

Excavations at the Saxon Monastic Sites of Wearmouth and Jarrow, co. Durham: an Interim Report

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INTRODUCTION

THESE two sites have been so closely linked throughout their monastic history that it seems relevant to publish them together, especially as they have been excavated under the same director and with much the same volunteer labour force. The possibility of excavation near the Saxon church of St. Peter, Monkwearmouth, was afforded by the replanning of Hallgarth Square south of the church. Material evidence of the Saxon and later medieval occupation has been much disturbed in the areas so far excavated, largely because of town development which encroached on the south within 20 ft. of the S. wall of the church. Unlike Jarrow no traces of the medieval monastic buildings survived above ground and only limited areas were available for excavation in 1959, 1960 and 1961 while houses were still standing on the site. However, the line of wall 4 (FIG. 13) was established in 1959, in the road which gave access to the back-yards of Hallgarth Square. It was also clear that this wall lay over an early cemetery. Moreover, the debris from Saxon buildings (FIG. 14), which included such features as *opus signinum* and painted plaster, encouraged the hope that some remains of the pre-Viking monastery might exist. In 1962 it was possible to open a more extensive area while demolition was in progress, and in 1964, 1966 and 1967 the area was unencumbered by standing buildings.

The possibility of excavation south of St. Paul's Church at Jarrow was part of the plan of the Ministry of Public Building and Works for the more permanent layout of the site. A short exploratory season in 1963 was followed in 1965 by excavation linked to the standing buildings west of the medieval garth, and in 1966 and 1967 by completion of the excavation of building A and the beginning of the excavation of building B. In 1969 it is hoped to complete building B and to begin the exploration of the E. range of the post-conquest cloister, available for excavation now that a modern school house has been demolished.

Unlike Monkwearmouth there has been excavation at Jarrow before. Dr. Raleigh Radford in a short excavation in 1954 explored part of the ground on the N. side of the church. No recognizable Saxon structures were discovered and no early material was found.¹ In 1934 Eric Birley undertook a small trial excavation on the bank south of the standing medieval buildings to test whether this was a Roman feature. The make-up of the bank was found not to be Roman.

¹ C. A. Raleigh Radford, 'Trial excavations at Jarrow', *Archaeol. J.*, III (1954), 205-9.

HISTORY OF THE SITES

THE FOUNDATION OF WEARMOUTH

The documentary evidence for Anglo-Saxon occupation on these sites begins with Bede and the anonymous author of *The Life of Ceolfrid* who record in some detail the foundation of the monasteries by Benedict Biscop.² Biscop Baducing, or Benedict Biscop as he was later called, was a Northumbrian noble well travelled on the continent; he visited Rome four times (652–3, c. 665, 667–8, 671–2), and had been professed as a monk in the famous island monastery of Lérins in 665–7. After two years as temporary abbot of the monastery of Sts. Peter and Paul, Canterbury, he returned to his native Northumbria in 672, and so impressed its king, Ecgfrith, by his books, relics, and zeal for the monastic life that Ecgfrith granted him 70 hides of land out of the royal estates to found a monastic community,³ according to a rule incorporating the best practices he had seen in seventeen monasteries.⁴ The building of the monastery *ad ostium fluminis Wiri* seems to have begun in 674, and not more than a year later according to Bede, or in the second year of the monastic foundation according to *HAA*, Benedict went to Gaul:

‘petens cementarios qui lapideam sibi aecclesiam iuxta Romanorum quem semper amabat, morem facerent, postulavit, accepit, adtulit. Et tantum in operando studii prae amore beati Petri in cuius honorem faciebat exhibuit ut intra unius anni circulum ex quo fundamenta sunt iecta, culminibus superpositis.’⁵

The author of *HAA* says that Benedict acquired his artisans from Abbot Torhthelm in Gaul. Bede continues by saying that when the work was nearly finished Benedict again sent to Gaul:

‘misit legatarios Galliam qui vitri factores, artifices videlicet Britannis eatenus incognitos, ad cancellandas aecclesiae porticumque et caenaculorum eius fenestras adducerent.’

These artisans also taught the art of making glass lamps and vessels for liturgical use.

Bede’s passage indicates that the refectories of the monastery were important buildings. Mention of a common dormitory also⁶ implies a fully communal life although there were *cubiculae* available for the abbot, prior, and some senior members of the community.⁷ It may also be assumed that, as well as the churches of St. Peter and St. Mary, the chapel of St. Lawrence *quod in dormitorio fratrum erat*,

² *Historia Ecclesiastica* (hereafter *HE*), *Historia Abbatum* (hereafter *HA*), and *Historia Abbatum auctore Anonymo* (hereafter *HAA*), ed. C. Plummer (1896). All quotations are from this edition. Bede does record (cf. *Archaeol. Aeliana*, 2 ser., xix (1898), 47–88) an earlier monastery at the mouth of the River Wear in which Hild resided, *ad septentrionalem plagam Viuri fluminis* (*HE*, iv, 23).

³ According to *HAA*, 7, the original grant of 50 hides was augmented by later royal and noble donations.

⁴ *Ibid.*, 6.

⁵ Bede, *HA*, 5.

⁶ *Ibid.*, 9 and 15; *HAA*, 25.

⁷ Bede, *HA*, 13.

and the many oratories added by Ceolfrid,⁸ there were other such necessary buildings as are recorded for contemporary English monasteries elsewhere. There could have been a novice-house as at Hackness (Yorks.); a hospital as at Whitby (Yorks.); and a guest-house, as at Ripon (Yorks.), or Lindisfarne. In addition there were domestic and farm buildings.⁹ There seems to have been no chapter-house, since meetings of the community were held in the church.¹⁰

THE FOUNDATION OF JARROW

In 681 King Ecgfrith made a further donation of 40 hides of land so that a second monastery could be founded, and in 682 building began at Jarrow. According to Bede seventeen monks were sent from Wearmouth under the supervision of the prior (*praepositus*), Ceolfrid. According to the author of *HAA* twenty-two brethren were sent 'decem quidem attonsis, XII vero tonsurae adhuc gratiam expectantibus, venit ad locum, primo ibidem constructis omnibus qui maxime necessitas monasterii poscebat, domibus, ipsamque regularis custodiae disciplinam . . .'.¹¹ The buildings they constructed were more solid than those so far discovered at Monkwearmouth and in 684, the third year from the foundation of the monastery,¹² they began to build a church dedicated to Paul the Apostle; the king marked out the site of the altar and when the church was consecrated in 685 his name as well as Ceolfrid's was recorded on the famous inscription which still remains in Jarrow church.¹³

WEARMOUTH AND JARROW FROM THEIR FOUNDATION TO THE DISSOLUTION

Bede and the anonymous author both stress that the foundations of St. Peter and St. Paul were to be thought of as 'one monastery in the two places',¹⁴ although Wearmouth seems to have been the larger establishment. The sites may have been separated solely because the foundations had to be placed where royal land was available. It is difficult to determine how they maintained a close land connexion with one another. There seems to be no direct route between them largely because of the marshy ground south-east and east of Jarrow, from which the *Gyrwas* no doubt took their name. All early maps of the area show a road running west from Wearmouth through Boldon, Hedworth and Monkton and joining the Roman road which ran west from South Shields. As Hedworth and Monkton were later possessions of Jarrow it may be that the monks used this land route rather than a branch of the N.-S. road that connected Wearmouth and the Roman site at South Shields.

The sites seem to have been carefully selected. Both were founded on the

⁸ *Ibid.*, 17 and 15.

⁹ *Ibid.*, 8.

¹⁰ *HAA*, 25.

¹¹ Bede, *HA*, 7; *HAA*, 11.

¹² *Ibid.*, 12.

¹³ Bede, *HA*, p. 361, for a discussion by Plummer of the problem of assessing the date of the foundation of Jarrow.

¹⁴ *Ibid.*, 15; *HAA*, 16.

lowland coastal strip which is one of the earliest areas of settlement in Bernicia. There is a certain similarity between both sites and those of other early monasteries such as Tynemouth (Northumb.), Hartlepool (co. Durham), or Whitby. At both Monkwearmouth and Jarrow the churches lie on little eminences with the land sloping away towards the sea on the east and to the river on the south. At Monkwearmouth the original contours of the ground have been blurred in modern times by the dumping of ships' ballast around the church, and industrial development between the church and the sea. An impression of its original appearance can, however, be gained from early drawings (PLS. I-II). Despite its surrounding industrialization Jarrow still gives some impression of its original setting. On the east the Slake from which flows the little River Don provides a natural harbour, and it may be that a pre-existing Roman site also dictated the choice of site¹⁵ as a convenient source of stone. The monasteries at Tynemouth and South Shields at the mouth of the River Tyne, and that at Gateshead farther up the river (FIG. 12) are earlier foundations than Wearmouth and Jarrow.

The Saxon monasteries appear to have been quite large. When Abbot Ceolfrid departed in June 716 he left behind 600 brethren in the two foundations,¹⁶ and took with him eighty companions many of whom must have been from the community. In the early 8th century the Wearmouth/Jarrow monastery was one of the most influential communities in England and abroad. Its fame in the art of stone building is attested by the request in c. 710-11 of Nechtan mac Derile, king of the Picts, who asked the monastery for stone masons to build a church in the Roman manner to be dedicated to St. Peter.¹⁷

After the death of Bede what is known of the history of the monasteries must be gathered from other literary evidence and from the results of the excavations. In 746 Boniface wrote to Abbot Hwaetberht asking for the works of Bede, and in 764 Abbot Cuthbert wrote to Lull at Mainz asking for glaziers:

'If there is any man in your diocese, who can make vessels of glass well, that you will deign to send him to me when time is favourable . . . because we are ignorant and destitute of that art.'¹⁸

This decline in the craft of glass-making is interesting since at Monkwearmouth a range of vessels and of window-glass, including what seems to be the handle of a glass lamp, has been found, but at the later foundation of Jarrow the colours in window-glass are less varied and there is less vessel glass.

There seems to have been a general slackening of monastic fervour in Northumbria in the 9th century and there is a dubious reference to an attack on Jarrow in 794.¹⁹ It is assumed that both Wearmouth and Jarrow were abandoned after the Viking attacks on Northumbria in 874-5. There is evidence of extensive

¹⁵ A coin of Aulus Vitellius, together with Roman inscribed stones, has been found on the site (E. Birley, *Research on Hadrian's Wall* (1961), pp. 157-9). During the present excavations Roman pottery was discovered in the topsoil of the bank south of the standing buildings, and part of a samian mortarium in the rubble lying over building A.

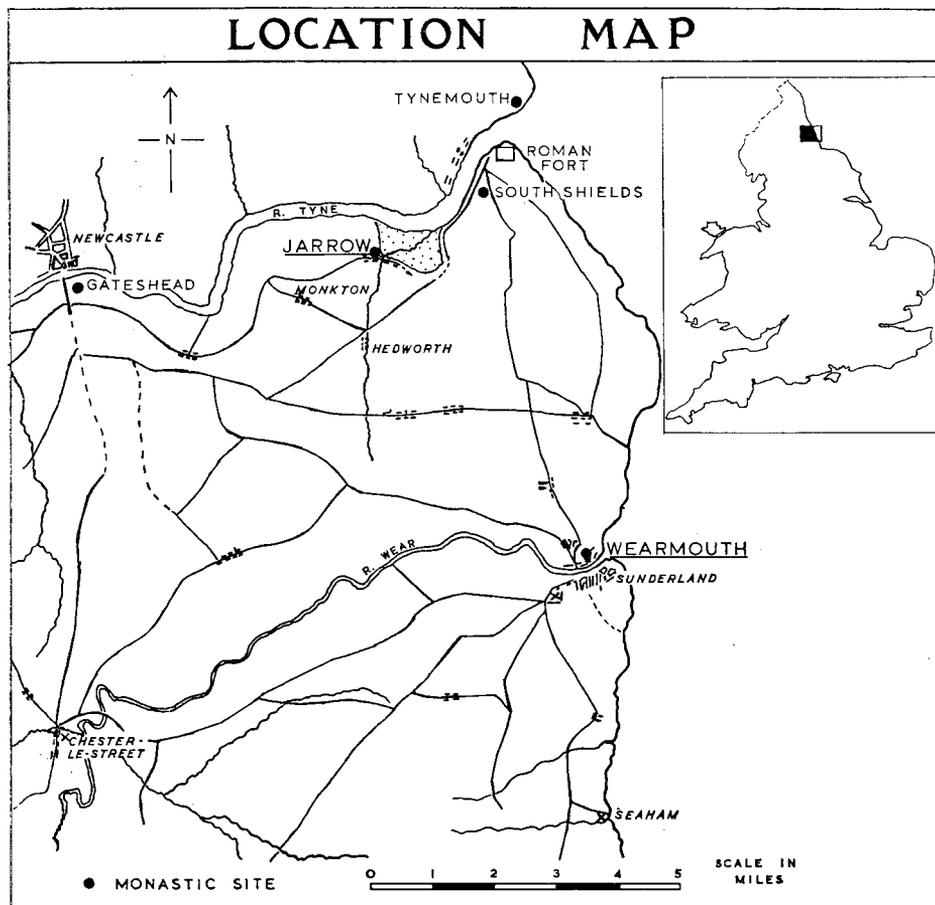
¹⁶ Bede, *HA*, 18.

¹⁷ *HE*, v, 21.

¹⁸ Dorothy Whitelock (ed.), *English Historical Documents c. 500-1042*, 1 (1955), no. 185, p. 766.

¹⁹ *Anglo-Saxon Chronicle*, E, *sub anno*.

burning at both sites. At Monkwearmouth some architectural fragments, particularly baluster shafts, are heavily burnt, and there was a layer of charred wood and ash in the reconstruction level above building A (FIGS. 14-15). At Jarrow the floor of building A (FIG. 19) was thickly covered with charcoal, and the surface of its *opus signinum* floor, particularly around the pillar base, was blackened by fire.



R.C. R.I.L.

FIG. 12
MONKWEARMOUTH AND JARROW, CO. DURHAM

Map showing relationship of Wearmouth and Jarrow to other near-by Saxon sites (pp. 24, 26). Based on map of 1768 by Capt. A. Armstrong and T. Jeffrey

The glass from the S. windows was melted and distorted by heat (see below, p. 48), and there were drops of melted lead inside the S. wall. It is uncertain, however, whether this burning was the result of a 9th-century Viking sack or of later Scottish raids.

At Wearmouth the area south of the church was used extensively as a burial-ground after the monastic buildings were abandoned and before the site was cleared in the 11th century (see below, p. 33 f.). The top of the church tower is usually assigned to the period *c.* 1000,²⁰ a reconstruction which may perhaps be due to the efforts of the community of St. Cuthbert after their establishment at Durham in more stable and prosperous conditions. Building B and some of the traces of timber buildings (FIG. 14) could also be assigned to this period. The coin sequence ends with 9th-century stycas, but there are a few later Saxon sherds (FIG. 25).

