB2). Late 2nd–early 3rd century. D12 6%
38. Granular grey with smoothed surface. Early 3rd century. D15 10%.
Also: 1 wall sherd mortarium in sandy pale grey; trituration grits: large (c. 4 mm) hard sub-angular black. 3rd century+
10 wall sherds calcite gritted.

80 V 410 2 wall sherds Dressel 20 amphora

80 V 412
1 frag. orange mortarium similar to Gillam 243 or 245. Probably north-western in origin. Early–mid 2nd century
1 wall sherd beaker in sandy grey-brown fabric with rough-cast surface. cf. Gillam 74. Mid 2nd century

1 rim sherd BB2 jar. Late 2nd–early 3rd century. D12 6%
20 wall sherds Dressel 20 amphora

80 V 413 Total sherds: 3 including 1 rim sherd BB2 jar. Late 2nd–early 3rd century. D14 6%.

80 V 414 Total sherds: 22

39. Black calcite gritted. Late 4th century. D18 13%

Also: 14 other sherds calcite gritted.

80 V 415 Total sherds: 66

40. Hard granular grey, smoothed surface. D13 8%
41. Black calcite gritted. Late 3rd century+. D15 17%
42. Black calcite gritted. Late 4th century. D15 16%
43. Black calcite gritted. Late 4th century. D15 12%

Also: 1 rim sherd same vessel as no. 55
5 base-, 44 wall-sherds calcite gritted.

80 V 417 Total sherds: 5 including 1 wall sherd calcite gritted.

80 V 421 Total sherds: 29

44. Granular dull brown with burnished black surface (BB2). Mid-late 2nd century. D16 10%.

Also: frag. orange mortarium (see under 412)
frag. mortarium in sandy pale pink with paler core and pinkish-cream surface. Multicoloured grits (1–3 mm dia.) (quartz, quartz sandstone and ferruginous sandstone)

80 V 422 Total sherds: 15

45. Granular dull orange-brown, dark grey core, patchy dark grey and dull orange-brown micaceous surface (related to BB2). Late 2nd–early 3rd century. D19 19%.

1 wall sherd calcite gritted.

80 V 423 Total sherds: 3 including 1 wall sherd calcite gritted.

80 V 428 Total sherds: 32

46. Granular grey with dull orange-brown margins and mid grey surface (BB2). Late 2nd–early 3rd century. D12 17%
47. BB1. Late 2nd–early 3rd century. D13 12%.
48. BB1. Early–mid 3rd century. D12 7%.

Also: 2 wall sherds Dressel 20 amphora.

80 V 435 Total sherds: 26 including 1 rim sherd BB2 jar. Late 2nd–early 3rd century. D14 17%.
10 wall sherds Dressel 20 amphora.

80 V 446 1 rim sherd, 1 wall sherd BB2 jar. Late 2nd–early 3rd century. D14 7%.

80 V 450 Total sherds: 129

49. Black calcite gritted. Late 3rd century+. D17·5 55%
50. Black calcite gritted. Late 3rd century+. D16 11%
51. Black calcite gritted. Late 3rd century+. D16 11%
52. Black calcite gritted with rivet hole for repair. Late 4th century. D15 10%.
53. Black calcite gritted. Late 4th century. D16 14%.

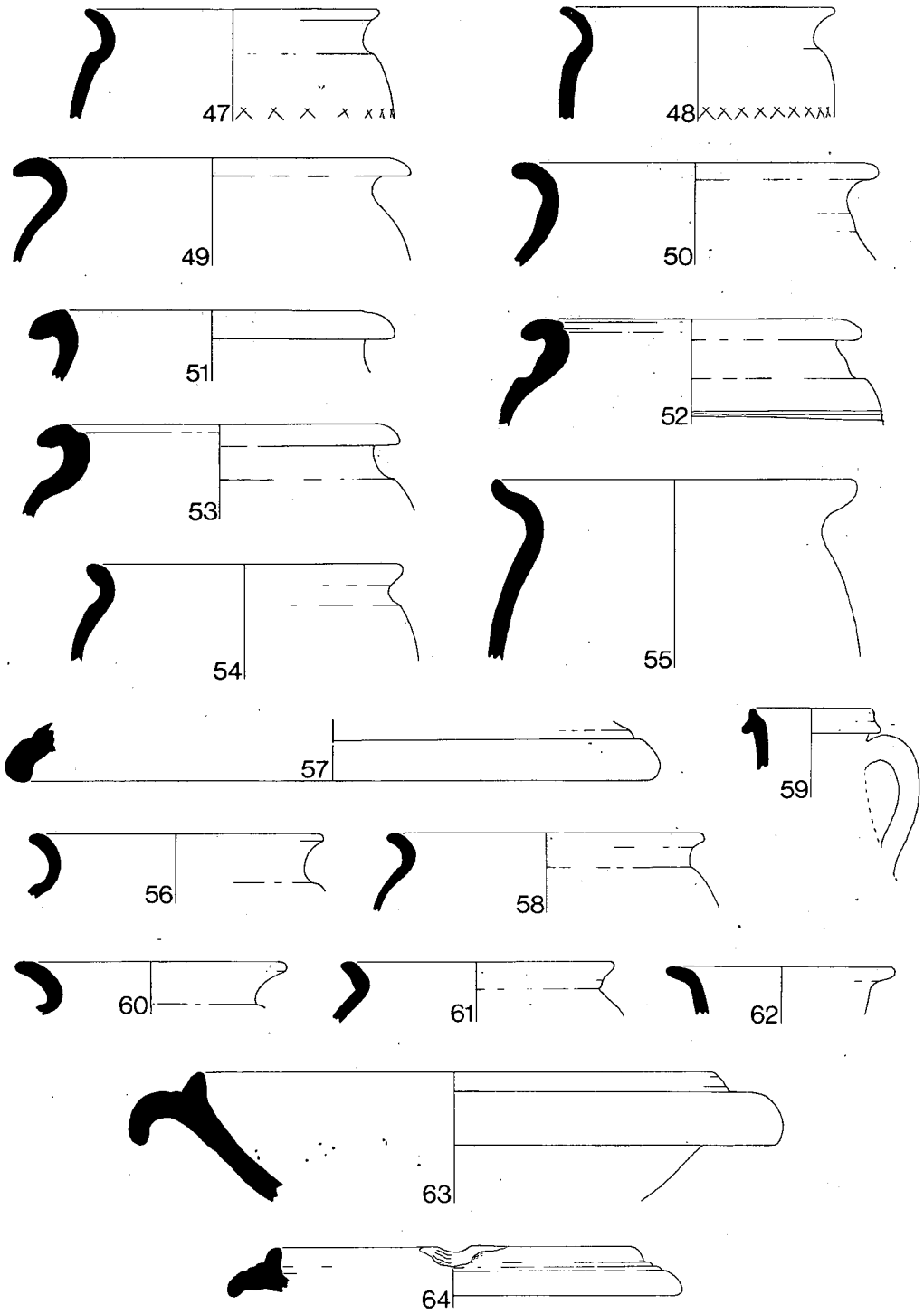


Fig. 25. (1:3)

80 V 451 Total sherds: 8
1 rim sherd 6 wall sherds calcite gritted jar. Late 3rd century+ D18 6%.
80 V 453 Total sherds: 96
54. BB1. Mid 2nd century. D14 10%
55. Granular grey with dark grey core and rough black surface. Probably 3rd century+. D16 10%.
56. Sandy grey. Mid-late 2nd century. D13 30%
57. Sandy orange-brown with a glossy slip of the same colour on the outside. Late 2nd–early 3rd century. D29 6%. A Wilderspool "Raetian" product (cf. Hartley and Webster, 1973).
Also: 41 wall sherds Dressel 20 amphora.
80 V 455 Total sherds: 10 including 2 rim sherds, 6 wall sherds calcite gritted
80 V 460 Total sherds: 2 including 1 wall sherd calcite gritted
80 V 462 Total sherds: 11 including 9 wall sherds calcite gritted
80 V 463
58. Granular dull orange-brown with brownish-grey surface. Late 2nd–early 3rd century. D14 21%
80 V 465 Total sherds: 60
59. Granular orange-yellow. 2nd half 2nd century. D5·5 22%
60. Sandy grey. Late 2nd–early 3rd century. D12 20%
61. Fine mid grey with paler core and smooth black surface. Mid 2nd century. D12 42%
62. Sandy grey with smoothed surface. Mid 2nd century. D10 16%.
63. Sandy pale brown with grey core and the remains of a dark brown wash inside. Sparse white trituration grits (c. 1 mm dia) (quartz). Probably 3rd century. D29 14%
64. Sandy dark grey with dirty white surface. No visible grits. Possibly an E. Yorks. product. Late 3rd century+. D20 14%
Also: 1 wall sherd rough-cast beaker (see under 412)
1 base sherd beaker in fine white fabric with black colour coat. Late 2nd century+.
4 wall sherds Dressel 20 amphora
1 wall sherd calcite gritted
80 V 466
65. Black calcite gritted. Late 3rd century+. D16 7%
Total sherds: 41
66. Granular mid-grey, dark brown margins, patchy rough dull orange-brown and grey surface. Related to BB2. Late 2nd-early 3rd century. D18 5%
67. Granular dark brown, rough patchy orange-brown and dark grey surface (BB2). Late 2nd–early 3rd century. D17 13%.
Also: 1 rim sherd mortarium; same vessel as no. 102. Mid 3rd century
2 wall sherds calcite gritted
1 wall sherd Dressel 20 amphora
80 V 476 Total sherds: 22