At Jarrow, sherds of late Saxon or Saxo-Norman pottery have been found mostly in the disturbed ground at the W. end of building A, and south of that building there is evidence of reconstruction. There is some literary evidence for pre-conquest occupation although it is not easy to assess its nature. In the episcopate of Bishop Eadmund (1022-45) there was in the community of St. Cuthbert at Durham an indefatigable relic collector, Alfred Westou, who, according to Symeon,²¹ was accustomed annually to visit the monastery at Jarrow on the anniversary of the death of Bede. On one occasion he secretly purloined some of the bones of Bede, and it is implied that these were in some way guarded and venerated. In 1070 the community of St. Cuthbert fleeing north from the wrath of King William stayed for one night in the church at Jarrow on their way to Lindisfarne. This implies that other domestic buildings were not fit for habitation.²²

The harrying of the north may have quenched whatever religious life existed at Wearmouth and Jarrow. Certainly when in *c.* 1072 the next phase of the monastic history of the sites began, Symeon paints a picture of unrelieved desolation.²³ Aldwin, prior of *Wincelcumbæ* (Winchcombe, Glos.), travelled north with two monks from Evesham, Elfwy and Reinfrid, to visit the ancient monastic sites of Northumbria. Walcher, bishop of Durham, granted them 'the monastery of the blessed apostle Paul, which had been erected at Jarrow by its former abbot Ceolfrid, the unroofed walls of which were alone standing, and they exhibited scarce any vestige of their ancient dignity. Upon these walls they reared a covering formed of unhewn timbers with hay upon them, and there they began to celebrate the offices of divine service. Beneath the walls they erected a little hovel in which they slept and took their foods, and thus they sustained by living the life of the religious, a life of poverty.' They were joined by many monks from all over England; Walcher endowed the community with the neighbouring vill of Jarrow, Preston, Monkton, Hedworth, Hebburn, Westoe and Harton (FIG. 12), 'observing their desire was to rebuild the church, and to restore the dwellings of the monks which had been destroyed'. The words Symeon used here are interesting since it is often assumed that the church as shown on the 1769 plan (see below, p. 43) is basically that of Ceolfrid. Excavation so far indicates not a restoration

²⁰ E. C. Gilbert, 'Anglian remains at St. Peter's, Monkwearmouth', *Archaeol. Aeliana*, 4 ser., xxv (1947), 140-78.

²¹ *Historia Ecclesiae Dunelmensis*, XLII.

²² *Ibid.*, L.

²³ *Ibid.*, LVI.

but a complete replanning of the site. After two or three years Aldwin left Jarrow under Elfwin's control and went first to Melrose and then to Wearmouth. Symeon of Durham who is the sole recorder of this incident says of St. Peter's monastery:

'At this period its original state could scarce be traced in consequence of the ruinous conditions of the buildings. Here they erected some little habitations of wattle work and strove to teach all whom they could influence how to enter in with them at the strait gate.'

When they had attracted potential monks from the remotest parts of England, 'they took pains to clear out the church of St. Peter's nothing more than half-ruined walls of which were at this time standing, and they cut down the trees, and rooted up the thorns and brambles which had taken possession of the whole site. When they had done this and roofed it with thatch, as it now appears, they had done their best to make it fitting for the performance of divine services. We may reckon that two hundred and eight years had passed from the time when the pagans had ruined the church and destroyed and burnt down the monasteries, until the third year of the pontificate of Walcher when the monastic mode of life began to revive in that province upon the arrival of Aldwin.'²⁴

In just over ten years from their arrival, however, the monks at Jarrow and Wearmouth were removed to form a Benedictine community at Durham and the originally independent houses became dependent cells of Durham. It is unclear from literary sources how extensive Aldwin's rebuilding had been, although it seems that more had been achieved at Jarrow than Wearmouth; in 1114 the monastery at Jarrow successfully withstood a siege, so that the buildings must have been substantial. However, the archaeological evidence (see below, p. 54) implies that Aldwin's original layout was never completed, and that the later more domestic arrangements should have been finished by 1303, when the first inventories and account rolls begin at Jarrow. The account rolls from Wearmouth are extant from 1321. These documents mention only the Master's *camera*, the *aula* (presumably the living- and sleeping-rooms of the one or two monks who occupied the site together with the Master), the kitchen, larder and farm buildings.²⁵

MONKWEARMOUTH AND JARROW AT THE DISSOLUTION AND LATER

At the dissolution the history of the sites sharply diverges and each must therefore be considered separately. The revenues of the cell of Monkwearmouth were estimated at £26 9s. 9d. per annum and in 1545 Henry VIII granted the cell to Thomas Whytehead for the sum of £161 2s. 7d. This grant supports the view that the medieval cell had a home farm attached. In 1597 William Whitehead

²⁴ *Ibid.*, LVII. Symeon therefore dates the destruction of the Saxon monasteries to c. 865. For the translation of this and other passages from Symeon cf. J. Stevenson, *The Church Historians of England*, III, pt. 2 (1855).

²⁵ James Raine, *The Inventories and Account Rolls of the Benedictine Houses or Cells of Jarrow and Monkwearmouth* (Surtees Soc., XXIX, 1854).

granted 'all their messuages, lands, whatsoever with appurtenances, belonging to the later cell of Monkwearmouth' to Robert Woodrington. Robert, who died in 1641, left an interesting account of the buildings of his manor at Monkwearmouth in his will of August 1598. The inventory lists a 'Hall, Great Chamber, inner chamber, privie chamber, Mr. John's chamber, maids' chamber, brushing chamber, serving men's chamber, inner parlour, fore-parlour, new chamber, besides the ostler's closet, the kitchen, milk-house, bowlting house, brewe house, buttery, pantry, cattle sheds and barns.'²⁶ This would seem to imply that it was a quite substantial residence and that some new rooms had been added.

About 1689 Dame Dorothy Williamson purchased the estate; it has remained in the Williamson's hands until the present day, although the site is now leased at a nominal rent to Sunderland Corporation. William Hutchinson notes that 'there are several remains of the monastic buildings which form three sides of a square with the church', and the house (which in 18th-century maps is called Monkwearmouth Hall) has been described as 'a noble old mansion, built about the age of James I. It formed three sides of a square with the church . . . The kitchens which fronted to the East and closely adjoined the Church were lofty and spacious, with large square windows, divided by stone mullions and transomes; these had very probably formed part of the Monastic Offices . . .'²⁷

It is impossible to say from this description how extensively the house described by Woodrington had been rebuilt. A drawing by Grimm, dated 1704 (PL. II), shows the E. wing of the building with a sunken path in front, and an estate map shows an L-shaped building which seems to follow the lines of the E. and S. medieval ranges. The evidence from both is confirmed by the excavations. The hall ceased to be the Williamson family residence in or about 1735, and became the parson's house. This was destroyed by fire in 1790. Rebuilding of the site of the old manor was completed by about 1854 but, until the 1962-3 demolition, the Hallgarth Square area probably preserved some of the outlines of the hall precincts. It has been stated²⁸ that the river previously flowed in a more northerly course 'within 150 yards of the church and close to the Hall gardens', but 'by 1849 the distance had increased to 420 yards by reason of the tipping of ballast from inbound colliers'. A grant of 1672 includes wharves as one of the perquisites of the manor, and in 1710 the Williamson's right to use the ferry is confirmed. The dean and chapter of Durham granted to Sir William Williamson 'leave and right to work all limestone quarries and quarries of stone within their lands at Monkwearmouth and Fulwell'. These rights of the manor to the ferry and the quarry probably go back to medieval or even pre-conquest custom.

At the dissolution the property of the church at Jarrow likewise passed into lay hands, although the church precincts remained in ecclesiastical use. The first lord of the manor was William, Lord Eure of Witton, and the Eure family

²⁶ I am indebted to Mr. P. Hedley for this reference: *Durham Wills and Inventories*, II (Surtees Soc., xxxviii, 1860), 286-7.

²⁷ W. Hutchinson, *The History and Antiquities of the County Palatine of Durham* (1787), p. 506; J. R. Surtees, *The History and Antiquities of the County Palatine of Durham*, II (1820), 9-10.

²⁸ E. Watts Moses, *Notes on the Williamsons of East Markham, Notts., Monkwearmouth and Whitburn, co. Durham* (compiled 1959).

remained in possession until 1616 when the property was divided and eventually fragmented into one-eighth shares. It would seem that the incumbent of Jarrow lived in the late medieval S. range and adjacent buildings to the north (FIG. 18) until 1715 when the parsonage was declared unfit for habitation. Nevertheless in 1728 when the Buck brothers drew the church and the surviving medieval buildings (PL. VI) the house looked respectable. In 1773 a drawing by S. Sparrow shows the S. building abandoned.²⁹ Excavation of building d has shown that a new floor was laid some time after 1623, and the most northerly area (d, e; FIG. 18) was occupied by a verger into the 20th century.

MONKWEARMOUTH: THE ARCHAEOLOGICAL EVIDENCE

THE PRE-VIKING PERIOD (674-c. 864)

The interpretation of the very fragmentary buildings that survive is complicated by several factors. For the first period the Saxon walls have not the deep foundation-trenches of the Jarrow buildings and so could have been robbed virtually without trace. Again, unlike Jarrow, the clearing and levelling of the ground by the medieval and post-dissolution builders has been very thorough, and the modern development of the site has resulted in places in the total obliteration of all levels earlier than the 19th century. Because of lack of early stratification a careful plotting of mortar types in relation to wall-footings and debris, and a distribution of all early finds, such as window-glass, worked and carved stone, and lead roofing-clips, had to be attempted. Even this has left the evidence woefully inconclusive. Nevertheless during the restoration of the church tower in 1966 and 1967 it was possible to check mortar types against that structure, with very useful results.

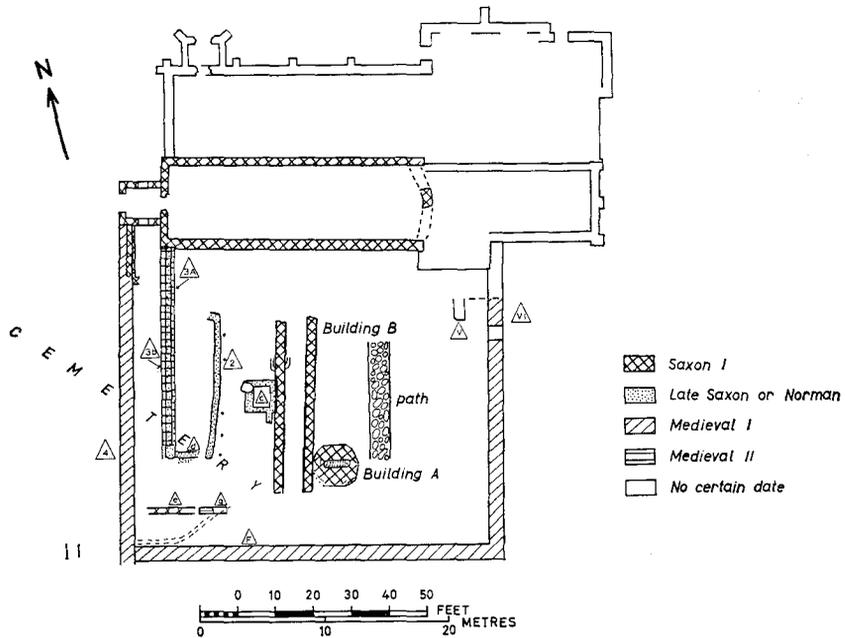
It is obvious from Bede (see above, p. 22) that during the 7th and 8th centuries there was a period of intensive building activity and changes of plan. However, in this interim report, no distinction has been made between the possible building phases even in the church. It has been clearly established³⁰ that the porch is later than the W. wall of the nave, although it is still earlier than 685 when Abbot Eosterwine was buried in the *portus ingressus*. It has unfortunately not been possible save in a small trench by the porch to relate directly any of the excavated monastic buildings to the walls of the Saxon church because of the concrete path which surrounds the modern building. In this small trench the

²⁹ For early drawings of Jarrow see H. E. Savage, 'Jarrow church and monastery', *Archaeol. Aeliana*, xxii (1900), 30-60. None of the early artists or antiquarians make clear the occupancy of the S. range in post-dissolution times. Harrison in a preface to Holinshed (1587) speaks of 'Jerro or Girwie, where Bede dwelled in an Abbeie, now a gentleman's place', and Savage suggests that the first parsonage was in the NE. corner of the churchyard.

³⁰ The fact that the porch is not bonded into the nave was established in the 1866 excavations, and again in the consolidation of the tower in 1966. Other 'excavations' which have destroyed all stratification S. of the porch (see below, p. 31) are illustrated in *Trans. Archit. and Archaeol. Soc. Durham and Northumberland*, vi (1906-11), pl. on p. 163.

ground had been disturbed down to the foundations of the early walls (3 a/b, 4; FIG. 13), presumably in the restoration and rebuilding of the 1866 S. wall.

MONKWEARMOUTH RECONSTRUCTED GENERAL PLAN 1967



A.E. P.H. R.C.

FIG. 13

MONKWEARMOUTH, CO. DURHAM

Identification plan of major structures of Saxon and medieval periods (pp. 30 ff.)

THE CHURCHES

The churches must have been focal points in the monastic complex, but only St. Peter's Church has incontrovertibly survived. A full account of the problems of this structure can be found in the works of Gilbert and Taylor, and here it is only intended to indicate the new evidence that has emerged.³¹ Only the W. wall of the church which Benedict's Gaulish masons built within a year survives today. Its external width, as can be seen from the heavy quoins on the outer face, is 22½ ft. The present S. wall is built on the same line as the old S. wall; the N. wall (FIG. 13) was established by excavations in 1866 by Mr. Robson of Sunderland who concluded that 'the lower courses of the north wall of the Saxon nave were extant on the line of the arcade which afterwards separated the nave from the north and only aisle'.³² This would give an internal width of 18½ ft. for the Saxon

³¹ E. C. Gilbert, *op. cit.* in note 20, and 'Some problems of early Northumbrian architecture', *Archaeol. Aeliana*, 4 ser., XLII (1964), 75-83; H. M. and Joan Taylor, *Anglo-Saxon Architecture* (Cambridge, 1965), pp. 433-46.

³² W. Longstaffe, manuscript notes in chapter library, Durham, octavo 16.

nave. Also noted in the 1866 excavations was a cross-wall which joined the N. wall of the nave underneath the chancel arch. Moreover, this cross-wall seems to have been connected with the N. wall of the chancel, implying that the foundations of this too were Saxon. The accounts are not entirely lucid; in a letter to Longstaffe, Hodgeson, the incumbent, writes: 'In the first place the excavations at the east end of the nave shew the junction of the transverse with the north walls of the church. All are bonded together and of one date. It would seem possible that the cross wall may have only served as a foundation for steps. They are of the same thickness as the chancel wall, two feet. The nave wall which projects slightly beyond that of the chancel is 2 ft. 4 in.' Longstaffe later notes that the cross-wall was thickened in the centre to 2 $\frac{3}{4}$ ft. with the appearance of a slight curve. A further note from Robson to Longstaffe confuses the issue somewhat: 'After you had gone I went down again and found that the mason had cleaned under the pew until he found the return wall as he calls it. It is quite plain to be seen running east towards the chancel wall and built of squared stones. At that point the new found wall is 15 $\frac{1}{2}$ ft. from the south wall, after allowing the eight inches that the chancel wall is thinner than the church wall.' Despite the discrepancies in measurements that these antiquaries provide, it seems clear that they considered that the chancel was joined to the Saxon nave. This is important for the monastic layout (see below, p. 37), as well as providing a striking parallel with the arrangements of the church at Jarrow. It is at least possible that the chancel outline represents St. Mary's Church.

In 1966 a small trench dug south of the tower while consolidation was in progress revealed a Saxon wall 2 ft. wide which was either older than, or bonded with, the porch (FIG. 14). It was covered by a distinctive creamy yellow mortar, and the stones were very closely cemented together. This wall had been seen by 19th-century antiquaries. Although its relationship with the church could not be clarified during the consolidation of the tower, it seemed to turn east at a point 12 $\frac{1}{2}$ ft. from the S. face of the porch, but at the same point there were heavy foundations west of the wall. It seems likely that there were single N. and S. porticus flanking the porch. Unless there were adjuncts less than 8 ft. wide (the nearest it has been possible to excavate to the S. wall of the church) it does not seem that there was either a S. aisle or a series of porticus farther east.

THE PRE-CONQUEST CEMETERY

The area so far examined south of the church had been extensively used as a burial-ground in pre-conquest times. Unlike Jarrow, there were no later burials save in immediate juxtaposition to the porch. This terminus to burial south of the church is no doubt explained by the fact that the site passed immediately into lay occupation after the dissolution. Only an approximate number of burials can be given since later burials had often displaced and disturbed earlier ones, and the activities of later builders had destroyed or dispersed the skeletons, many of which had been exposed when the ground was levelled from the S. wall of the church for 50 ft. southwards. More than 300 bodies have been excavated although many of the skeletons were very incomplete. There are three main groups: *i*, those earlier

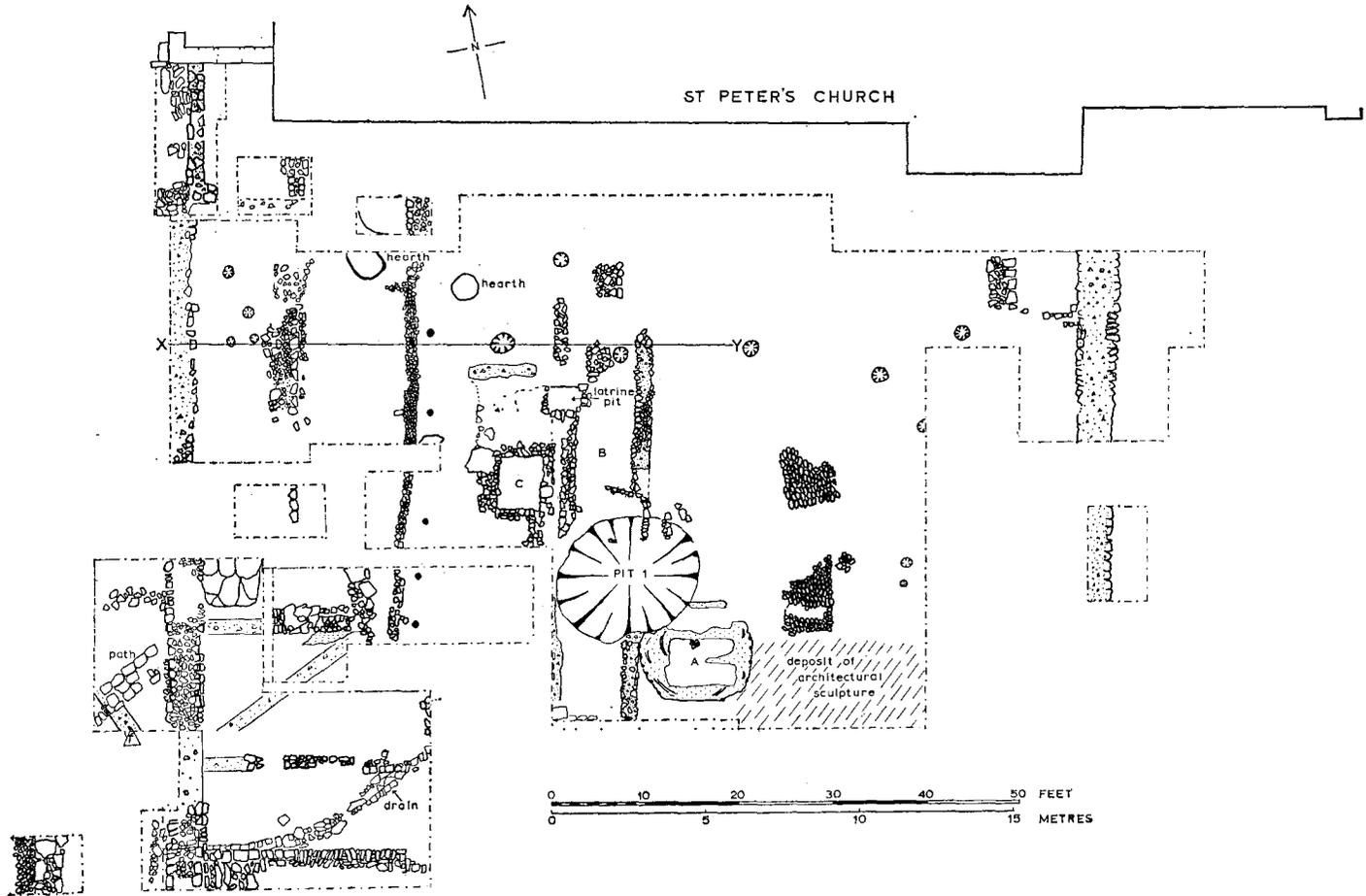


FIG. 14
MONKWEARMOUTH, CO. DURHAM (pp. 31 ff.)

R.C. *et al.*

than or contemporary with the Saxon monastic buildings; *ii*, those, judging from associated material, later than the abandonment and partial destruction of the monastery; and *iii*, a few that seem to be later than a period of clearance of the Anglo-Saxon buildings but earlier than the full post-conquest occupation.

i. The first group lie, with, so far, only two possible exceptions, west of building B (FIG. 13) in undisturbed natural soil which in this area is damp sand. The filling of the graves is clean sand and where their position can be determined the bodies lie on their backs with their feet crossed or together. Some of them appear to have been buried in wooden coffins indicated mainly by nails (FIG. 24, 2). Only in three graves did the outline of the original coffin show as a stain in the sand. Two appear to have been lying on wooden trays or biers, although the remains may perhaps have been merely the shadows of coffin bases. All had their heads at the E. end and none of them seem to have been clothed except possibly with a shroud. In the total so far examined were fifty-two males, twenty-four females, thirty-eight children and fifty whose sex was not determinable. The heights of the men ranged from $4\frac{3}{4}$ ft. to 6 ft. 1 in. and of the women from $4\frac{3}{4}$ ft. to 5 ft. 7 in. Most seem to have died when about twenty-eight years old, although some had survived into their sixties and seventies.³³ Where it was possible to estimate the depth of the graves they were about 3 ft. deep. The surface from which they had been excavated was mostly lost. The only grave-marker from the site³⁴ had been reused in a wall and was found with demolition-material.

It is possible that at least part of this cemetery is earlier than Benedict Biscop's foundation of 674 since some burials lie below buildings which should belong to the Saxon monastery (for example under the *opus signinum* floor at d). The monks might have built over an early cemetery but it seems unlikely that they would have done so over the very recently buried without translating the bodies. It is assumed, therefore, that any building which lies over these primary burials, such as building B, should be later than the first monastic phase. It must have been a lay cemetery because of the high percentage of burials of women and infants. So far no part of it seems to have been reserved for the monks. We know from Bede³⁵ that the monks were buried south of the church; perhaps they had a separate cemetery farther east as in the arrangements at St. Gall (see below, p. 50). It is unfortunate that the famous Tidfirth stone discovered on the site in the 19th century was not precisely located.³⁶ The position of this early lay cemetery is comparable with that of the ancient cemetery at Glastonbury³⁷ and it was probably quite extensive although its limits have not been established. Certainly the number of burials superimposed one on another would imply that it served quite a large population. This is in marked contrast to the early cemetery at Jarrow

³³ I am grateful to Mr. R. A. S. Cowper of Newcastle upon Tyne for examining the skeletons for me up to 1964. His findings will be incorporated in a full report.

³⁴ Rosemary Cramp, 'A name stone from Monkwearmouth', *Archaeol. Aeliana*, 4 ser., XLII (1964), 294-8.

³⁵ *HA*, 20.

³⁶ *Guide to Anglo-Saxon Antiquities* (London, British Museum, 1923), p. 123.

³⁷ C. A. Ralegh Radford, 'Glastonbury abbey' in *The Quest for Arthur's Britain* (ed. G. Ashe, 1968), pp. 129 ff.

which also lies south of the church (see below, p. 45); perhaps there were more burial-sites available for the laity in the Tyne area.

ii. The second group were more widely dispersed; some lay over the earlier burials, some were buried among the monastic buildings. In the graves of the latter were fragments of plaster, baluster shafts (PL. IV, B-C), window-glass (PL. V) and, in two, 9th-century stycas. On either side of building B the graves acted like post-holes in preserving Saxon debris from a ground surface which was stripped away in post-conquest reconstruction. In the southern part of the site where the original Saxon ground surface was patchily preserved (where the burials cut into the cobbled path, for example) these second-period graves were on average less than 1 ft. below the surface, although it is possible that there was a layer of undergrowth which could have raised the surface at the time they were buried (see Appendix I, p. 59). Nearer the church where the ground had been levelled, the bodies were within a few inches of the medieval ground surface. All had been buried unclothed in narrow graves, usually lying on their sides with the head turned on the right cheek, that is facing south, and with their hands folded.

iii. The two bodies of the third group which appear to have been buried after the later Saxon reconstruction of the site were in similar positions.

BUILDING A (FIGS. 13-15)

Only the floor of this enigmatic building survives. It had been sunk about 1 ft. into the natural clay from the Saxon ground surface which is represented here by the remains of a cobbled path to the east. The floor which measures 12 ft. east to west and 10½ ft. north to south was 4 in. to 8 in. deep and constructed of hard white mortar with large pebble conglomerate, thinly faced with brick or tile chippings which had almost worn away except in the semicircular grooves which marked the surface at intervals. At the E. and W. ends the floor was rounded³⁸ and slightly dished, and stakes about 1 in. across had been set at 1-ft. intervals into the wet concrete. The N. and S. edges had been damaged, but the remains of sockets for two similar stakes on the line of the S. wall indicate that the stakes formed a continuous series of uprights for a wattle wall. There were no traces of post-holes in the ground outside the floor, and at the E. end the stakes clearly splay from the floor at an angle of about 45°. Material in the destruction level which surrounded this building and in pit 1 included much fine light plaster which had been whitewashed on both faces, and similar plaster which bore the clear imprint of wattles generally 1 cm. in diameter. Some of this plaster was slightly curved on what is presumed to be the internal face. It is useful to compare this method of construction with Vitruvius's account of the Roman method of constructing plaster domes.³⁹ The superstructure would have been thin and light, but entry to the building must have been intended since the floor and the internal wall surfaces were given a finished appearance.

The central part of the floor had been chopped up by burials, the lowest

³⁸ Cf. G. Jobey, 'Excavations at Tynemouth Priory and Castle', *Archaeol. Aeliana*, 4 ser., XLV (1967), 42-3 and fig. 2; M. Biddle, 'Excavations at Winchester', *Antiq. J.*, XLV (1965), 258.

³⁹ *De Architectura*, vii, 3.

level of which was packed with broken flooring (PL. III). The remains of nine bodies, none of which were buried in clean clay, were excavated. Some were presumably buried while the building was still standing and others after the walls had been stripped away (FIG. 15); one on the extreme south had an uninscribed grave-marker placed at the head. The massing of graves within the building perhaps implies that it was a particularly venerated spot. At the central point in the floor there was a smooth unbroken niche where the primary burial perhaps lay. Here one body lying on its back with its head turned to the north lay over some disturbed bones, but there was no trace of a coffin below and both appeared

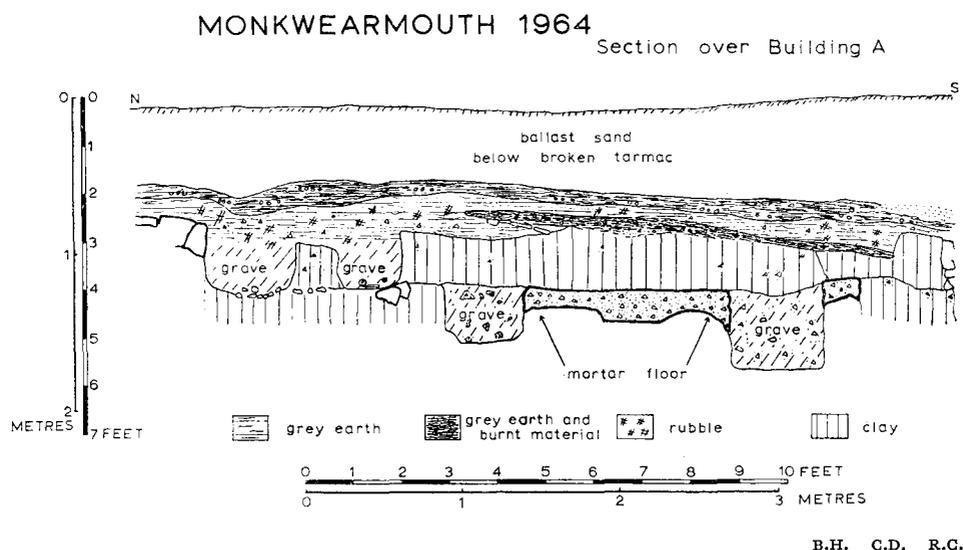


FIG. 15
MONKWEARMOUTH, CO. DURHAM (p. 35)

to be secondary interments. Set in the natural clay below both bodies was a hole packed with stones. This might have been an original draining hole underneath a burial or a setting for a grave-marker when the primary burial had been moved. Bede⁴⁰ mentions the transference of the bodies of several important personages in the early monastery from south of the church to its interior. This structure may then have been a type of mausoleum set just inside the enclosure on the western limits of the lay cemetery.⁴¹ It may also have been used as an oratory since at the E. end there were two slots which might have supported an altar. The entrance, if there was one, was perhaps in the N. side where two large stones looked like displaced steps. Around this building there were clear signs of fire.

⁴⁰ *HA*, 20.

⁴¹ For a discussion of early cemeteries and small shrines see C. Thomas, 'An Early Christian cemetery and chapel on Ardwall Isle, Kirkcudbright', *Med. Archaeol.*, xi (1967), 165-9.

Much carbon was found in the demolition-material and some of the baluster shafts, strip-work, and wattle-marked plaster were burnt.

The relationship of this structure to building B was not definite. Both were set in undisturbed natural clay and covered with the same deposit of Saxon debris which included broken strip-work (FIG. 24, 1), baluster shafts and plaster. At first it seemed that A must have been built later than B since the thin edge of the mortar floor lipped up to the foundation of the E. wall of B; it would have been extremely difficult to cut a wall-trench without breaking the mortar. Moreover the line of the E. wall of B is slightly thinner where it touches A, and could have been cut back to accommodate it. Nevertheless the whole line of building B is slightly angled away from A and it is difficult to see why the two buildings should have been juxtaposed, when there was no entrance to connect them. Until it is possible to excavate farther south it seems better to suppose that these buildings existed simultaneously and were part of a composite plan. Immediately east of the path by A were two bases which could have been for posts or even for columns, since the Ionic capital (PL. IV, A) was lying in the rubble beside them.