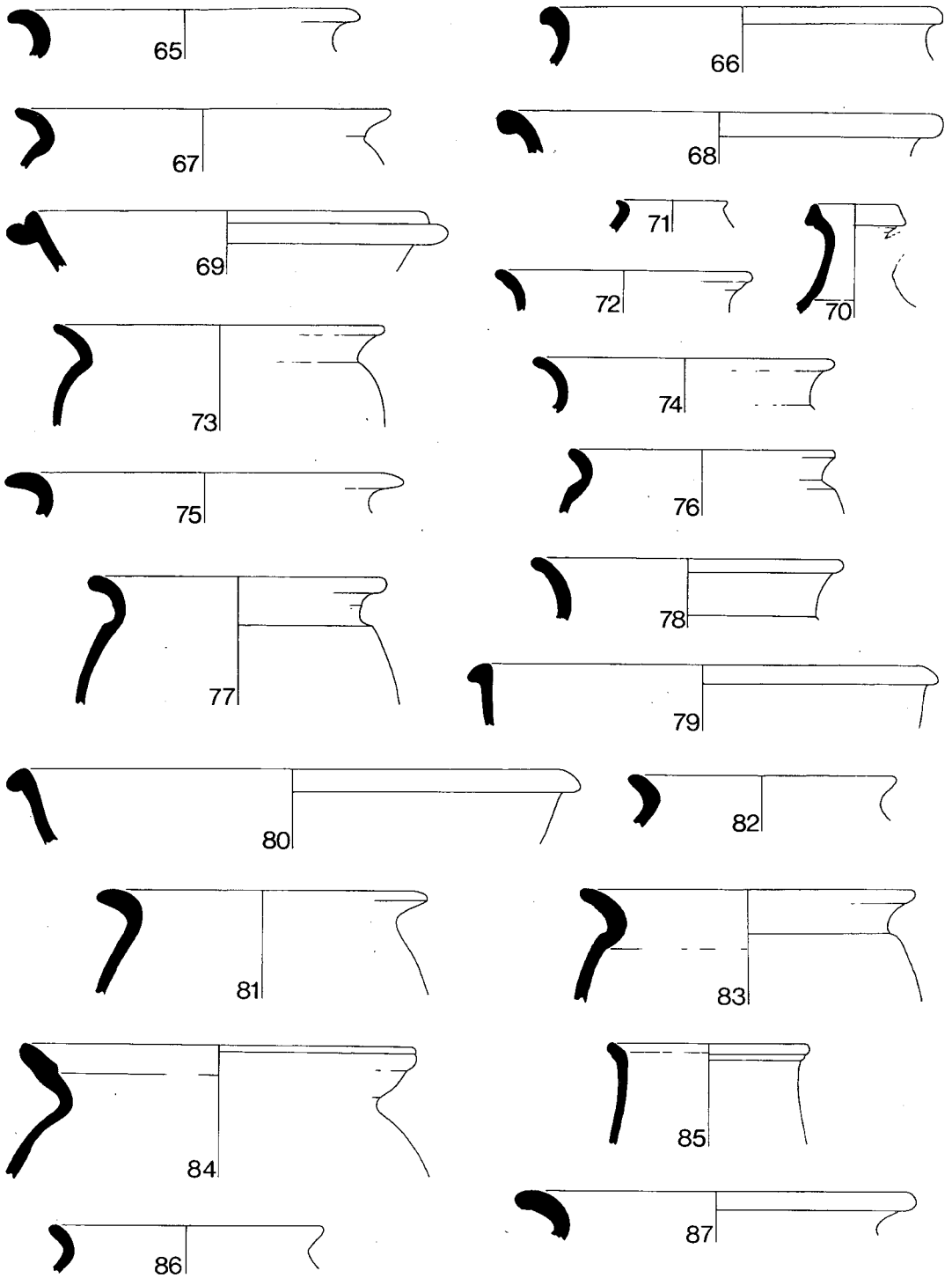


Fig. 26. (1:3)

68. Hard sandy mid grey with darker surface burnished outside and on the inside of the rim. More likely to be late 2nd century than any later. D20 10%
69. Sandy pale grey, dark grey margins, smooth dark grey surface. Late 3rd century+. D20 13%
Also: 4 wall sherds calcite gritted

80 V 478 Total sherds: 33, including 1 rim sherd same vessel as no. 68, D20 13%; 1 wall sherd Dressel 20 amphora.

80 V 484 Total sherds: 58

70. Fine orange-brown. 1st half 2nd century. D4·5 100%
71. Fine, hard pale grey with darker grey core. 1st half 2nd century D5 10%
72. Sandy mid grey. Early-mid 2nd century. D11·5 16%
73. BB1 Mid 3rd century. D15 15%
74. Granular mid grey with dull orange-brown margins and rough brownish-grey surface (BB2). Late 2nd-early 3rd century. D13·5 35%.
75. Black calcite gritted. Late 3rd century+. D18 11%

80 V 485 Total sherds: 12

76. Sandy grey. 1st half 2nd century. D12 18%
77. Hard fine mid grey with burnished surface. Early-mid 2nd century D13·5 33%
78. Fine mid grey with smoothed surface. Early-mid 2nd century. D14 11%
79. Sandy dark grey with dull dark brown margins and burnished grey surface (BB2). Mid-late 2nd century. D21 11%
80. Sandy dark grey with reddish brown margins and black burnished surface (BB2). Late 2nd–early 3rd century. D26 8%
Also: 2 rims sherds same vessel as no. 6 D18 10%

80 V 488 Total sherds: 3 including 1 rim sherd BB2 jar. Late 2nd–early 3rd century. D18 10%.

80 V 500 Total sherds: 5

81. Black calcite gritted. Late 3rd century+. D15 20%

80 V 502 Total sherds: 14 including 1 rim sherd BB1 jar. D13 7%

80 V 506 Total sherds: 7

82. Sandy mid grey, smoothed surface. 2nd century. D12 13%.
Also: 1 wall sherd Dressel 20 amphora

80 V 507 Total sherd: 35

83. Granular dark grey with light grey burnished surface. Late 2nd–early 3rd century. D15 16%
84. Sandy black, pale grey margins, dark grey to black wet-smoothed surface; occasional large grits. 3rd century+. D18 24%.
Also: 1 rim sherd same vessel as no. 55
1 base sherd, 7 wall sherds calcite gritted
3 wall sherds Dressel 20 amphora

80 V 510 Total sherds: 62

85. Sandy pale grey, darker grey burnished outer surface. Type as Gillam 43. Probably an E. Yorks product. Late 3rd century+. D9 15%