BUILDING B (FIGS. 13-14, 16)

45 ft. of this long narrow structure have been excavated but its southern limits have not yet been determined, and at the north it petered out in a single stone 17 ft. from the S. wall of the church. At this point the area was disturbed by an early 19th-century drain covered by a large main sewer, but if the walls had continued to the S. wall of the church it is unlikely they would have survived the series of reconstructions.

Its width was 11 ft. externally and 6 ft. internally. The walls were 2 ft. 4½ in. wide, and, like the walls of the Saxon church, stood on very shallow foundations of two courses of rough limestone blocks set upright and inclined, and bonded with natural clay. The oversailing course was of irregular limestone slabs lavishly covered with a creamy yellow cement and faced with a fine white mortar, some fragments of which were painted with red stripes (PL. IV, D-E). A very distinctive type of 'layered' plaster, whose surface, carefully smoothed and painted in matt white, is pinkish over a creamy background,⁴² was also found here and *in situ* on the internal S. face of the church porch.

The floor had not survived but the area inside the walls was of hard, apparently flattened, clay, and much brick-faced mortar of a greyish sandy type was found in demolition-areas surrounding the building and in pit 1. The slabs of mortar were about 1 in. thick with a very finely powdered brick surface. It seems rather fragile as a flooring material but the backs of the surviving fragments are quite flat. This type of *opus signinum* could have been set on a flattened clay base. It is, however, markedly different from the small area of flooring surviving at d

⁴² I am grateful to Mrs. H. Boon who kindly tested this plaster for me to see if the pink layer contained gypsum. The results were negative. Mrs. Boon came to the conclusion that the pink colour might have been produced by fine brick dust. This type of mortar seems to have been noted also by J. T. Irvine in the 7th-century churches in Canterbury: C. F. Routledge, 'St. Martin's Church, Canterbury', *Archaeol. Cantiana*, xx (1897), 5, 19.

(FIG. 13), and from the flooring at Jarrow where the brick admixture goes right through the mixture, and the liquid cement has been poured on to a bed of rubble. The roof seems to have been partly covered with limestone slates (FIG. 24, 4) and partly with lead sheets, fixed by lead clips (FIG. 24, 3).

Most of the Saxon window-glass from the site, both plain and coloured (PL. v), was found associated with this building, or in the second-period graves which lay immediately east of it. It is unfortunately impossible to say whether the mass of broken baluster shafts and strip-work which lay to the south-east and in pit 1 was associated with this building or not. It may represent a dump where stone had been redressed. The strips could have divided a wall surface or outlined openings. It seems from their sections (FIG. 24, 1, is a typical example) that they should be vertically set into a wall. Perhaps the building had a series of openings represented by the strips and baluster shafts.

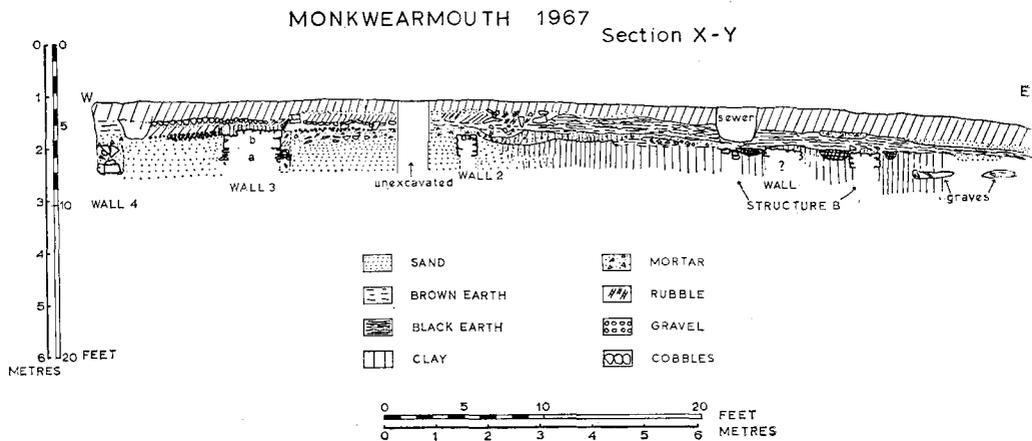
Building B was clearly not inconsiderable, and it remains to discuss its function. It lies 30 ft. from the W. end of St. Peter's Church, and, if Longstaffe and other 19th-century observers were correct in recording a cross-wall under the present chancel arch, then it would fall exactly in the centre of the church. It might have been a covered gallery which joined the church to buildings farther south and as yet unexcavated, in the manner of Charlemagne's famous later structure at Aachen.⁴³ However, if the present chancel (the N. wall of which according to Longstaffe was in some way bonded with the S. wall of the Saxon nave) is on the same lines as another Saxon church (as at Jarrow with which it compares very markedly in scale), then B can be considered as part of a claustral plan. A building of the same dimensions set 30 ft. west of the E. wall of the chancel would have been partly obliterated by the medieval E. range, VI, and the sunken 18th-century path which fronts it. Only the W. wall of the presumed E. side of the Saxon cloister would have survived and in only one small area (by walls V and VI) has this line been excavated (FIGS. 13-14). Here, immediately west of wall V there was some Saxon debris, plaster and *opus signinum*; wall V could be a reshaped Saxon wall. The theory of a claustral plan is supported by the discovery of an open space sparsely covered by small round pebbles in the 30 ft. that have been explored east of building B. Moreover, in two places patches of a solid path carefully constructed with large flat cobbles tipped scale-fashion against the natural slope of the ground, and exactly in the centre of the projected claustral line, survived. On and beside this path ten fragments of Saxon glass-mounts were found.

Building B obviously stood in a ruinous condition before it was finally demolished after the conquest. Late Saxon graves east of it were full of broken plaster and glass in contrast with the cleared level around them. Inside building B was a spread of rubble which surrounded a small latrine pit. Lying over this pit was the base of a 13th-century vessel. A thin spread of mortar-flecked clay (FIG. 16) lay over the foundations of B and the rubble inside. This produced pottery belonging to the middle of the 13th century.

⁴³ Felix Kreuzsch, 'Kirche, Atrium and Portikus der Aachener Pfalz', in W. Brautenfels (ed.), *Karl der Grosse, Lebenswerk und Nachleben*, III (Dusseldorf, 1965), 463 ff.

LATE SAXON AND NORMAN PERIODS (FIGS. 13-15, 17)

The buildings so far discussed were all bedded on a clay subsoil, but there is some slight evidence for Saxon buildings west of wall 2 covering burials dug into a sand subsoil. The wall at d, which had been cut by a late medieval wall, 3b, stood over a spread of Saxon rubble which contained not only distinctive Saxon mortar and a broken burnt baluster shaft but a small fragment of middle Saxon pottery. Below this rubble and between d and e was a pink concrete floor in which the brick dust and chippings were uniformly contained in the mixture, and spread on a layer of stone chippings. Wall e of which only a foundation course of lime-



R.G.

FIG. 16

MONKWEARMOUTH, CO. DURHAM

Section showing relationship of building B to Norman reconstruction (p. 37)

stone blocks survived greatly resembled the walls of building B, but it had been cut by a later wall and the Jacobean hall above it had destroyed all earlier stratification. Similarly, east and west of wall 4 shadows of robber-trenches only about 4 in. deep seem to indicate early buildings on a different alignment. In the robber-trench, f, one sherd of middle Saxon pottery was found (FIG. 14).

Wall 2 and *structure C* could well represent late Saxon occupation. Both features lay over early burials; both are surrounded by a spread of Saxon mortar and window-glass which may of course be only reused material. *Structure C* was originally free-standing but only the W. wall and SW. corner survived above ground level. In the NE. corner a stone slab may represent an entrance. On its E. side structure C appears to have been built against the W. wall of building B. It is unfortunate that the juncture of the two buildings had been cut by an early medieval trench line. The interior, $5\frac{1}{2}$ ft. by $4\frac{1}{2}$ ft., was a stone-lined shaft sunk 6 ft. into the ground. Two vertical slots, about 10 in. wide and 1 ft. 8 in. apart, were set into the W. wall two courses above ground level. They were filled with charred wood. The clay base of the shaft was clean with no obvious silt line, and

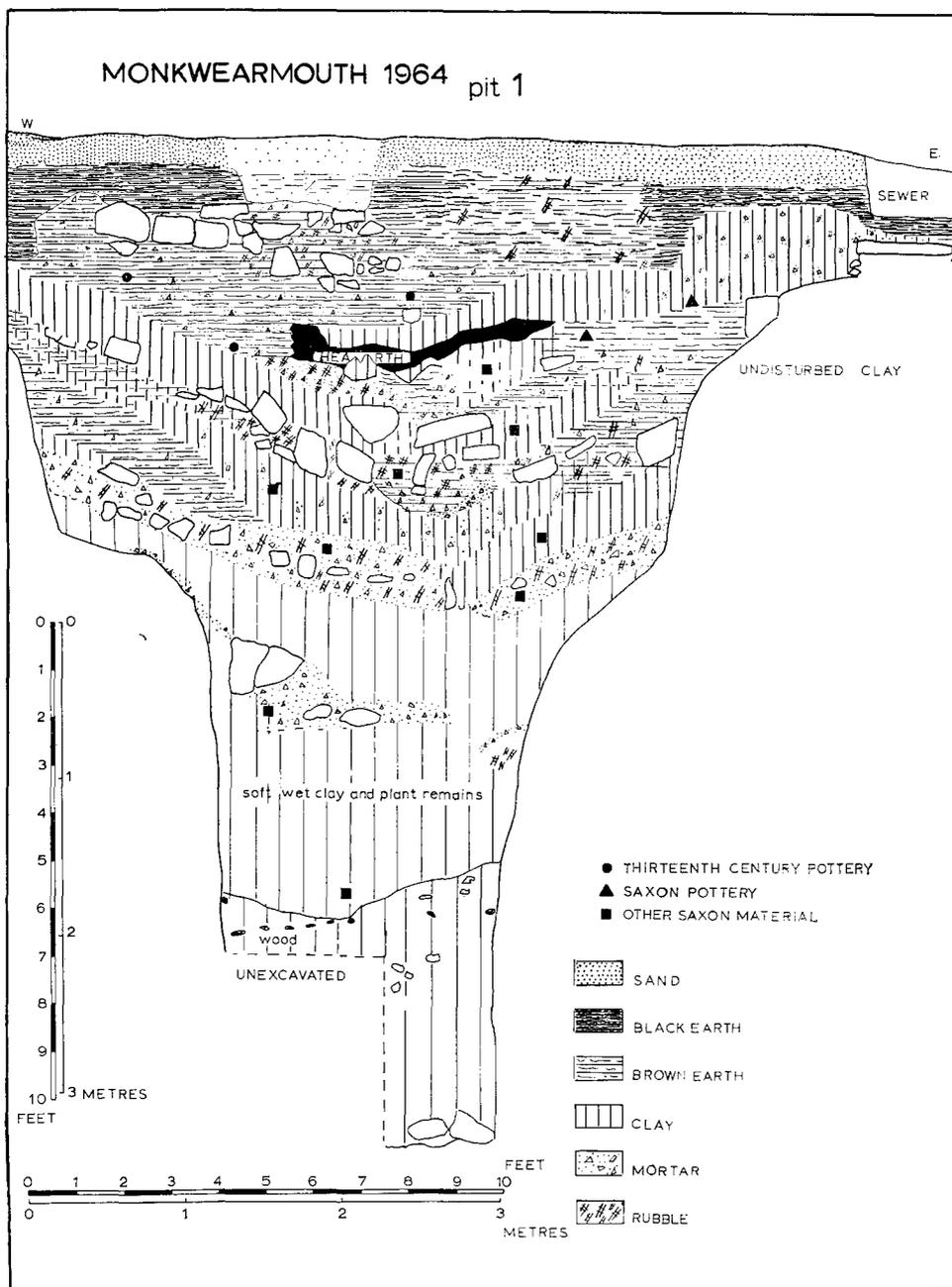
no traces of latrine debris. The bottom 2 ft. were filled with rubble containing Saxon window-glass and one piece of yellow-glazed white pot which has been ascribed to the 13th century. Above was a layer of ash and food debris and the top layers, in which was one sherd of 14th-century pottery, were packed with earth and stone. Over the whole was a black level which covered all the western part of the site and contained 15th- and early 16th-century pottery (FIG. 16). This shaft bears an obvious likeness to some medieval latrines, but it is also comparable with the stone-lined wells found on the monastic site at Whitby.⁴⁴

Wall 2 which was on average only 1 ft. 2 in. wide was roughly constructed with a base of crudely squared sandstone blocks capped by loose rubble. It may perhaps have carried a timber superstructure, although the building to which it belonged seems to have had a stone-tiled roof, and the line of posts which ran parallel with it could have supported an overhanging roof or veranda. The building does not seem to fit in with the post-conquest layout and indeed had apparently gone out of use when the two small hearths north and east of it were in use.

These hearths, one of which had been used for melting down lead (presumably for repairing the roof of the church) are tentatively assigned to the reconstruction by Aldwin. Other evidence for the reconstruction of the site such as is mentioned by Symeon of Durham is provided by a maze of small stake-holes which survive patchily along the length of the nave and 20 ft. from the S. wall of the church. All of them contained small fragments of charcoal or Saxon plaster and could have been part of Aldwin's temporary buildings.

The best evidence for what seems to be an 11th-century reconstruction is, however, provided by *pit 1* (FIG. 17), 18½ ft. in diameter at its widest and 18 ft. deep. It was dug from the cleared Saxon ground surface represented by the stone step on its E. edge and the near-by cobble path, and cut through buildings A and B and several bodies which had been buried after the abandonment of these buildings. It was funnel-shaped in section; its lower shaft, which was about 11 ft. deep, was filled with soft silty bonded clay which contained material that would have fallen in while it was being dug: parts of skeletons, Saxon plaster and baluster shafts, *opus signinum* flooring and much tree and plant debris (see Appendix I, p. 59), showing that the site was derelict when it was dug. This organic matter and the bones lay on and just below the level marked by a line on FIG. 17. The 5 ft. below were of very solidly compacted grey clay which contained only a few stones and indeed the bottom 2 ft. of the excavation could well have been natural soil. This pit was perhaps originally dug for collecting clay to level the site and to provide working-surfaces on the wet sand near the SW. corner of the nave where a thin spread of clay was found associated with hearths. It was probably then used as a well whilst reconstruction of the site took place and was finally filled with rubble from the Saxon buildings which were cleared in the reconstruction. Fragments of plain and red-painted baluster shafts, 7 in. and 6 in. in diameter (PL. IV, B-C), strip-work, painted plaster, slabs of *opus signinum* flooring,

⁴⁴ Sir Charles Peers and C. A. Raleigh Radford, 'The Saxon monastery of Whitby', *Archaeologia*, LXXXIX (1943), 29-33.



E.P. R.C.

FIG. 17
 MONKWEARMOUTH, CO. DURHAM
 Section through pit 1 (pp. 39, 41)

coloured and plain window-glass and much worked building stone were found in this rubble.

Nothing except Saxon material was found below the level of the hearth which sealed the top of the pit and this in its turn had been packed with clay and levelled. It is impossible on the evidence available to say whether the clearing of the site represented in this shaft is to be assigned to *c.* 1000 when the church tower was built, or to *c.* 1075 when Aldwin and his monks took over. Some time later a sunken structure was built over the top of the pit. This was filled with brown earth, mortar and building debris which contained 13th-century pottery and Saxon material. Evidence for two reconstructions is also found in other areas.

The siting of this pit seems rather extraordinary if building B was still standing with its floor intact. It may be that the builders wanted water and so put it near the junction of the sand and clay subsoil and perhaps they also wished to have a convenient place for dumping material away from their main sphere of activities. Structure C may have superseded this pit although it too went out of use before the 14th century according to the dates assigned to the pottery in its filling.

THE NORMAN REPLANNING

Not enough work has been done on the periphery of the site to be able to say anything conclusive about the post-conquest building plan, since most of the area excavated lies within the post-conquest enclosure. This seems to be represented by walls 4, VI and F. *Wall 4* is presumably the E. wall of the W. range of the Norman rebuilding, although it is possible that it was built immediately before the conquest at the same time as the top of the church tower. It slightly overlaps the W. front of the porch and widens the wall of the Saxon S. porticus (FIG. 13). It also cuts through the Saxon cemetery, and several fragments of pre-conquest pottery have been found in its foundation-trench (FIG. 25). It was solidly constructed, 3½ ft. wide, and lay on projecting foundations of five courses in a trench 3½ ft. deep. The lowest three courses are of neat blocks and slabs set flat and then upright at an angle giving a sort of herring-bone appearance. Such an odd construction may indicate two building periods, one before and one after the conquest. The mortar is greyish and gritty not unlike that found in the upper courses of the church tower below the Victorian reconstruction. The same construction is seen in *wall F*, although the two walls are butt-jointed and not bonded. Perhaps Aldwin planned an orthodox Benedictine W. range with a cloister wall 9 ft. wide whose wall, 3a, ran up to the SW. corner of the chancel. This wall seems to have partly utilized an existing pre-conquest wall. A fragment at f could possibly represent part of the same feature. However, it seems that at some later date (from the pottery evidence, in the late 13th or early 14th century) the area west of wall 4 was not inside a W. range, but partly used for farm buildings. A path running up to the wall covered a Saxon wall-trench and late 13th- or early 14th-century pottery was sealed below it. Part of a building west of the junction of walls 4 and F (FIGS. 13-14), which had a heavy cobbled floor, could have been a stable or farm building. Under the stone debris which covered the floor was a deposit of 14th-century pottery. During the occupation of Monkwearmouth Hall

wall 4 went out of use; it was robbed down to foundation level and covered by a cobbled yard associated with an enclosure 2 ft. to the west. This enclosure is marked on an early estate map of the hall.

The extent of the E. range of the 11th-century monastery is so far unknown. Three small trenches exposed *wall VI* running up to the line of the present transept of the church. The W. side of this wall is associated with a sunken ornamental flagged and cobbled path under which 17th-century pottery has been found. This is probably the W. wall of Monkwearmouth Hall as shown in Grimm's drawing (PL. II). The hall is shown on an early estate map as an L-shaped building. Hutchinson notes that it formed three sides of a square with the church and incorporated some of the monastic buildings.⁴⁵ The Norman door drawn by Grimm implies that part of the E. wing was early and indeed the foundations of wall VI, which consist of thin slabs about 4 in. wide set at an angle and penetrating with different depths into the courses above, are of the same early character as the base of wall IV. They are heavily covered with the same yellow-lime mortar as that found on the Saxon buildings, and above this level is another spread of greyer sandier mortar. The wall was ruthlessly cleared and levelled with debris containing many broken brown-black glazed pantiles, which covered the roof of the hall in Grimm's drawing, and some 18th-century pottery.

After the dissolution, therefore, the E. and S. ranges seem to have been adapted for domestic use; no doubt, as at Jarrow, they were the most substantial parts of the medieval buildings. If Aldwin planned an orthodox Benedictine layout with cloister walks and a chapter-house in the E. range, then, as at Lindisfarne which has a similar history as a cell of Durham, the E. range could have been adapted in the later medieval period to a more domestic layout with the Master's house and *aula* for the monks in the E. and S. ranges.⁴⁶ With no stratification earlier than the 18th century above the E. block it is impossible to prove this without further excavation.

JARROW: THE ARCHAEOLOGICAL EVIDENCE

THE PRE-VIKING PERIOD

THE CHURCHES

From Bede's account (see above, p. 23) it is clear that the early buildings at Jarrow took some time to complete, and that the main basilica on the site, whose dedication to St. Paul is recorded on a slab now placed over the chancel arch in St. Paul's Church, was finished last. One must assume, however, that the community needed somewhere to live and to worship during the three to four years in which they laboured to build the site. One small hut south of building A (FIG. 23) may represent a domestic building, and perhaps the present chancel, recognized by modern architectural historians as a separate Saxon church, could have served

⁴⁵ *Loc. cit.* in note 27.

⁴⁶ These are recorded in the accounts (*op. cit.* in note 25); in 1360 tithe barley was stored in 'the old church'.

as their place of worship. The W. wall of this eastern church was seen during church restorations and it has been suggested that before the conquest this building was joined to another church lying to the west.⁴⁷

The E. church which may have had a small eastern sanctuary, now lost, is very similar in dimensions to the chancel of St. Peter's Church, Monkwearmouth, measuring 15 ft. 8 in. wide internally and 20 ft. by 44 ft. externally. Its quoining and types of opening can be paralleled in other Northumbrian churches, such as those at Corbridge and Escomb which belong to an early group. Longstaffe, who examined the foundations of the building in 1864, makes the interesting observation that 'on both sides of the chancel the lowest courses of square stones overlay the foundations by about 2 in. or 3 in. and that the tower walls consist of 2½ ft. of cobbles filled in with the surrounding clay'.⁴⁸ From this he deduces that the chancel lay over an earlier Roman building. However this type of overlapping of the foundation course is exactly paralleled in building A (see below, p. 45), and in the western *porticus* at Escomb. It must therefore be a Northumbrian building technique.

The chancel or original eastern church fits very exactly the lines of an anonymous 18th-century plan and elevation of the church and monastic buildings.⁴⁹ The plan makes the chancel 15½ ft. by 39¾ ft. internally and 20½ ft. by 44 ft. externally. This leads one to hope that the main church to the west rebuilt in 1782 and again in 1866 is equally accurately drawn. FIG. 18 shows the 1769 plan projected on to the resurveyed standing buildings and excavated features on the site. This 18th-century plan and a drawing by the Buck brothers of the church and monastic buildings viewed from the south-west in 1728 (PL. VI) have been the main bases for modern reconstructions of the early churches. Most contemporary scholars would agree that the church standing in the 18th century was basically Ceolfrid's basilica.⁵⁰ The overall length of the two churches on the plan is about 150 ft. The internal measurements of the big western church are 90 ft. by 19 ft. This is rather larger than William Hutchinson's description provides: 'The nave was 28 paces in length and only 6 in breadth.'⁵¹ This would make the measurements about 85 ft. by 18 ft. This is not a large discrepancy allowing for differences between the 18th-century plan and the 19th-century 'pace'.

In one place only has it been possible to test the plan. A small trench just north of the church porch exposed the foundations of a wall exactly on the line and of the same width (3 ft.) as the N. wall of the nave on the plan. The small stretch of wall exposed (FIG. 18) was of the same technique as, although slightly wider than, the walls of buildings A and B, but had been robbed down to foundation level and covered by a pack of clay. On the British Museum plan the round-headed arches of the N. *porticus* look identical with the openings on the E. range

⁴⁷ H. E. Savage, 'Jarrow Church and monastery', *Archaeol. Aeliana*, xxii (1900), 41-4; E. C. Gilbert, 'The Anglian remains at Jarrow Church', *Proc. Soc. Ant. Newcastle*, 5 ser., 1 (1951-1956), 311-33. These views are supported by H. M. and Joan Taylor, *op. cit.* in note 31, pp. 343-7. All use the only written account of the early church: Hutchinson, *op. cit.* in note 27, II, 475.

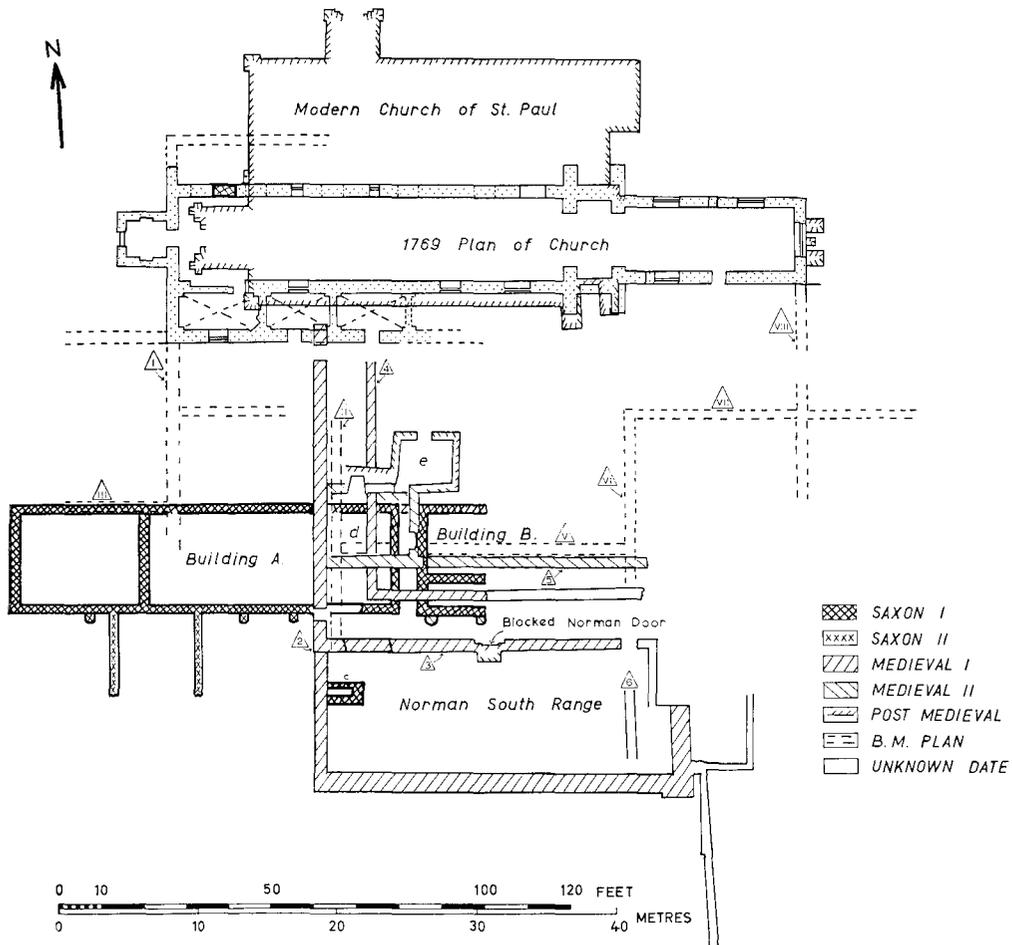
⁴⁸ Durham Cathedral MSS. Quarto, 41, p. 40.

⁴⁹ British Museum MS. K 12.47B, dated 1769.

⁵⁰ *Op. cit.* in note 47.

⁵¹ *Op. cit.* in note 27, p. 475.

JARROW GENERAL PLAN OF AREA EXCAVATED 1963 - 67 IN RELATION TO THE STANDING BUILDINGS AND 1769 PLAN



F.B. R.C. M.L.

FIG. 18
JARROW, CO. DURHAM (pp. 43 ff.)

of what seems in the Bucks' drawing to be the Norman chapter-house. Only extensive excavation can show whether the old church was all of the Saxon period.

The churches are shown in a continuous line on the 18th-century plan but the monastic buildings, for which no date is provided, are indicated by dots. Hutchinson records that there were buildings on the N. side of the church.⁵² It

⁵² By tradition Bede's little oratory which the three monks of Jarrow showed Leland in c. 1542 was also on the N. side of the church (Leland, *Collectanea*, IV (1715), 70, and *Commentaries*, I (1709), 118).

seems probable that, as at Whitby, the church complex stood in the centre of monastic buildings.

THE PRE-CONQUEST CEMETERY

South-west of the church part of a cemetery extending to the path north of building A has been found. Most of the Saxon burials seem to be of males or juveniles. They were all lying on their backs and had been cut by the trench of the 11th-century cloister wall, or the walls of post-dissolution buildings. Dr. Calvin Wells writes: 'The mean age of the adults is about 37·5. Heights range, for men, from 5 ft. 3 in.—6 ft., and, for women, from 5 ft.—5 ft. 6 in. In general they were well built people with distinctly strong muscular development and indications that they led a vigorous physical life sustained by more or less adequate diet. . . . Their dominant disease was osteoarthritis in various forms. It tends to be extremely severe in the spine (including the ribs and sacro-iliac joints) but it also affects hips, knees, elbows, hands and feet. Six fractures were noticed, five in the hand or wrist.'⁵³ It was not possible in most cases to estimate grave depths because the ground had been levelled. The position of the cemetery is significantly like that at Monkwearmouth (see above, p. 31).