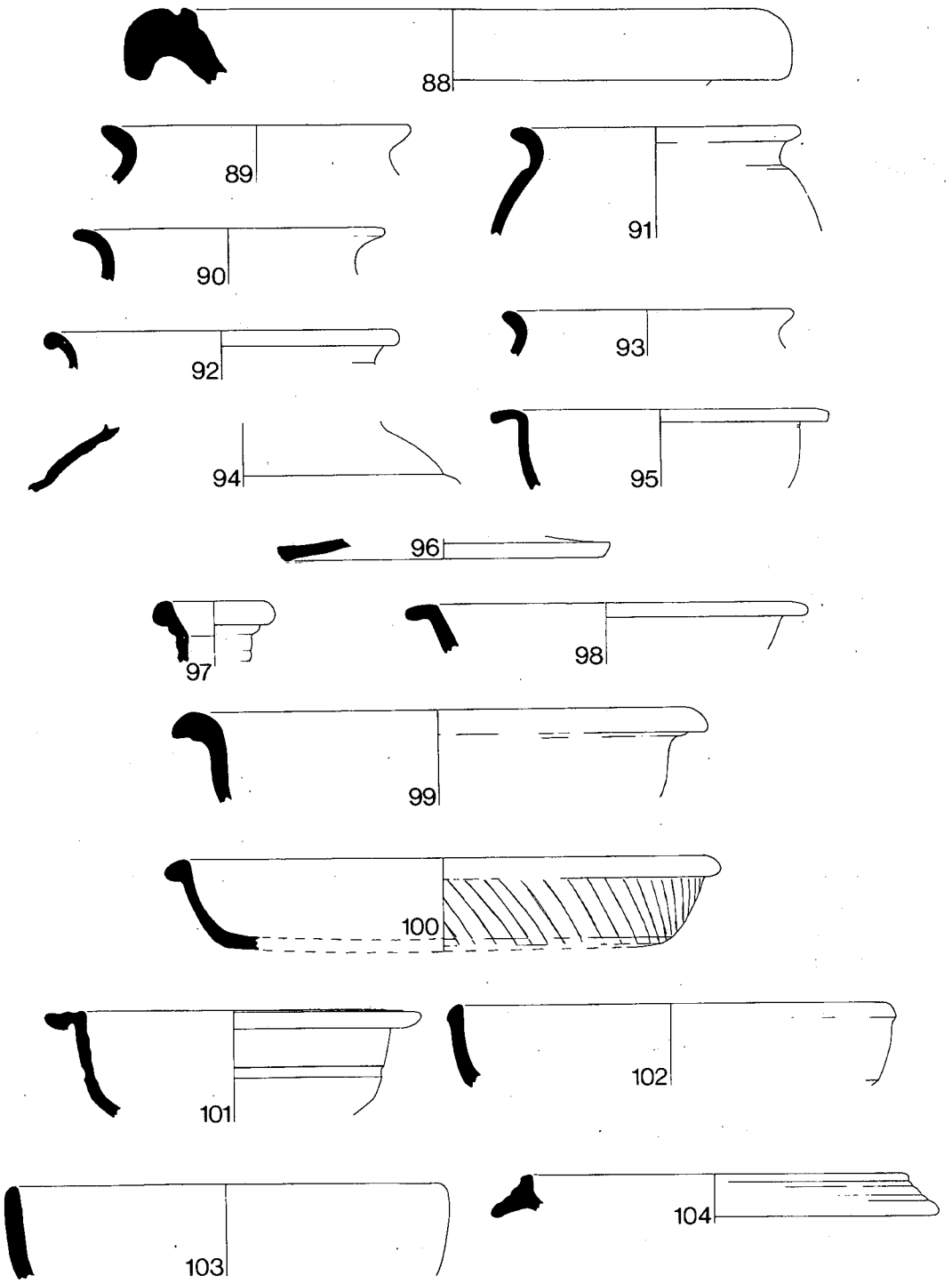


Fig. 27. (1:3)

86. Granular pale grey with smoothed darker grey surface (BB2 or related). Four vertical notches cut in rim after firing. Late 2nd century. D12·5 13%
87. Black calcite gritted. Late 3rd century+. D18 12%
88. Sandy pale orange-yellow with orange-brown slip (?) on surface. The 2 surviving grits are rounded quartz sandstone (4 mm diam.). Mid 2nd century. Stamped. Mrs. K. F. Hartley comments: "The broken and poorly impressed stamp is at present unidentifiable;]SC///E is a possible but by no means certain reading. Probably a north-eastern product, certainly 2nd century."—
Also: 1 rim sherd same vessel as no. 81. D15 16%
1 rim sherd same vessel as no. 80.
2 wall sherds Dressel 20 amphora

80 V 518 Total sherds: 4 including 2 wall sherds Dressel 20 amphora
80 V 524 Total sherds: 4 including 2 wall sherds Dressel 20 amphora
80 V 533 Total sherds: 9

89. Sandy mid grey, paler grey margins and mid grey surface. Early-mid 2nd century. D14 12%
90. Granular mid grey. Mid 2nd century. D14 15%

80 V 545 Total sherds: 43

91. Sandy grey with burnished surface. Early-mid 2nd century. D13 29%

80 V 553 Total sherds: 23

92. Granular grey with dull orange core. Patchy orange and grey surface. Late 2nd–early 3rd century. D16 8%
Also: 2 wall sherds Dressel 20 amphora

80 V 565 Total sherds: 33

93. Sandy grey with smoothed surface. Early-mid 2nd century. D13 11%
94. Granular dark grey with light grey margins and dark grey outer surface. Probably from a jar with a cordoned girth band. Late 1st–early 2nd century.
95. Fine orange-yellow with paler core. Surface smoothed and possibly originally mica-dusted. cf. Curle, 1911, fig. 26, no. 13 (Newstead). Late 1st–early 2nd century. D15 21%
96. Sandy orange-yellow with paler core. Smoothed surface. Similar fabric to no. 95. Late 1st–early 2nd century. D15 8%
Also: 1 wall sherd Dressel 20 amphora.

Other Vessels: Forms not already represented above

97. Fine white with darker surface. Mid-late 2nd century. D5·5 60%
98. Sandy mid grey. 2nd century. D18 11%
99. Sandy mid grey. Possibly an E. Yorks product. Late 3rd century+. D24 10%
100. Granular black with lustrous burnished surface (BB2). Late 2nd–early 3rd century. D25 6%
101. Hard granular black with gritty surface. Late 1st–early 2nd century. D17 13%
102. Sandy pale orange-yellow. D20 13%
103. Sandy grey with darker surface. Late 3rd century+. D20 10%
104. Sandy cream, no grit visible. Mid–late 3rd century. Dia. not less than 20, c. 5%.

THE MEDIEVAL POTTERY FROM SEWINGSHIELDS

By R. J. C. Coleman-Smith and T. Pearson

The medieval pottery from Sewingshields forms a small but interesting group of 495 sherds. Most of these (485 sherds) were recovered during the excavation of medieval buildings which overlay the robbed site of Milecastle 35. The other 10 sherds came from medieval robber trenches along the line of Hadrian's Wall, and include two types of pottery not found at the milecastle.

In view of the quality of the excavated buildings at Sewingshields, the composition of this assemblage is slightly surprising. Not only is there an unusual variety of both glazed and unglazed pottery but a wide variety of forms occur. The presence of at least one imported (Langerwehe) vessel would seem unusual if the site were viewed in isolation, especially as the quality and variety of some of the pottery is mirrored by the range of small finds. It is clear, however, that these finds reflect the proximity of the site of Sewingshields castle, and the wealth of the owners of the manor of Sewingshields during the 13th–15th centuries.

The pottery has been sorted by context according to type and form. After the number of sherds within each category has been recorded an attempt has been made to assess the minimum number of vessels and the degree of fragmentation that has occurred. Despite the small size of the sample it is clear that the more common glazed wares have been widely scattered, while the majority of the Langerwehe sherds come from a single vessel. For ease of reference, the pottery types have been recorded in a standard form: fabric, method of manufacture, form and decoration, date and parallels. The fabrics have been described after examination with a × 20 hand lens and their inclusions have been tested where necessary with dilute hydrochloric acid, following the method used by Peacock.