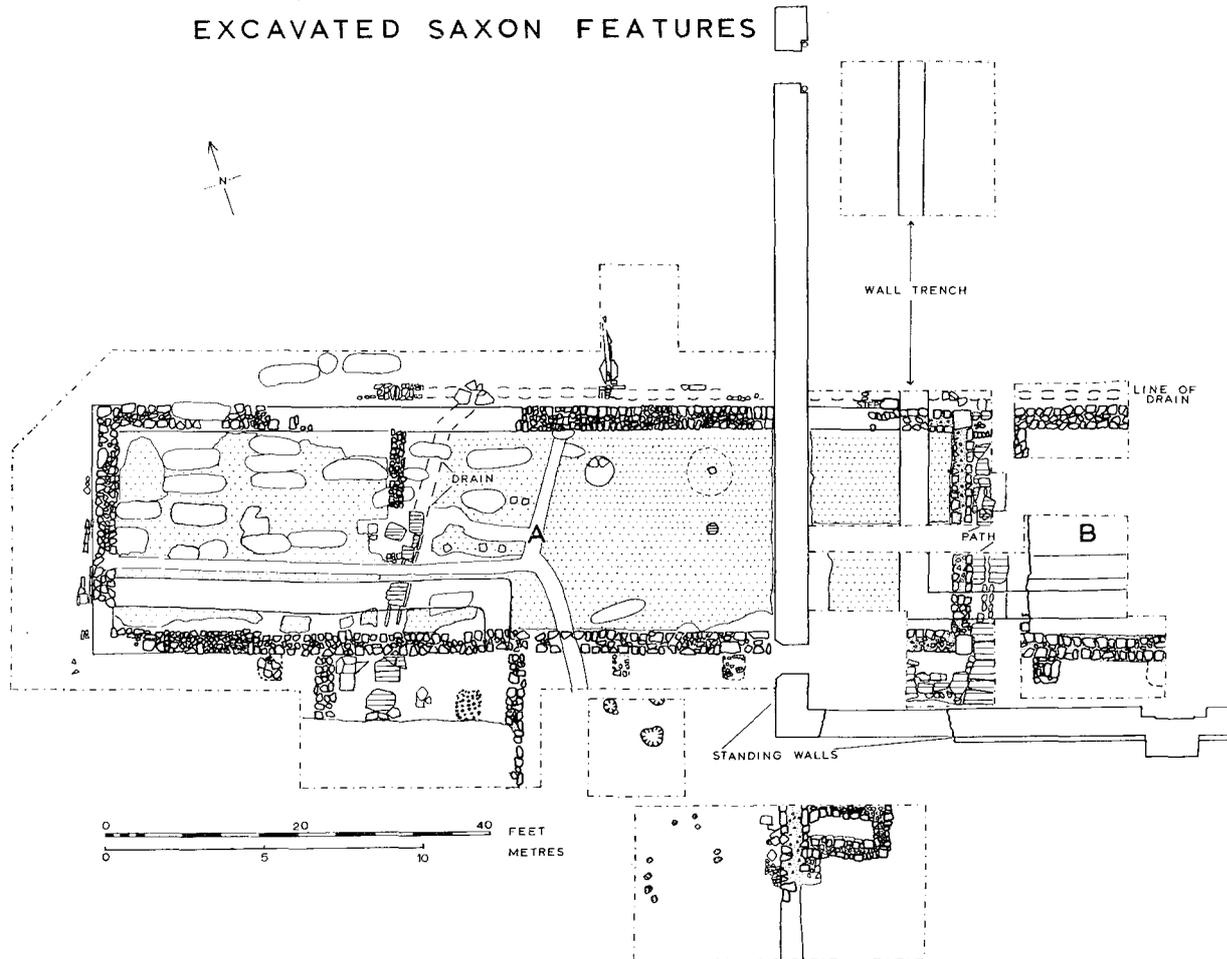
BUILDING A (FIG. 19)

This large and elaborately constructed building lies 45½ ft. from the S. wall of the existing chancel of St. Paul's Church, and about 36 ft. from the S. wall of the church shown on the 1769 plan (FIG. 18). It measured *c.* 21 ft. by *c.* 87 ft. internally and *c.* 26 ft. by *c.* 91½ ft. externally. The W. wall was robbed to foundation level; the E. wall still stood above the original floor level. East of the standing Norman wall, 2, building A had been protected save for the work of medieval builders; west of it, however, grave-digging between the late Saxon period and the early 19th century, the building and demolition of a rectory in 1855 and 1878 respectively, and the making of modern gardens have seriously disturbed the stratification and destroyed much of the structure. The walls, 2 ft. 2 in. to 2 ft. 4 in. wide, were trench-built and very solidly constructed on two foundation courses made of large cobbles set in natural clay, and capped by two levelling courses of smaller cobbles and flat slabs on to which the first course of ashlar was slightly offset. Two quoin stones, *c.* 2 ft. square, survive on the NE. and SE. corners (PL. VIII, A-B).

Building A seems to have been originally planned with a party wall 1 ft. 10 in. wide which lay 28 ft. from the W. wall. This party wall together with what seems to be an octagonal pillar base 24 ft. from the E. end divided the building into three unequal parts. The floor, in the *opus signinum* technique, was of concrete with large pebble agglomerates laid on a bed of small stones and faced with powdered brick, and had an average thickness of 2 in.—a markedly stronger construction than that at Monkwearmouth (see above, p. 34). East of the party wall the floor had a much better surface (PL. VII, A); whether this was original or

⁵³ A full report on the skeletons will be provided by Dr. Calvin Wells in the final excavation report.

JARROW 1967
EXCAVATED SAXON FEATURES



B.H. R.I.L. R.C. *et al.*

FIG. 19

JARROW, CO. DURHAM

Plan showing limit of excavation in relation to Saxon structures (pp. 45, 47 ff.)

whether the floor here had been subjected to less wear it is impossible to tell. Certainly east of the wall there was undisturbed burning and debris lying thinly over the floor; in the western part the floor, where it survived, was cleaner. The party wall was removed during the occupation of the building and a large stone drain of V-shaped stone slabs was carefully inserted through the S. wall. Its stone capping was covered on the floor by clay and red-tile chippings, as were the footings of the party wall. Perhaps this covering was dictated less by a technological decline in the monastery than by the need to provide an easy access to the drain for cleaning (although this does not explain why the wall was not properly covered). The necessity for this drain is not yet clear, but presumably it took water away from a building which stood north of building A; this need not necessarily have been the church.

A S. annex, badly damaged by a deep cut filled with rubble from the demolished rectory, has not been completely excavated so that its length north to south is not known. Its width at foundation level is $21\frac{1}{2}$ ft. externally and $17\frac{1}{2}$ ft. internally. The walls had been robbed to their cobble and clay foundations, although part of the floor survives. This was partially paved and partially of trodden earth. Two rounded depressions lined with tiny pebbles may have been settings for vats or barrels. Perhaps this annex was a store or server. A small samian sherd and middle Saxon pottery were found. Although the foundations are similar to those of the main building it is impossible to be certain whether the annex and the S. wall of building A are contemporary. The party wall provides some problems if one considers its relationship with the S. annex, since it may also have divided the annex into unequal parts. If the annex was part of the original plan of building A, there may have been two means of access between them, the smaller one west of the party wall and the larger, leading to the main area of the building, east of it. It seems, however, more likely that the annex was added to take over the function of the W. end of building A which, after the demolition of the party wall, became part of the main area.

The only probable entrance to building A was on the N. side $9\frac{1}{2}$ ft. from the E. end where there appeared to be a step (FIG. 19). As the floor of the building was lower than the ground level on the north, a step would have been needed.

The building was surrounded on all sides except the south by small eavesdrip drains. The natural slope of the land on the south should have obviated the need for such, although at the SE. corner the path slabs had been cut away at the angle and the soil gravelled. This was either for better drainage at the corner, or to accommodate a rain-water tank. Unlike the intrusive drain which cut through the building (see above, this page) these external drains were not constructed to carry much water. On the east where its line was intact under the heavy flagstone path which divided building A from building B, the drain consisted of a double row of small cobbles capped with thin stone slabs (FIG. 19). Parts of similar drains were found on the N. side of this building and of building B. West of building A the fragmentary remains of a very curious drain made of (?) Roman *imbrices*, slotted together and set into a V-shaped stone channel, were found. No capping survived in this area which was one of the most disturbed on the site (PL. VII, B).

At some stage buttresses were added to the S. wall. The fragmentary bases were *c.* 2½ ft. wide; the complete base south of building B was 3 ft. wide. Buttressing of buildings is not a feature so far known in northern Anglo-Saxon buildings. Presumably they were not placed at the corners as in some 7th-century southern churches, such as St. Martin's, Canterbury, or that at Bradwell St. Peter (Essex), because the corners were well braced by heavy quoins. East of the annex two of the buttresses were spaced at 10-ft. intervals; there may have been another 10 ft. farther east against the only part of the S. wall it has been impossible so far to investigate. However, the system, if system there was, breaks down somewhat, since any regular spacing does not bring the central buttress on line, even if the annex was a later addition. Perhaps the buttresses were placed where the walls were weakest and in relation to the existing windows. The ground south of the building slopes more steeply today than it did in the Saxon period but even then the slope must have made work hazardous, especially if the building were of two stories.

The roof of building A seems to have been partly of lead and partly covered with limestone slates, *c.* 9½ in. by 7 in. and ½ in. thick, and identical with those from Monkwearmouth (FIG. 24, 4). They are quite different from those used on the post-conquest buildings which were of sandstone and larger and thicker. The slates were apparently fixed by nails, a great many of which, sometimes attached to charred wood, were found in the debris which lay over the floor (FIG. 24, 2). Lead clips, like those found at Monkwearmouth (see above, p. 37), and a quantity of melted lead found alongside the S. wall indicate the use of lead sheets.

The position of two or possibly three windows in the N. and S. walls has been revealed by very careful plotting of fragments of window-glass. There may also have been one in the W. wall where more intensive destruction of the levels may have destroyed the evidence. There was no doubt that the building had been abandoned after a severe fire. The whole area of the floor 40 ft. from the E. wall was covered by a layer of charred wood, 1 in. to 6 in. deep, which had in places blackened the surface of the floor. This intense burning was dramatically reflected by the cracking and distortion of the deposit of window-glass alongside the S. wall. It had originally been a clear bluish green; the N. window immediately opposite contained dark green, blue and red-streaked quarries. This may have been a sensible provision to admit more light from the south, and to get the best aesthetic effects in the N. window. A section of the internal face of a single-splayed window-head was found near the most easterly concentration of glass on the S. side of the building, but so far there is no evidence of the size of the apertures for the glass, nor whether the windows were fitted with stone or wooden screens for holding it. As a few fragments of lead comes of H-shaped section have been recovered, it is assumed that the grozed edges of the quarries were fitted into them (PL. V).⁵⁴

Little can be said about the interior fittings and decoration of building A. The wall-plaster was thicker than that on the exterior, and was a light creamish

⁵⁴ For a fuller account of the window-glass see Rosemary Cramp, 'Glass finds from the Anglo-Saxon monastery of Monkwearmouth and Jarrow', *Studies in Glass History and Design* (International Conference of Glass, Committee B Publications, 1968) pp. 16-19.

colour. It was still in place on the E. wall. Just outside the N. wall some red-painted plaster (which might have come from the destruction of another building) was found. Among the debris lying on the floor east of wall 2 several fragments of a cable-edged plaque decorated with a petalled flower, together with a tiny bird's head, were recovered (PL. IX, C). Such fragments are of the same type as carvings recovered when the church was rebuilt in the 18th century and now inset in the church porch. All these carvings may indicate that the E. end at least was decorated with friezes or inset panels. Near the pillar base (see above, p. 45), which was of coarse red sandstone, many fragments of carved stone of the same type were recovered from the burnt material on the floor. These were decorated with plant scroll, but so far it has not been possible to reconstruct them as part of the pillar or of some other feature.

Immediately north of the pillar base there was a shallow depression in the surface of the floor with a central rectangular hole (PL. VII, A), which contained charred wood lying both horizontally and vertically. Since the natural clay beneath the floor at this point seemed to have been shaped to bed the floor into the depression, it appears that this feature was part of the original design, but it is difficult to explain.

There is no doubt that building A belongs to the first monastic phase at Jarrow. The floor has been cut in many places (FIG. 19) by graves and modern pipe trenches and everywhere the floor bedding lay on an undisturbed level of yellow clay with a brown humus capping. It is true that the technique of wall construction differs from that of the early buildings at Monkwearmouth, but a different quarry was used for the stone, and the difference in wall types is reflected exactly in the Saxon churches on the two sites. The walls and flooring might indeed be considered an advance on those at Monkwearmouth, although the internal plastering, plain and painted, the architectural sculpture, and the range of colours in the window-glass are inferior. What the English craftsmen gained in boldness they lost in subtlety.

Nevertheless this must have been one of the most impressive buildings in the monastery. It seems a self-contained unit although interpretation of its function may be modified by the results of a full excavation of building B. At the E. end in a thin undisturbed level of burnt roofing debris over the floor one sherd of middle Saxon pottery was found. Other sherds (FIG. 25) of Ipswich- and Whitby-type wares were found trodden into the ground outside, or lying on the floor inside, but none were firmly sealed. One sherd of York type, a small iron hook, a fragment of what looks like Roman bottle glass and a thin scatter of fish bones, together with some bird and animal bones, were also found under the undisturbed debris on the floor. There were fish bones also in the filling of the drain which bisected the building and outside the S. and W. walls. In view of the importance accorded to the refectories in Bede's account of the founding of Wearmouth it seems likely that this was the function of building A. Perhaps the threefold division of the building implies some division of status in its use—the *seniores* sitting east of the pillar base, which may have supported a double arch, the main community in the centre, and the lay-brothers or novices to the west. The party wall could have been taken

down to enlarge the central area or to change the function of the W. end. Alternatively, if the W. end were once a servery, the S. annex could have been built to take its place when further accommodation was needed in the main hall. There were traces of hearths west and south of the building but no conclusive evidence of a kitchen. As a refectory this building would occupy a position in relation to the church comparable with that of a later Benedictine layout. Nevertheless it extends more than 40 ft. farther west than the western porch of the presumed early church, and is not enclosed or attached to a W. range, as it would have been in a later plan. Nor is it like the early cloister at Canterbury⁵⁵ or those at St. Gall⁵⁶ although in the latter the major monastic buildings such as the refectory are only attached at one corner. There may have been a space between building A at Jarrow and some other structure farther west. The churchyard wall limits further exploration westwards, but excavation of the area surrounding building A on the north and south could give it a less isolated appearance.

BUILDING B (FIGS. 19-20)

A full account of this building must await its complete excavation after the removal of the modern school house in the eastern part of the site. However some preliminary comments can be made. It is laid out on nearly the same alignment as building A, and the two buildings are separated by a paved path 3 ft. wide (FIG. 20; PL. VIII, B). Its width of 21 ft. internally and 26 ft. externally is identical with that of building A. If it is of the same length, its E. end would coincide with the E. end of the Saxon church.

Neither the NE. nor the SE. corners were available for excavation, but in one place the full width of the wall-trench for the W. wall has been exposed. However, one cannot say whether the corners were turned with massive quoins as at the E. end of building A. The walls of building B were set in trenches with two foundation courses of large flat cobbles set in clay but no levelling courses above as in building A. In building B the walls immediately above the cobbles are of well-shaped closely-joined ashlar and project slightly above the foundations. The S. wall has not been as heavily robbed as the N. wall, no doubt because in the post-conquest levelling inside the 11th-century cloister building debris had been spread over the S. end. The S. wall so lay that the internal creamy white plaster was standing to a height of 1½ ft. supported by the fallen debris of the wall. The external plastering was also intact in patches. The S. wall seems to have collapsed, then perhaps been partially robbed and finally grassed over before the post-conquest levelling. The N. wall was robbed to the lowest level of its foundations. The *opus signinum* floor, where investigated, had been completely stripped off by later rebuilding, although its level surface and a thin layer of mortar still survived, and there was much broken *opus signinum* in the debris which covered the building. Roofing-clips for lead sheets and thin limestone slates indicate that the roof was of the same type as

⁵⁵ A. W. Clapham, 'A note on the lay-out of the cloister at St. Austin's Abbey, Canterbury', *Archaeol. Cantiana*, XLVI (1934), 191-4 and plan.

⁵⁶ H. Reinhardt, *Der St. Gallener Klosterplans* (St. Gall, 1952).