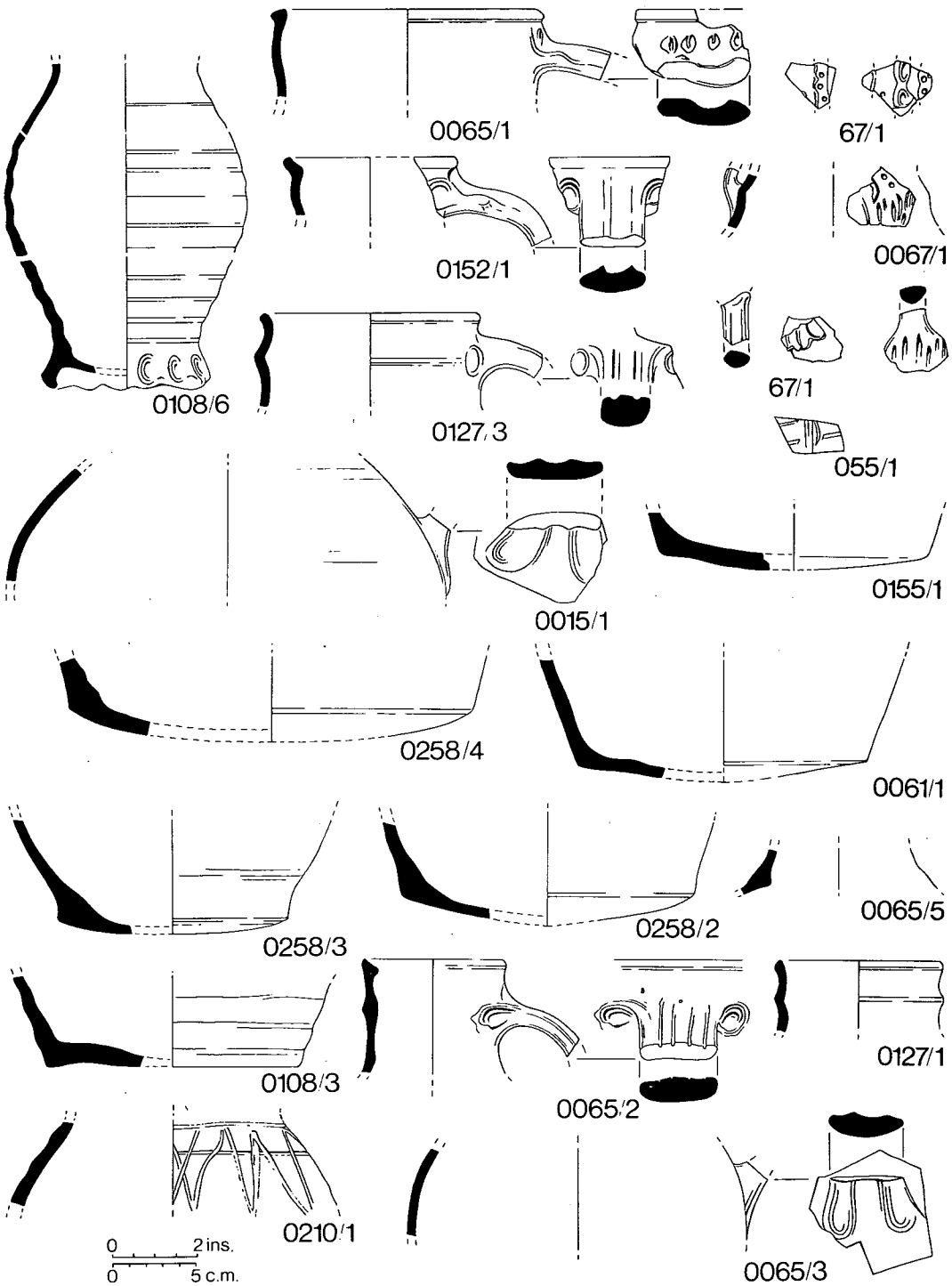
An attempt has also been made to solve the problems of separating reduced green glazed wares into different fabric types, by controlled refiring. A note on this work as carried out by Mr Coleman-Smith is appended to the report.

The Pottery Types

IMPORTED STONEWARES

Type 1, Langerwehe:

A hard buff-brown fabric with a fine grainy texture. The external surface is slip covered giving a mottled brown-grey colour under a clear salt glaze. The majority of the sherds could safely be assigned to one vessel (108·6 fig. 28) but the lack of diagnostic rim sherds does not allow a precise date to be given to it. The absence of both the earlier Siegburg and later Raeren stonewares from the site may imply that this belongs to the early 15th century. The vessel is a common type of 14th–15th century jug (Peacock 1977).


0065/1
67/1
0152/1
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0108/6
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67/1
055/1
0015/1
0155/1
0258/4
0061/1
0258/3
0258/2
0065/5
0108/3
0065/2
0127/1
0210/1
0065/3
0 2 ins.
0 5 c.m.

Fig. 28. (1:4)

THE REDUCED GREY WARES

Type 2:

A hard fabric with clear rounded quartzite grits (below 0·5 mm), and isolated white opaque grits. It has a hard texture and has been reduced to a blue-grey colour with surfaces varying between grey and off-white below the glaze.

Method of manufacture: Wheel thrown with roughly smoothed surfaces.

Form and decoration: A jug or cistern with pulled strap handles which have been thumb impressed or finger stabbed on to the body of the vessel (65.1 fig. 28). A small jug with a miniature rod handle and decorated on both the body and handle with small stabbed circular impressions, and with applied and thumb impressed strips.

Date and parallels: The jug (65.1) resembles one from Newcastle (Harbottle and Ellison 1981, 112 and 115 no. 45), and the smaller jug (67.1 fig. 28) is paralleled at Finchale Priory (Jarrett and Edwards 1961, 229–67). Similar small handles and the same circular stabbed decoration, perhaps made with a round stick, are found at Hartlepool, where the decoration is reserved for making the eyes of face designs (Jarrett and Edwards 1962, 241–51, 242 nos. 15, 24, 28). Similar decoration occurs on unprovenanced pottery held by the Society of Antiquaries of Newcastle upon Tyne (Jarrett and Edwards 1963, 94 and 96 no. 45). In Newcastle this type of ware would generally be of late 14th to late 15th centuries, although a few pieces were still being made in the early 16th century. Oxidization tests by Coleman-Smith showed that this type could be sub-divided into two groups. Without sampling and refiring all the sherds, this would not be possible and it was decided not to pursue this line of investigation.

Type 3:

A hard fabric with irregularly grouped clear and opaque white quartzite grits (mainly below 0·5 mm) and with sparse red iron ore inclusions. It is softer than Type 2 and has mainly been reduced to grey or grey-black. Where oxidized, the external surface is orange-buff to off-white. Externally the sherds are glazed with a badly developed lead glaze ranging from olive-green to green and to brown-yellow. The glaze is only patchily applied in some cases.

Method of manufacture: Wheel thrown with finger smoothed external surfaces and with some sherds showing clear throwing rings.

Form and decoration (fig. 28): Large handled jars or cisterns (152.1) and jar forms (127.3 and 15.1) are common, with strap-handles that have thumb-impressed terminals. One sherd has incised horizontal turned lines overlaid with combed ones (55.1), otherwise decoration is rare. Slightly sagging bases are characteristic, (258.4, 61.1 and 155.1) and vessel (258.4) may perhaps be a cistern as it closely resembles one from Newcastle (Harbottle and Ellison 1981, 112 and 115 no. 45).

Date and parallels: On the evidence from Carlisle this type has a wide date range extending into the post-medieval period (M. McCarthy *pers. comm.*). In Newcastle however these reduced green glazed wares appear in the early 13th century, but diminish in favour of buff-white wares until the 14th century when they again appear in quantity (Harbottle and Ellison 1981). At Cockermouth this type first appears in the 13th century alongside highly decorated oxidized wares (T. Pearson *pers. comm.*).

In Newcastle similar forms in this fabric appear in the late 14th century, and this date fits well with the apparent association of this type with Building A.

Type 15:

A fairly hard fabric with isolated fine clear or white opaque grits (perhaps sand tempering) and a few voids. Its colour ranges from the predominant reduced grey, to an oxidized pink orange. They are glazed externally with a badly developed yellow to yellow-green lead glaze.

Method of manufacture: Wheel thrown with externally smoothed surfaces and knife trimmed bases.

Form and decoration (fig. 28)*:* Globular jugs with slightly sagging bases (258.3) or flat bases (108.3) are common. Decoration is limited to external wheel turned incised lines round the neck and upper part of the body.

Date and parallels: Similar decoration is found on a storage jar at Finchale (Jarrett and Edwards 1961, 249, 272 no. 50), whilst all over decoration with turned incised lines occurs on pottery from Newminster Abbey (Harbottle and Salway 1964, 161 no. 52), suggesting that this form of decoration was widespread. The vessels found at Sewingshields are probably 14th century in date.

Type 22:

A hard heavily gritted fabric with white opaque and clear quartzite grits and isolated voids from organic inclusions. The surfaces feel harsh and the fabric has generally been reduced to a blue-grey to light grey colour with slight external oxidization. Thick yellow-green lead glaze covers the exterior of the sherds.

Method of manufacture: Wheel thrown with an uneven thick cross-section and with external finger smoothing.

Form and decoration: A globular jug (210.1 fig. 28) has incised zig-zag decoration in single lines made with a sharp pointed tool.

Date and parallels: Only three sherds were found, all from a robber trench through Building C. In Newcastle similar forms are attributed to the late 14th century, and as a sherd of Langerwehe came from material overlying Building C it is probable that it was in use during the 14th century, but had been abandoned by the 15th, and this is confirmed by the small finds.

THE OXIDIZED GLAZED WARES

Type 12:

A soft slightly micaceous smooth textured fabric with sparse clear and opaque white quartzite grits and a few organic voids. The core and occasionally the internal surface are reduced to a blue-grey colour, but more usually both surfaces are oxidized to a buff-pink. External surfaces have well developed lead glazes although occasionally poorly developed softer glazes are found. The glaze ranges from yellow to orange-green, and many of the glazed areas were heavily eroded.

Form and decoration: Only jugs or cisterns with slightly sagging bases and squat globular bodies are found here (258.2 fig. 28). There appears to be no decoration apart from the glaze.

Date: Probably late 13th-14th century.