JARROW 1965

Section under Standing Wall 5

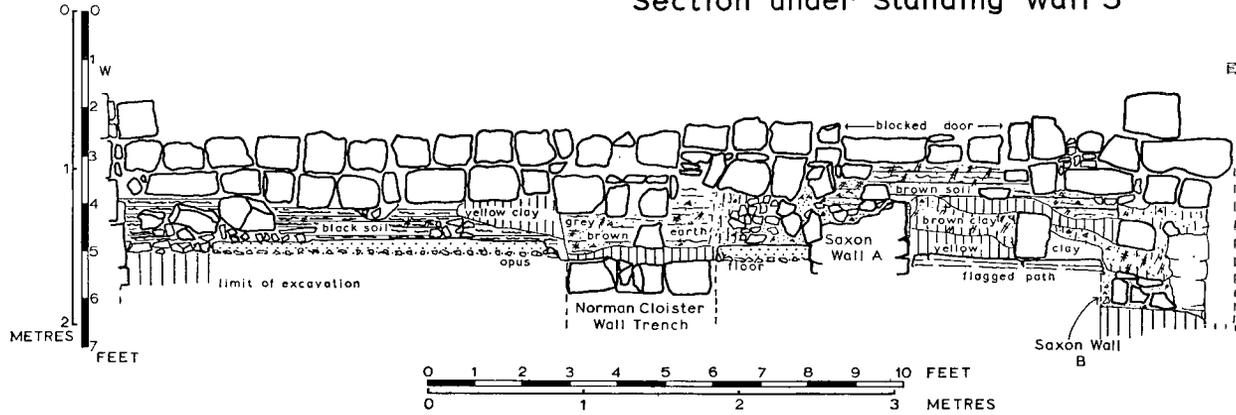


FIG. 20

JARROW, CO. DURHAM

B.H. C.D. R.C.

Section showing relationship of late medieval wall 5 to Saxon and Norman structures (p. 50)

JARROW 1963

Section over Wall 2A

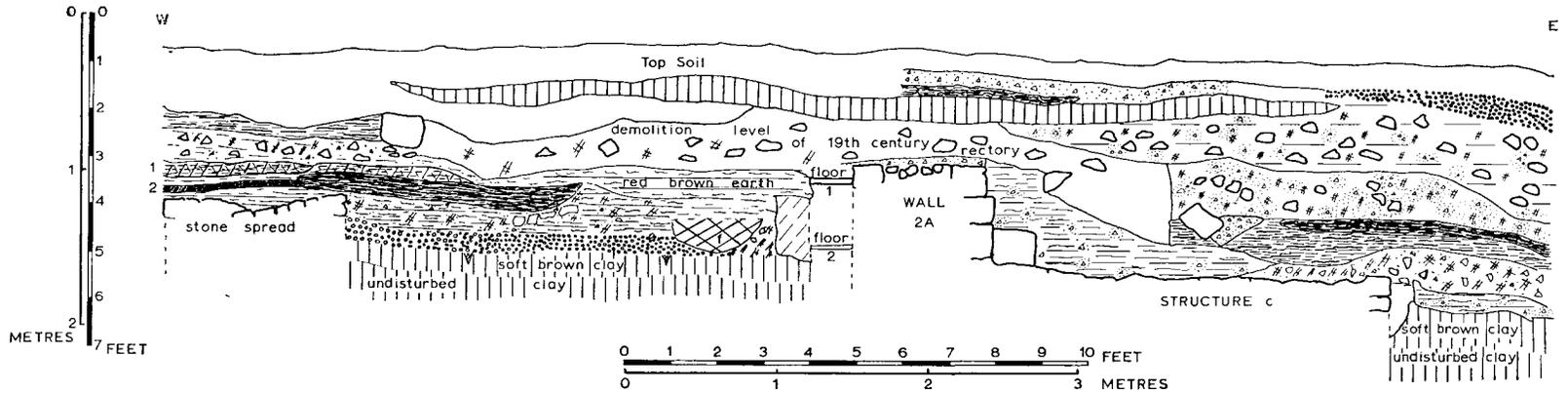


FIG. 21

JARROW, CO. DURHAM

W.D. R.C.

Section showing relationship of Saxon gravel floor and paving (floor 2) to post-conquest hearths 1 and 2 and floor 1 (p. 52)

that of building A. Some window-glass was also found, but not so disposed that it indicated a window position. Outside the S. wall there appears to have been a gravel path. The most enigmatic feature is a robbed wall-trench, of which only 3 ft. survived on either side of an early 19th-century soak-away pit. Perhaps the building was divided longitudinally at this point; confirmation of this will have to await further investigation.

So far there is no clear indication of the function of this building. A hone, a bronze pin with ring-and-dot decorated head, and food debris were found inside it; immediately adjoining the S. wall was a layer of organic material.

SAXON TIMBER BUILDINGS (FIGS. 21-2)

In the area immediately south of buildings A and B where the modern bank slopes sharply to the River Don, there is some evidence for subsidiary wooden buildings in pre-conquest and post-conquest levels. The larger of two cuttings, 30 ft. by 18 ft., exposed a sequence of occupation from the Saxon period to Victorian times (FIG. 21), on what was originally a little terrace which dropped away suddenly on the south, perhaps from a collapsed edge.

Possible cultivation marks showed as brown streaks in the surface of the natural yellow clay. At the same level was a series of small stake-holes. Above these were post-holes and timber impressions, some of which in the southern part of the trench were post-conquest, perhaps indicating the line of the S. wall of the 11th-century kitchen. Others, which had been covered by a gravel floor in the northern sector of the trench, seemed to belong to a small roughly rectangular building which either belonged to the earlier phase of the Saxon monastery, or was earlier than the 7th-century occupation. No dating evidence was found save the sealing evidence of the deposit on the gravel floor above. This gravel floor, which was 6 in. thick, was sealed by a level of collapsed building debris beneath post-conquest hearths. Lying on the gravel floor were several fragments of bone combs; a coin assigned by Mr. John Kent to Eanbald II (796-830+, moneyer Eadwulf); a stump of a polychrome glass rod decorated with a red St. Andrew's cross on a blue ground;⁵⁷ and part of a bowl in a hard red fabric, with a thick glossy glaze (FIG. 25 *bis*; PL. IX, A-B). No parallel has been found for the bowl which was badly burnt and may have had a secondary use (see below, p. 64 f.); fragments of slag in the gravel suggest that this was a workshop area for the monastery. It seems that this floor had been bounded on the east by a line of flagging (FIGS. 21-2) alongside a wall which lay under wall 2A. Nevertheless, despite this earlier wall and an area of stone tumble in the NW. corner of this trench, it does not seem that the gravel floor was enclosed by a stone building. North-west of this trench a second cutting, 10 ft. square (FIG. 19), revealed a scatter of disturbed gravel and three large post-holes, which may suggest that the floor was surrounded by a timber building. It is unfortunate that on the east the junction between the gravel and the flags was cut by two intrusions, a fish rubbish-pit (FIG. 21, f), and a trench associated with the Norman rebuilding. Attached to the E. face of the wall under

⁵⁷ This, and two other polychrome settings from Monkwearmouth, will be discussed in *Antiq. J.*, forthcoming.

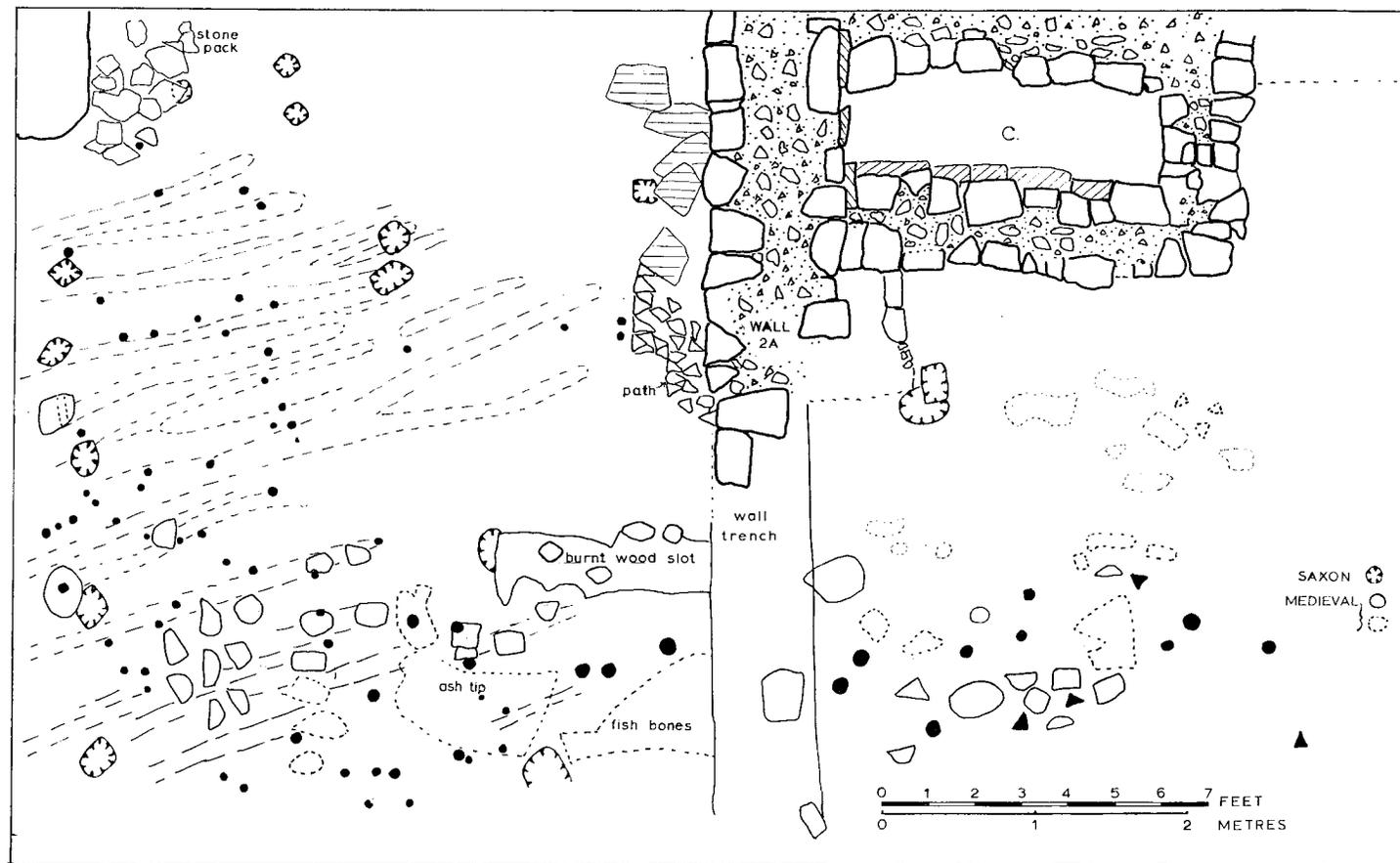


FIG. 22

JARROW, CO. DURHAM

Plan showing stake-holes and possible cultivation marks cut by Saxon and medieval post-holes. Stone structure C and flagged path or floor survive from level above Saxon timber buildings (p. 52)

W.D. A.C. R.C.

wall 2A was a narrow structure, 7 ft. by 2 ft. internally, of which the walls, three courses of which were standing, were similar in construction to Saxon walls elsewhere on the site. It may perhaps have held a water tank since the eavesdrip drain between buildings A and B flows towards it. Its filling contained fish bones, Roman brick, and 11th- and 13th-century pottery.

THE LATE SAXON AND NORMAN PERIODS AND LATER

No structures at Jarrow in the area so far excavated can confidently be assigned to the late Saxon period. Some sherds of Saxo-Norman pottery (FIG. 25), found mainly west of the party wall of building A and among the timber structures south of that building, may indicate some sort of occupation to support the literary evidence (see above, p. 24). However, it is clear from the deposit of rubble and burning that lay over the floor of building A that it was abandoned after its destruction, and except for a coin of Edward the Confessor which was found in the debris of the N. wall immediately west of wall 2, there is no evidence of robbing or rebuilding before the Norman reconstruction in the 1070s. Likewise building B seems to have collapsed and been abandoned. There is a turf line under the clay levelling deposited by the Norman builders of the S. range in *c.* 1075 (FIG. 20).

No undisturbed 11th-century floor levels have so far been discovered associated with the standing buildings. West of wall 2, gardening and grave-digging have disturbed the ground inches above the Saxon floor, and within the 11th-century garth the earliest undisturbed post-conquest occupation has been ascribed on pottery evidence to the 13th century. The door sills and offsets of the standing Norman building indicate that Aldwin and his monks established their floor level 2 ft. above the Saxon floor of building A, and this level has been disturbed by later occupation within the garth. At no point, with the possible exception of the area surrounding wall 2A which will be considered separately, does the Norman replanning appear to follow the pre-conquest layout of the monastic buildings. Wall 2, which is still standing with two 11th-century doorways, cuts across the E. end of building A. This 3 ft.-wide wall is trench-built and solidly constructed with six foundation courses below the offset. It appears to have been intended as the E. wall of a two-story building since the joist holes for an upper floor and the sills of the upper floor windows are still visible. However no trace of a W. wall has yet been discovered; if the range extended for the full length from north to south, such a wall should have been found. The British Museum plan (FIG. 18) shows a cross-wall along the line of the N. wall of the Saxon building, but nothing was noted in the robbed wall-trench at this point although an E. wall for the W. range and possible cross-walls were anticipated. Closer inspection of the dotted outlines of the monastic buildings on the British Museum plan causes one to suspect its value. Wall II is nearly on the line of wall 2, but it does not extend to join the S. porticus of the church as on the Bucks' drawing (PL. VI), nor does it continue far enough north to include the extant Norman doorway. Perhaps the W. range was never fully completed before Aldwin and his monks were called back to Durham in 1083. In the Bucks' drawing, and in E.

Blore's drawing of 1820⁵⁸ only six joist holes are visible in the northern part of wall 2; perhaps only a section of this range survived through the middle ages. A small N. chamber could have been missed in the area so far excavated (FIGS. 18-19); complete stripping of the area west of wall 2 will be necessary before any final statement can be made about this part of the site.

Immediately south of the junction of walls 2 and 3 the Bucks' drawing shows the stump of a butt-jointed wall which might be the W. wall of the Norman frater. This wall (2A) lay directly beneath a 19th-century building, presumably the Victorian rectory (FIGS. 21-2), and its construction was curiously unlike wall 2. Up to a point 15 ft. from the SW. corner of wall 2, it was 3 ft. wide and two courses deep, but after that it continued in a shallow wall-trench only 2 ft. wide

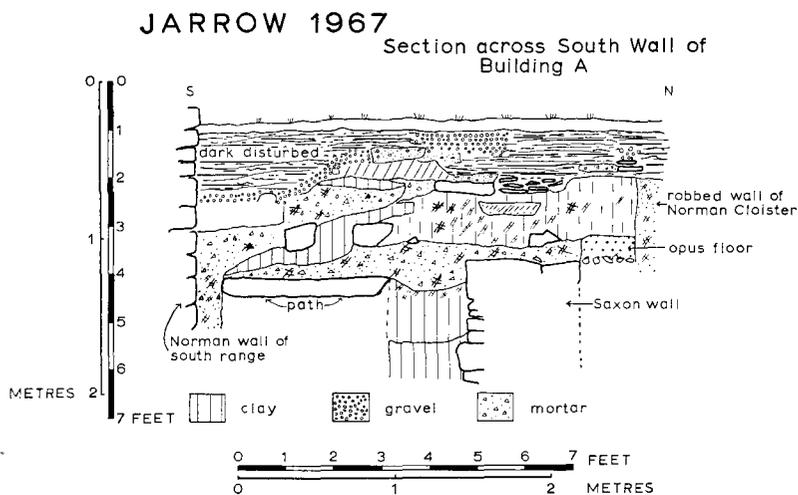


FIG. 23

E.C. R.G.