Type 13:
A fairly hard smooth textured fabric with isolated clear quartz grits (mainly below 0·25 mm). The core is reduced to a blue-grey colour whilst the external surfaces are oxidized to an orange-pink. They are glazed externally with a patch green lead glaze.
Method of manufacture: Wheel thrown with smoothed surfaces and knife trimmed bases. A sherd shows the junction between the separately thrown neck section and the thickening where it was been luted on to the body (65.5 fig. 28).
Form and decoration (figs. 28/29)*:* Jugs or cisterns (65.2 and 127.1) with large strap-handles pulled and thumbed at the lower terminal to the body (65.3–4 and 207.2), and thumb impressed to the upper body and then slashed (65.2).
Date and parallels: Probably 14th century by analogy with similar forms from Newcastle (Harbottle and Ellison 1981).
Type 16:
A soft, friable fabric with clear quartzite grits (mainly below 0·25 mm) and isolated red, iron ore inclusions. The core is reduced to a light grey with oxidized light buff-pink surfaces. Traces of external yellow-green lead glaze remain.
Method of manufacture: Wheel thrown with a knife trimmed basal angle and a flat base with some grass impressions on both sides. The surviving sherds are all heavily eroded.
Form and decoration: These small globular vessels are probably urinals, with small flat bases and an incised wheel-turned line below the neck (108.2 fig. 29).
Date and parallels: These are similar to urinals from Finchale Priory which are dated

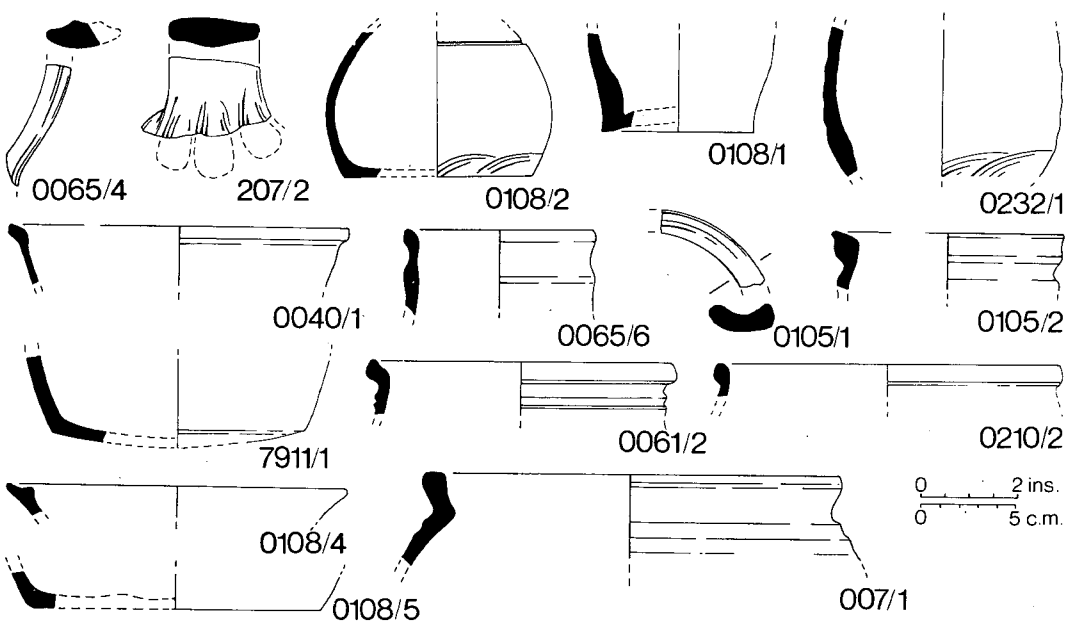

Fig. 29. (1:4)

to the 13th–early 14th centuries (Jarrett and Edwards 1961, 250–3 and 272–3 no. 56).

Type 17:

A fairly hard sandy fabric with few inclusions apart from isolated red iron ore grits. The texture is striated to grainy, and the sherds are unevenly oxidized to a buff-orange with patches of slightly reduced light grey-blue core remaining. They are roughly glazed on the upper parts of the vessel, with splashes and drips running down the sides.

Method of manufacture: Wheel thrown with thick cores and smoothed surfaces and knife trimmed bases.

Form and decoration (fig. 29): Mainly bottles, either cylindrical (108.1) or baluster in shape (232.1), with thick heavy bases. What appears to be a bowl with post-medieval parallels at West Whelpington, may just have been a bottle that was warped in firing (Jarrett 1962, 215–16 no. 39). Apart from this vessel (40.1), the suggested date for this type is 13th-14th century.

Type 21:

A hard slightly grainy fabric with isolated white opaque quartz grits. The core is reduced to a light blue-grey with an oxidized buff-brown internal surface. The exterior is completely glazed with a yellow-green lead glaze extending just over the rim.

Method of manufacture: Wheel thrown with smoothed external surfaces.

Form: Undecorated jug (65.6 fig. 29).

Date and parallels: Similar to examples at both Carlisle and Newcastle, probably late 13th to the first half of the 14th century (M. McCarthy *pers. comm.*, Harbottle and Ellison 1981).

Type 28:

A soft to fairly hard slightly micaceous fabric with isolated to medium density of quartzitic grits. Both rounded and angular clear and dark coloured glassy grits occur. The core is patchily reduced to a blue-grey colour whilst most of the surfaces have oxidized to a buff-pink as has some of the core. Most of the surface has been glazed with a patchy but well developed green lead glaze.

Method of manufacture: Wheel thrown with external finger smoothing, and with clear throwing rings on the body sherds.

Form and decoration: Jug with squared rim and strap-handle (105.1–2 fig. 29).

Date and parallels: Probably 13th century, with a close parallel at Newcastle (Edwards 1966, 110–11 no. 35).

Type 29:

A hard fabric with clear, rounded, quartzite grits (mainly below 0·5 mm) and a slightly striated texture. The core is reduced to a blue-grey with slightly oxidized buff-brown to buff-grey surfaces. A patchy yellow-green lead glaze is found on the exterior surface.

Method of manufacture: Hand made and wheel turned with external and internal finger smoothed surfaces.

Form: Large globular or baggy vessels with slightly sagging bases. (From a robber trench along the line of Hadrian's Wall, Trench XI, 7911.1 fig. 29.)

Date and parallels: 13th century to 14th century.

THE UNGLAZED COARSE WARES

Type 14:

A fairly hard fabric with a soft, laminated texture. It has both clear and white opaque angular grits (1·00 mm or less), and isolated inclusions of flint (1·00 to 0·5 mm), red iron ore, and dark coloured very hard grits. The core is reduced to grey-black while the surfaces have oxidized to a buff to orange-brown colour.

Method of manufacture: Wheel thrown with a thick section.

Form: Cooking pots or storage jars with everted rims (108.4) and flat or slightly sagging bases (108.5 fig. 29).

Date: Probably 13th century.

Type 19:

A hard harsh textured fabric, heavily tempered with clear and white opaque angular quartzitic grits (1·00 mm or less), with isolated chips of quartz (2·00 m or less). The core has reduced dark grey to black lenses in a patchy slightly oxidized pink to orange fabric.

Method of manufacture: Wheel thrown, the rim and external grooves may have been formed by the use of a template.

Form: Undecorated cooking pots or storage jars with upright rims and slight external wheel grooves round the neck (61.2 and 210.2 fig. 29).

Date: Probably 13th century.

Type 31:

A harsh textured hard fabric with opaque white rounded to sub-angular quartzite grits (mainly 0·5 mm or less but some larger grits up to 1·00 m are found). This may indicate the use of a coarse quartz sand temper. There are also isolated voids in the fabric which has been reduced to a dark grey to black, with slightly oxidized yellow-brown surfaces. The surface skin has shrunk slightly over the grits to give a pimply texture.

Method of manufacture: Hand made and wheel turned with finger smoothed surfaces.

Form: Undecorated cooking pots or storage jars.

Date: Probably 13th century.

Type 33:

A hard heavily tempered coarse striated fabric with pimply surfaces and with white opaque and clear angular quartz inclusions. The core is reduced to a grey to black colour with slightly oxidized brown surfaces.

Method of manufacture: Probably hand made and wheel turned with smoothed faces. The external turned ridges possibly show the use of a template for the rim. There is a single glaze spot on the interior surface.

Form: Undecorated cooking pot with everted rim and thick fabric section. (From a robber trench along the line of Hadrian's Wall, Trench VII, 7.1 fig. 29.)

Date: Possibly 13th to early 14th century.

Type 25:

A hard striated fabric with pimply surfaces, tempered with white opaque and clear angular and rounded quartz grits. The core is reduced to a dark grey to black colour with slightly oxidized brown surfaces and is similar to that of Type 33.

Method of manufacture: Hand made and wheel turned.
Form: Undecorated cooking pot or storage jar.
Date: Possibly late 13th century to early 14th century.

Analysis of the forms: cooking pots or storage jars
Only 32 sherds (0·4% of all the medieval sherds from the milecastle) of unglazed cooking pots or storage jars were recovered representing at the most some 20 vessels. This low percentage is atypical of medieval pottery assemblages and may reflect the function of these buildings as outbuildings of the castle used for storage and as byres rather than for permanent habitation. There may however be a chronological reason for the absence of this type of vessel here. In Newcastle unglazed cooking pots occur only in small quantities after the middle of the 13th century and were never as numerous as the oxidized glazed, or reduced green glazed wares. This may indicate that glazed wares had already replaced the unglazed wares to such an extent that the supply of coarse ware to sites like Sewingshields was affected. Even if Sewingshields acquired pottery from the Carlisle area a similar pattern is clear there.

JUGS OR CISTERNS
The majority of the vessels recovered from Sewingshields fall into this category. These vessels conform to the North East English medieval pottery tradition as shown in pottery from kiln sites at Scarborough, Nottingham and Derby amongst others. The absence of oxidized jugs from the recently discovered kiln at Eshott (unpublished information from P. Dixon) dating to the 12th–13th centuries, seems to suggest that the Sewingshields assemblage is perhaps slightly later in date.

URINAL (fig. 29)
Sherds of several vessels of this form were recovered, although the example illustrated is rather smaller than usual, it belongs to the general class of vessels with a northern distribution (108.2—Type 16).

BOWL (fig. 29)
It is possible that the unusual bowl form (40.1—Type 17) is a jug which was warped during firing as there are no contemporary medieval parallels.

CONCLUSIONS
The fragmentary nature of the assemblage suggests that much of the pottery had been dumped over the edge of Sewingshields crags. All the assemblage could be late 13th–early 15th centuries in date.

REFIRING OF MEDIEVAL REDUCED WARES

by R. J. C. Coleman-Smith F.S.A.

The problems of recognizing and describing medieval pottery fabrics are greatly increased by the considerable colour variation that often occurs on products from the

same kiln. This is mainly due to the uneven nature of medieval firings resulting in different degrees of oxidization and vitrification. By refiring sample sherds and possible parent clays, these colour differences can be removed to make these comparisons easier.

Optimum results were obtained from firing samples for 10 hours at 1000°C, in an oxidizing atmosphere using an electric kiln. Samples were placed in pots to prevent contamination.

The reduced wares from Sewingshields had been divided by eye into 2 groups. Both groups had a reduced dark grey fabric (Munsell 7.5YR N5/ to 7.5YR N3/). They were divided into those with slight reddening (Munsell 2.5YR 6/8) and those with a reddish brown appearance on the internal surface (Munsell 5YR 6/4).

After refiring the fabrics became buff (Munsell 10YR 8/4) or light red (Munsell 2.5YR 6/8). However the glaze used on the buff fabric became yellowish red (Munsell 5YR 5/8) while the glaze on the red fabric became brown. (Munsell 7.5YR 4/4). Some of the buff wares had the same glaze as that used on the red wares, suggesting that lead from the same source was used in the glaze on these buff wares but not on the others. This gave a third division which would have remained unidentified without this refiring.

While this result was obtained from a limited sample, it is clear that this method of analysis has great potential when applied to a larger group of pottery of this type.

THE COINS

P. J. Casey

No.	SF. No.	Issuer	Denom.		Type	Ref.	Date	Cond.
1.	157	Vespasian	*As*	Obv.	—			
				Rev.	—	RIC –	68–79	VW/EW
2.	10	Domitian	*As*	Obv.	—			
				Rev.	—	RIC –	81–98	VW/EW
3.	367	Trajan	*Sestertius*	Obv.	[*IMP CAES NER TRAIANO OPTIMO AVG GER*]*DAC PARTHICO*[*PM TR P COS VI PP*]			
				Rev.	[*PROVIDE*]*N*[*TIA AVGVSTI SPQR—S.C*]	RIC 663	114–17	VW/VW
4.	741	Antoninus Pius	*Sestertius*	Obv.	—			
				Rev.	—	RIC –	138–61	VW/VW
5.	353	Antoninus Pius	*As*	Obv.	[*ANTONINVS*]*AVG* [*PIVS* ...]			
				Rev.	—	RIC –	138–61	W/EW
6.	16	Illegible fragment of *As* or *Sestertius*. 2nd century.						
7.	94	"Tetricus I"	*"Antoninianus"*	Obv.	*IMP TE*[*TRICVS PF AVG*]			
				Rev.	[*SPES A*]*VGG*	Copy RIC 134	273+	SW/SW

No.	SF. No.	Issuer	Denom.	Type	Ref.	Date	Cond.
8.	278	Carausius—for Maximian.	*"Antoninianus"*	Obv. *IMP[C MAX]IMIANVS PF AVG*			
				Rev. *[PAX AV]GGG*	as RIC 34	290–3	W/SW
*9.	291	Diocletian	*"Follis"*	Obv. *IMP C DIOCLETIANVS PF AVG*			
				Rev. *GENIOPOPV-LIROMANI*	RIC VI (Lon) 6a	300	SW/SW
*10.	81	Diocletian	*"Follis"*	Obv. *IMP DIOCLETIANVS PF AVG*			
				Rev. *GENIOPV-LIROMANI*	RIC VI (Trier) 277a	298–9	SW/SW
*11.	113	Diocletian	*"Follis"*	Obv. *IMP DIOCLETIANVS PF AVG*			
				Rev. *GENIOPOPV-LIROMANI*	RIC VI (Trier) 279a	298–9	SW/SW
*12.	68	Diocletian	*"Follis"*	Obv. *IMP DIOCLETIANVS PF AVG*			
				Rev. *GENIOPOPV-LIROMANI*	RIC VI (Trier) 515a	c. 302–3	W/W
*13.	25	'Diocletian'	*"Follis"*	Obv. *[IMPDI]OCLETIANVS PF AVG*			
				Rev. *GENI[OPOP]V-LIROMANI*	Copy RIC VI (Trier) 516a	c.302–3	SW/SW
*14.	114	Constantius I, caesar.	*"Follis"*	Obv. *FL VAL CONSTANTIVSNOBC*			
				Rev. *GENIOPOPV-LIROMANI*	RIC VI (Lon) 30	c. 303	SW/SW
*15.	219	Constantius I, caesar.	*"Follis"*	Obv. *CONSTANTIVSNOBILC*			
				Rev. *GENIOPOPV-LIROMANI*	RIC VI (Trier) 530a	c. 302–3	SW/UW
*16.	238	Galerius, caesar.	*"Follis"*	Obv. *MAXIMIANVSNOBC*			
				Rev. *GENIOPOPV-LIROMANI*	RIC VI (Lyons) 180b	c. 302–5	W/W
*17.	375	Galerius, caesar.	*"Follis"*	Obv. *MAXIMIANVSNOBCAES*			
				Rev. *GENIOPOPV-LIROMANI*	RIC VI (Tic) 24b	c. 294–5	SW/SW
18.	378	Constantine I		Obv. *CONSTANTI-NVSMAXAVG*			
				Rev. *GLOR-IAEXAERC-ITVS*	LRBC.I.62	330–5	UW/UW

No.	SF. No.	Issuer	Type	Ref.	Date	Cond.
19.	388	Constantine I	Obv. *CONSTANTINOPOLIS* Rev. Victory on prow	LRBC.I.201	330–5	SW/SW
20.	196	Valens	Obv. *DNVALEN[SPFAVG]* Rev. *[SECVRITAS REIPVBLICAE]*	LRBC.2.	374	SW/SW
21.	1	Valentinian/ Valens	Obv. — Rev. *[GLORIAROMANORV M]*	1427 as LRBC.2.275	364–75	UW/UW
22.	234	Illegible 3/4th century fragment.				

References:
LRBC.I/2 Carson, R. A., Hill, P. V. and Kent, J. P. C. *Late Roman bronze coinage.*
RIC. Mattingly, H. and Sydenham, E. A. *The Roman imperial coinage.*

The Coins were found in the following contexts:

Context	Coins nos.
35	12, 13
57	6
62	2
104	10
170	7
204	1
248	22
265	16
275	15
334	4
336	8

Context	Coins nos.
402	9
450	5, 17
454	3
460	18, 19
Unstratified	11, 14, 20
Site VIII.1 (Topsoil)	21

(for details of these contexts see below pp. 137–143)

The most notable feature of the coins from Sewingshields is the very large number of the so-called *Folles* of Diocletian's monetary reform. This reform took place in 294, or 296, and was the culmination of a number of attempts to institute a stable currency system that he had embarked upon since his accession in 284. For our purposes the most important element of this reform was the issue of a billon coin, initially of *c.* 10 gr. weight, containing about 3% silver and tariffed, until 301 when the value was doubled, as a ten denarius piece. Even in the inflationary times of the late third century such a coin had considerable intrinsic value. Further it was of good silver appearance and of considerable size. In consequence individual finds of this coin are rare especially since the subsequent history of this coinage consigned most of it to hoards. Although the nine Diocletianic coins from Sewingshields come from a number of contexts, albeit very disturbed ones, there is no question but that they represent part or whole of a disturbed hoard and should for statistical purposes be regarded as the equivalent of a single coin.

There is a surprising association of milecastles and this scarce coinage which calls for comment. Individual finds, as we have said, are rare relative to the total numbers of coins found in the Wall area. For instance, Vindolanda has five Diocletianic issues in a site total of nearly four hundred coins and similar low values can be cited from South Shields and Corbridge. However four milecastles have recorded finds of Diocletianic coins in what must be considered very poor coin lists; Mc 12, Mc 40 (3 coins), Mc 48 (5 coins) and Mc 79. There is not sufficient comparative data available yet to comment in detail on the possible implications of this phenomenon. The excavation of more forts might redress the apparent occurrence of the richer coinage occurring on the poorer sites. In any event the Wall area was well supplied with the new coinage possibly to compensate for the withdrawal of extant stocks of the coin of Carausius and Allectus which would have suffered both as a political consequence of the elimination of the British regime and the change in the nature of the currency system.

SEWINGSHIELDS: LIST OF SIGNIFICANT CONTEXTS PRODUCING FINDS

1. unstratified contexts. (modern)
2. rubble from the robbed west wall of the milecastle on the west of it.
3. rubble from the robbed west wall of the milecastle.
4. rubble from the robbed west wall of the milecastle on the east of it.
5. rubble from the robbed north wall of the milecastle to the south of it.
7. rubble from the robbed north wall of the milecastle.
8. rubble from the robbed north wall of the milecastle on the north of it.
9. sandy clay loam to west of Building "A", contemporary with it. (med.)
10. rubble from the robbed west wall of the milecastle at its north end.
13. north wall of Building "A", phase 2. (med.)
15. coarse sandy loam within Building "A", built up, after abandonment (?) (med.)
19. north wall of Building "A", phase 1. (med.)
21. semi-circular stone setting against the partition in Building "A" phase 1. (med.)
25. possible floor level within Building "A". (med.)
28. robbed south wall of Building "A". (med.)
30. possible floor level within Building "A", west end. (med.)
35. sandy clay loam with possible cobbling between Buildings "A" and "B" phase 2. (med.)
36. north wall of Building "A", phase 2. (med.)
37. possible floor within west end of Building "B", phase 2. (med.)
38. north wall of Building "B", phase 2. (med.)
39. stone partition within Building "B", phase 2. (med.)
40. possible floor within east end of Building "B", phase 2. (med.)
42. stack stand (?) at west end of Building "B", phase 2. (north side) (med.)
43. possible flagged area within west end of Building "A", phase 1. (med.)
45. north wall of Building "B", phase 2. (med.)
47. north and west walls of Building "B", phase 2. (med.)
48. rubble from the north and west walls of Building "B", phase 2. (med.)
50. stack stand (?) at west end of Building "B", phase 2 (=42). (med.)
51. rubble from the robbed north wall of the milecastle. (p-med. ?)
52. south wall of Building "B", phase 2.
55. site of possible doorway in south wall of Building "B", phase 2. (med.)
56. south wall of Building "B", phase 2 adjacent to above. (med.)
57. rubble from the south wall of Building "B", phase 2. (med.)
59. rubble from the robbed south gate of the milecastle. (med.)
60. stack stand built against the south wall of Building "B", phase 2. (med.) (= 72–4)
61. rubble from the robbed south gate of the milecastle. (med.)
62. as above.
63. path of roughly laid stones over the rubble filled robber trenches south of Building "B", phase 2. (med.)

64–8. rubble from the robbed south gate and south wall of the milecastle. (med.)

72–4. stack stand built against the south wall of Building "B", phase 2. (med.)

75. rubble from the west wall of Building "B", phase 2. (med.)
76–7. build up of sandy silt loam over robbed east wall of milecastle. (med.)
78. rubble from the west wall of Building "C". (med.)
80. east wall of Building "B", phase 2.
86. levelled remains of Roman buildings underlying Building "A"(= 104) (med.)
93. sandy silt loam to the east of Building "B", phase 2, contemporary with it. (med.)
96, 102. rubble from the robbed north wall of the milecastle (= 7). (med.)
104. levelled remains of Roman buildings underlying Building "A". (med.)
108. sandy silt loam below the east end of Building "B", phase 2, contemporary with "A" (?).
109. rubble from the walls of Building "B", phase 2. (med.)
112. remains of stone partition wall within Building "A", phase 1. (med.)
114. remains of north wall of Building "B", phase 1. (med.)
115. rubble from the south wall of Building "B", south end. (med.)
120. coarse sandy clay loam with stone chips and mortar on west side of milecastle west wall. (Roman ?)
122. rubble from the robbed north wall of the milecastle. (med.)
127. rubble from the robbed east wall of the milecastle, north end. (medieval.)
128. levelled remains of roman buildings below the west end of Building "A" (= 104).
131. stone base of oven in north west corner of milecastle (Roman, phase 5+).
134. levelled remains of Roman buildings below east end of Building "A". (med.)
136. levelled remains of Roman buildings to south of Building "A" (below it).
137, 139 & 146. east wall of Building III (Roman phase 3/4+).
138. sandy clay loam with mortar and rubble in north west corner of milecastle. Disturbed.
144. sandy silt loam adjacent to the oven 131, and contemporary with it (Roman, phase 5+).
147. sandy silt loam adjacent to oven 131 (Roman, phase 5+).
152. sandy silt loam to north of Building "B", phase 2, and contemporary with it. (med.)
155. path from south door of Building "B", phase 2 (= 63). (med.)
170. rubble over remains 171 (Roman? phase 3/4+).
171. large stone flagged oven outside the east wall of milecastle—adjacent to the curtain (Roman, phase 1–3?).
172. possible wall foundation associated with Building C, north end. (med.)
176. fine sandy clay loam within north end of Building III (Roman, phase 1–4?) (= 240?).
181. coarse sandy clay loam with mortar and stone chips adjacent to milecastle walls (Roman).
182. semi-circular stone setting against partition within Building "B", phase 2. (med.)
190. fill of possible post hole outside the west wall of milecastle (Roman?).
192. possible building layer beyond west wall of milecastle (= 181) (Roman).
204. south wall of milecastle, to west of gateway.

205. north wall of Building "A", phase 2 (13, 23, 133). (medieval)
207. rubble from robbed south gate of milecastle. (medieval)
210. rubble from collapsed walls of Building "C". (med.)
214. initial filling within robbed course of milecastle east wall.
216. possible shallow pit below east wall of milecastle.
218. mortary deposit on south east side of milecastle (= 181).
223. silty clay loam overlying south end of medial road (Roman?, phase 5).
224. cobbled area south of the robbed south wall of the milecastle. (med.)
226. mound of decayed mortar below cobbled surface 224, from the robbed east wall? (Roman?)
227. rubble from south wall of milecastle. (med.)
229. rubble from collapsed walls of Building "C" (= 210).
230. possible robbing of Building "C". (med.)
232. rubble from collapsed walls of Building "C", on possible floor of fine sandy silt loam. (med.)
233. rubble layer, possibly a deliberate levelling, below Building "C". (med.)
234. south wall of Building "B", phase 1.
236. possible stone path set into the rubble below Building "B", phase 2. (med.)
243. sandy clay loam adjacent to oven 131, a lower level of 144 (Roman, phase 5+).
245. stoney deposit showing area of later disturbance, east of oven 131 (Roman, phase 5+).
247. latest road surface at northern end of milecastle (Roman, phase 5+).
248. rubble from Buildings IV–VIII. Above 340 (Roman, phase 7+; but disturbed).
251. levelled remains of Roman buildings below Building "A" (= 134). (med.)
253. levelled remains of Buildings V and VII (Roman/med.).
254. disturbed area of rubble and flag stones in north east corner of milecastle (Roman, phase 5+).
255. rubble from the south west corner of the milecastle wall (Roman).
256. fine sandy silt loam underlying Building "B", phase 2 (med.) contemporary with "A".
257. disturbed area of rubble and flag stones in north west corner of milecastle.
258. fine sandy silt loam underlying walls of Building "B", phase 2 (= 256). (med.)
259. fine sandy silt loam underlying north wall of Building "B", phase 2. (med.)
260. spread of fine rubble in north east corner of milecastle (Roman, phase 5+).
261. coarse sandy loam with few stones at south end of road surface 105 (Roman 5+).
262. wall E Building VII (Roman, phase 5?).
263. wall F (Roman, phase 6).
264. scatter of small stones in fine sandy silt loam within Building "B", phase 1. (med.)
265. rubble in robber trench on south side of Building "B", phase 1. (med.) (pre B phase 2).
266. small circle of stones against outer face of east wall of Building III (Roman, phase 4?+).

268. flagged area under Building "B", phase 2 may be a path south from "A". (med.) (see 28)
269. sandy clay loam in north east corner of milecastle (Roman, phase 3/4+).
271. tumbled stone from Buildings V and VII; close to line of robbed east wall of milecastle (Roman, phase 5+).
274. silty clay loam with small stones, worn surface of road at north end of milecastle (Roman, phase 5+).
275. fine sandy silt loam below Building "B", phase 2, contemporary with "A". (med.)
275a. as above, but sealed by partition wall 39 in Building "B", phase 2. (med.)
278. small spread of rubble in north west corner of milecastle (= 301) (Roman, phase 5+?).
282. rectangular setting of cobbling in road 274, round blocked door in 137.
284. isolated setting of 7 or 8 rough limestone flags in north east corner of milecastle (Roman, phase 5+).
285. lowest course of wall 145, may be an earlier phase of the same wall.
286. east wall footing of Building "B", phase 1 reuses Roman path (Roman/med.).
287. fine sandy clay loam within Buildings V and VII (Roman, phase 5+).
288. possible rubble wall alignment within Building "C". (med.)
289. fine sandy clay loam overlying drain (420) in west wall of milecastle (Roman 7+).
300. silty clay loam adjacent to oven 131, but underlies part of it (Roman, phase 1–4?).
301. spread of rubble lying on layer 300.
302. continuation of silty clay loam 300 to south of rubble 301 (Roman, phase 5+?).
312. cobbled road surface at south gate of milecastle (Roman? phase 5+?).
319. fine silty clay loam below 259. Above remains of Buildings V and VII (Roman? phase 7?).
323. cobbled surface of medial road at northern end of milecastle (Roman, phase 5+).
324. fine silty clay loam in south east corner of milecastle (Roman, phase 3/4+).
327. lowest level of sandy clay loam 243, adjacent to oven 131 (Roman, phase 5+).
334. area below 257; in north-west corner of milecastle (Roman?).
336. lower level of 236—possible path. (med?)
339. flagged surface contemporary with 268 and 286, underlying Building "B", phase 2 but contemporary with earlier phase of Building "A" or "B", phase 1, path to south. (med.)
340. coarse sandy clay loam in south west corner of milecastle, below 248 and 289 (Roman, phase 7?).
342. wall C, Building IV (Roman, phase 5).
343. stoney deposit within north west corner of milecastle (Roman, phase 5+?).
344. fine silty clay loam on to which, the paved areas 339 and 268 have been laid. (med?)
346. fine sandy silt loam below Building "B", phase 1 (Roman or medieval?).
400. wall D, Building VI (Roman, phase 6).
401. sandy clay loam associated with Buildings IV–VIII at south end (Roman, phase 5+).
402. fine silty clay loam below Building "B", phase 1 with traces of turf in it. (med.)

403. similar to 402, but with less clear traces of turves within it. (med?)
405. sandy clay loam between Buildings IV–VIII and the west wall of milecastle (Roman, phase 5+).
406. sandy clay loam within Buildings IV–VIII (Roman, phase 5+).
407. fine sandy silt loam below paving 268 (= 403) (med?) to N or robbed south gate.
408. as 407.
409. fine sandy silt loam with traces of turf (= 402 and 403) below Building "B" 1. (med?)
410. remains of east wall of Building VIII (Roman, phase 7).
412. area within Buildings IV–VIII (Roman, phase 5+).
413. linear spread of stone fragments within 412, a random scatter (Roman, phase 5+).
414. fine sandy silt loam, an arbitrary division within 409 (= 409) (post Roman/med.).
415. clay loam with mortary patches adjacent to 342 (Roman, phase 5+?).
416. rubble filled robber trench along inside of milecastle wall (med?).
417. fine sandy silt loam, arbitrary division of 407 (post Roman/med.).
420. rough drain, cutting east face of west wall of milecastle (see plate VIIIa) (Roman, phase 7?).
421. area of sandy clay loam within Buildings V–VII (Roman, phase 5+).
422. area of sandy clay loam associated with Buildings V–VII (Roman, phase 5+).
423. rubble layer at the south end of the Buildings V–VII (Roman, phase 5+).
428. coarse sandy clay loam underlying flagged surface 315 in north east corner of milecastle (Roman 3/4?).
431. rubble and sandy clay loam within north end of Buildings V–VII (Roman, phase 5+).
432. more dense area of rubble adjacent to Buildings V–VII, a road surface (?) (Roman, phase 5+).
435. area within the Buildings V–VII: disturbed remains of floors (Roman, phase 5+).
437. sandy clay loam with mortar and burnt stone in north east corner of milecastle (Roman, phase 5+).
439. rubble alignment within Building "C", possible remains of wall. (med.)
446. patchy rubble surface of medial road (Roman, phase 1–4).
450. fine sandy silt loam over flagged approach to south gate (= 414/417) (post Roman/med?).
451. flagged area above southern part of medial road (Roman, phase 5+).
452. area of mortary silt loam in south west corner of milecastle (Roman, phase 5+).
453. disturbed area within south end of Buildings V–VII (Roman, phase 5+).
454. fine sandy loam below oven 131 in north west corner of milecastle (Roman, phase 1–4?).
455. part of flagged surface, to north of south gateway (Roman, phase 5+?).
456. sandy clay loam below 431 (Roman, phase 3/4?).
458. ashy deposit over south wall of Building I (Roman, phase 3/4+).

459. dump of ash and slag adjacent to 458 (Roman, phase 3/4+).
460. hearth in south west corner of milecastle (Roman, phase 5+).
462. final surface of path leading to south gate from Building III (Roman, phase 4?).
463. sandy clay loam under cobbled surface 323 at N end of milecastle (Roman, phase 1–4?)
465. spread of rubble overlying cobbled surface 462 and 458 (see 469).
466. steeply dipping area of cobbled surface 462 leading to S gate (Roman, phase 5+ but may be contaminated—see 469).
467. deposit between Buildings III–VIII and milecastle wall (Roman, phase 3/4+).
469. rubble filled robber trench over site of south gate (may include 465) (medieval).
471. cobbled surface of medial road at north end of milecastle (Roman, phase 5+) (= 274).
472. cobbled surface of medial road (Roman, phase 1–4?)
476. mortary sandy clay loam in south west corner of milecastle (Roman, phase 5+).
478. silty clay loam in south west corner of milecastle—below 460 but may be disturbed at its edge—see 469 (Roman, phase 5+).
481. hearth in south west corner of milecastle (Roman, phase 5+).
484. deposit appearing to run below 263 (Roman, phase 4–5?).
485. disturbed remains of north end of west wall of Building II (Roman, phase 3+).
486. hearth below 458 in south east corner of milecastle (Roman, phase 3/4?).
488. cobbled surface of medial road at north end of milecastle (Roman, phase 1–4?).
497. clay loam in south west corner of milecastle below 478 (Roman, phase 5+).
499. core of semi-circular stone feature within Building II (Roman, phase 3/4).
500. southern kerb of path leading to south gate from Building III (Roman, phase 4?).
502. area within Building II towards south end (Roman, phase 3/4).
506. ashy deposit at southern end of Building II see 486 (Roman, phase 3/4?).
507. possible east-west wall within Building II (Roman, phase 3—or later).
510. sandy silt loam with slag and ash deposits above southern end of medial road (Roman?) but with some evidence of medieval contamination.
518. area within Building II at east side, adjacent to milecastle east wall (Roman, phase 3/4?).
524. rubble and soil layer at south end of Building I, possible foundation for floor (Roman, phase 1–2).
533. rubble and soil underlying 466 (Roman, phase 5+).
540. charcoally deposit under flagged floor (536) within Building III (Roman, phase 1–3).
545. mortary sandy loam in south west corner of milecastle (= 476) (Roman, phase 5+).
553. area within Buildings IV–VIII (= 412) (Roman, phase 5+).
562. deposit of organic material in south west corner of milecastle (Roman, phases 1–3).
565. primary make up layer, underlying flagging in south west corner of milecastle.
567. pit cutting oven 171 (Roman?).

568. cobbled surface below northern end of Building "C"—possible floor. (med.)
569. sandy silt loam underlying cobbling, and overlying ash from hearth 171. (med.)

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Abbreviations used in the bibliography:

AA	Archaeologia Aeliana
Med Arch	Medieval Archaeology
PPS	Proceedings of the Prehistoric Society
PSAS	Proceedings of the Society of Antiquaries of Scotland
TCWAAS	Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society

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