JARROW, CO. DURHAM

Section across southern area of building A showing Norman clay levelling over destroyed Saxon building (p. 55)

and then petered out altogether. This wall seemed to have been set over an earlier narrower wall, possibly of the Saxon period, and also to have cut through levels associated with a timber structure which enclosed a sequence of hearths. The lower of these was associated with pottery of the 11th and 12th centuries, (2 on FIG. 21), and the higher (1) with pottery of the late 13th or early 14th century. A quantity of food debris and fish bones was also found. It is possible that this is part of a timber kitchen associated with the Norman monastic layout, which then went out of use at some later date when the cell was organized on the small domestic lines for the Master and one or two monks that the medieval inventories and accounts suggest.

It is probable that this reorganization took place at the same time as the cloister walk was demolished to make way for a building which utilized the N. wall of the Norman S. range as its S. wall, 3 (FIG. 23), and was provided with a N.

⁵⁸ *Op. cit.* in note 29, fig. on p. 57.

wall, 5, part of which is still standing over the robbed wall of the W. range of the cloister (FIG. 20). 10 ft. from the S. wall of the present church this robbed cloister wall cut through the pre-conquest cemetery (FIG. 19, and above, p. 45) and farther south through buildings A and B. The robber-trench contained much 13th-century pottery and a cut long cross penny of 1248 (dating by Mr. John Kent). Aldwin, then, seems to have used an orthodox Benedictine plan for his monastery. The 9-ft.-wide cloister walk so far discovered fronting the W. and S. ranges no doubt continued in front of the E. range, the ruins of which were still standing in the mid 18th century. The Bucks' drawing shows the E. wall with what looks like the blocked openings of a Norman chapter-house running up to the E. side of a door in the S. wall of the chancel, and a drawing by Sparrow^{58a} shows the W. wall

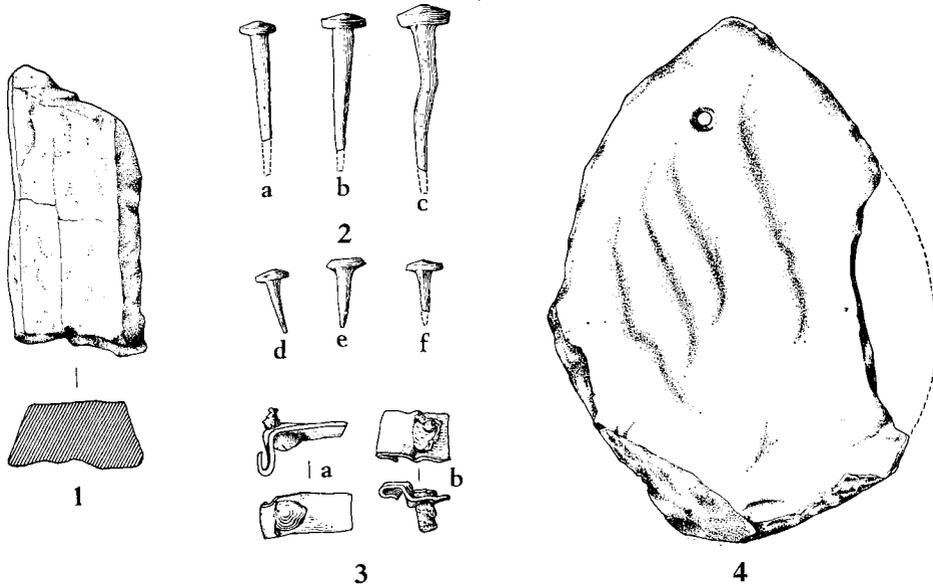


FIG. 24

MONKWEARMOUTH AND JARROW, CO. DURHAM. Sc. $\frac{1}{4}$

1, plan and section of typical fragment of limestone strip, Monkwearmouth (p. 36 f.); 2, *a-c*, roofing-nails, building A, Jarrow (p. 48); 2, *d-f*, coffin nails associated with earliest Saxon burials, Monkwearmouth (p. 33); 3, *a-b*, clips for lead roofing-sheets from Saxon buildings, Monkwearmouth and Jarrow (pp. 37, 48); 4, limestone roofing-slate from Saxon building, Monkwearmouth (p. 37)

running up to the E. end of the chancel. This would make an E. range about 30 ft. wide and a cloister 28 ft. square. In the later middle ages when the monastic inmates had shrunk in numbers to two or three, the area inside the cloister was cut down by the reshaping of the S. range.

After the dissolution buildings d and e (FIG. 18) were added north of the reshaped S. range and their roofless walls still stand. The earliest pottery in occupation-levels inside these buildings was 17th-century. Of two coins in an

^{58a} S. Sparrow in F. Grosse, *Antiquities of England and Wales*, 1 (1773), 195.

occupation-level below the brick floor of building d one belonged to 1613–25 and the other to 1623 or 1629. The Saxon building A extended below the level of the floor of building d (PL. VIII, A) and the Saxon cemetery below building e.

DISCUSSION

It is foolhardy in an interim report when no limit to the monastic buildings has been found on either of these 7th-century sites to make any general statements as to the layout and its possible relationships. It is in fact difficult to find parallels on other European monastic sites of a comparable date, and even if more excavated evidence were available it seems unlikely that hard and fast formal relationships would emerge.

The eclecticism and individuality of the 'Rules' of these early monasteries, well reflected in Benedict Biscop's choice of the best customs he encountered in seventeen houses on the continent, no doubt reflected itself also in the evolution in dispositions and functions of buildings within the monastic complex. As Dom David Knowles has said:⁵⁹ 'All organized religious life clearly stands in need of certain essential buildings of some size where the members may come together to pray, take counsel, eat and sleep, but the early Christian monasticism . . . gave no typical plan to the first monks of Italy and Gaul, and the Rule of St. Benedict neither pre-supposed nor established any fixed relationship between the component parts of the monastery such as did in a later century the Cistercian *Consuetudines* or the Statutes of the order of Sempringham.' We know that many of the early continental monastic communities were housed in converted private villas, such as St. Martin's at Ligugé, and the picture of Irish monasteries that can be pieced together from the scattered archaeological and literary references⁶⁰ implies that the monastic 'village' had many affinities with secular constructions and layout. The massive enclosure and the dominating position of the church and its surrounding cemetery seem constant, but the irregular scatter of rectangular and round buildings within the enclosure do not seem to have been aligned on the church in any formal way.

At Whitby,⁶¹ the only Northumbrian monastic site that has been extensively excavated, the one published plan of the buildings is not easy to interpret. However it clearly shows building ranges subdivided into parallel rows east to west and separated by flagged paths. The very rich deposit of finds from this site suggests occupation of a domestic, industrial and female character. However Whitby was a double monastery and so would need provision for two groups of inmates. It was founded in 657 in a period when the Irish church was influential in the north, although its foundress St. Hilda could well have known something of Gaulish institutions since her sister was a religious on the continent. Moreover,

⁵⁹ *The Historian and Character* (Cambridge, 1963), p. 181.

⁶⁰ Françoise Henry, *Irish Art in the Early Christian Period to 800 A.D.* (1965), pp. 76–91.

⁶¹ *Op. cit.* in note 44.

given the known differences in organization and tradition between Whitby and Wearmouth/Jarrow, the excavations have taken place on the opposite sides of the medieval, and presumably Saxon, church lines. At Whitby Saxon buildings were found on the south and west of the medieval church, but the published plans of the excavation are concerned solely with the north. At Wearmouth/Jarrow the excavations have been entirely on the south of the Saxon and medieval church lines. Even supposing therefore that there were any likenesses in layout the excavated areas are not comparable.

In methods of construction also the Whitby buildings are not comparable. It is true that only one course of the clay-bonded foundations seems to have survived, but no stone slates were found and no mortar seems to have been noted. The buildings were probably clay-bonded throughout like Irish stone buildings. If as much plaster and mortar had survived at Whitby as has at Monkwearmouth and Jarrow, even where the walls are robbed to foundation level they could not have been missed. No window-glass was found at Whitby. Indeed the method of construction and layout of the buildings (with small rectangular structures joined together in ribbon development) seem similar to those at Tintagel (Cornwall). At Whitby a limit to the Saxon monastic remains was found on the east,⁶² but none so far in the current excavations at Monkwearmouth and Jarrow, although Dr. Radford⁶³ found part of what he considered to be the vallum of the monastery north of the church at Jarrow.

At Monkwearmouth the dominating position of the large cemetery south of the church could be compared with the position of the cemetery at Glastonbury or on some Irish sites, but buildings A and B have no parallels in the British Isles, not even at Jarrow. In fact when one considers the layout and plans of the buildings so far excavated at 'the one monastery in two places' one is struck by their lack of similarity. This may be partly because there was more ground available for building between the church and the river at Wearmouth than there was at Jarrow. Alternatively it may be that Benedict and Ceolfrid profited by their first experiment to make at Jarrow a logical division between large communal buildings such as A and B, and smaller buildings for specialized or private use. Both Monkwearmouth and Jarrow have, however, produced buildings regularly aligned on the church in the manner of the St. Gall plan or later monasteries. Both sites have produced mortared stone buildings of a quality which supports Bede's claim that Benedict built in the Roman manner. In particular building A at Jarrow provides a fitting *milieu* for the intellectual achievements of Bede. Here was a real break with the Germanic past. Stone buildings such as these, with plastered and painted walls, red concrete floors, windows with coloured glass and stone slated or leaded roofs would have been an awe-inspiring if chilly reminder to their inmates as to how far the northern English had made themselves the inheritors of what was left of the Roman technological achievement.

⁶² *Op. cit.* in note 44, pl. xxxi.

⁶³ *Op. cit.* in note 1, p. 208.

APPENDIX I

REPORT ON THE WOOD AND POLLEN SAMPLES FROM PIT I AT
MONKWEARMOUTH

By Miss J. Turner and Miss V. P. Hewetson

The wood samples were of elder (*sambucus nigra*), holly (*ilex aquifolium*) and a conifer. The following pollen grains were found in the silt level in pit 1:

Tree pollen	16 grains	(birch 15, alder 1)
Shrub pollen	48 "	(hazel 40, willow 8)
Herb pollen	41 "	(grasses 14, heather 3, mugwort 4, sedges 1, plantain 15, <i>compositae</i> family 2, <i>cruciferae</i> family 2)
Spores	23	(horsetails 5, bracken 18)

The absence of oak, ash and elm wood and pollen is interesting and indicates that there was not at that time an adequate source of natural woodland near Monkwearmouth. The types of wood found and the whole assemblage of pollen grains suggest that there was a considerable amount of waste ground around the site.

APPENDIX II

THE POTTERY

By J. G. Hurst

Inspector of Ancient Monuments, Ministry of Public Building and Works

The pottery from Monkwearmouth and Jarrow may be divided into nine types of fabric. Six belong between 650 and 850 (middle Saxon) and three between 850 and 1150 (Saxo-Norman).⁶⁴ In addition several exotic fabrics, which are unlikely to have been made in England during this period, are either Frankish imports or Roman residual sherds. It is difficult to be sure, especially with the smaller sherds.

No middle Saxon kiln sites are known outside East Anglia.⁶⁵ In the Saxo-Norman period no kilns have been found north of Torksey (Lincs.)⁶⁶ although it is clear from the distribution of various fabrics that there were production centres farther north in Lincolnshire and in S. Yorkshire. Distribution-maps prepared in the 1950s for middle Saxon⁶⁷ and Saxo-Norman⁶⁸ pottery show a concentration of the former in East Anglia with an expansion of wheel-thrown wares to most of the E. midlands by the 10th

⁶⁴ J. G. Hurst, 'Saxo-Norman pottery in East Anglia', *Proc. Camb. Antiq. Soc.*, XLIX (1955), 43-70; L (1956), 29-60; LI (1957), 37-65.

⁶⁵ N. Smedley and Elizabeth Owles, 'Some Suffolk kilns: iv. Saxon kilns in Cox Lane, Ipswich, 1961', *Proc. Suffolk Inst. Archaeol.*, XXIX (1963), 311.

⁶⁶ M. W. Barley, 'The medieval borough of Torksey: excavations 1960-2', *Antiq. J.*, XLIV (1964), 175-87.

⁶⁷ J. G. Hurst, 'Middle Saxon pottery' in G. C. Dunning *et al.*, 'Anglo-Saxon pottery: a symposium', *Med. Archaeol.*, III (1959), 30, fig. 8.

⁶⁸ *Op. cit.* in note 64, LI (1957), 58, fig. 5, and 62, fig. 6.

century. It was then assumed that the rest of England continued to make coarse hand-made pottery until after the Norman conquest. Recent work, however, has produced evidence for Saxo-Norman wheel-thrown wares in limited areas of Wessex,⁶⁹ in wide areas of Mercia⁷⁰ and over large areas of the E. and W. Ridings of Yorkshire.⁷¹ It was still thought, however, that only in East Anglia could pottery, made on a slow wheel, be earlier than the 9th century.

The discovery at Monkwearmouth and Jarrow of wheel-thrown pottery in stratified levels belonging to the main period of the monasteries (that is, between the 7th and 9th centuries) means that the question of the reintroduction of good quality pottery into NE. England must be reconsidered. The middle Saxon levels have produced not only wares made on a slow wheel but two fabrics thrown on a fast wheel. It is not certain how early these fragments are but, even if they belong to the end of the period in the 1st half of the 9th century, they would be as early as, if not earlier than, the introduction of wheel-thrown fabrics into East Anglia. Therefore instead of a single reintroduction to Suffolk which gradually spread over the rest of England, it now looks as though there were separate influences entering East Anglia and Northumbria. There still seems to be a gap between, with the recent discovery of hand-made Maxey-type wares⁷² in many parts of Lincolnshire.⁷³

More work requires to be done to see how widespread these wares were in NE. England. A study is required of the finds from Lindisfarne and Bamburgh. The discovery of wheel-thrown pottery at the isolated medieval village of West Whelpington in central Northumberland⁷⁴ suggests that, as in East Anglia, these wares have a wide distribution and are not confined to major sites. Until kiln sites are discovered it is proposed that, where wares are similar to those already known, the existing names should be used.⁷⁵

FABRIC TYPES

MIDDLE SAXON, 650-850

A. HAND-MADE (FIG. 25, no. 1)

Rough gritty fabric similar in appearance to Ipswich ware but oxidized. Possibly a precursor of the northern type, suggesting local manufacture.

MADE ON A SLOW WHEEL

B. *Whitby-type ware* (FIG. 25, no. 2)

Fairly soft fabric with micaceous inclusions, usually dark grey to black. The vessels have thick walls as Ipswich ware and are sometimes rouletted.⁷⁶

⁶⁹ J. G. Hurst, 'Winchester ware: a new type of Saxo-Norman glazed pottery' in M. Biddle and R. N. Quirk, 'Excavations near Winchester Cathedral, 1961', *Archaeol. J.*, cxix (1962), 187-90. For Portchester ware see B. Cunliffe, *Antiq. J.*, forthcoming.

⁷⁰ F. Noble and R. Shoesmith, 'Hereford city excavations', *Trans. Woolhope Nat. Field Club*, xxxix (1967), 44-70; P. Rahtz, 'Hereford', *Current Archaeol.*, 1 (1968), 242-6; G. C. Dunning, 'A note on the late Saxon pot containing the hoard' in G. Webster, 'A Saxon treasure hoard found at Chester', *Antiq. J.*, xxxiii (1953), 31-2.

⁷¹ Katherine M. Richardson, 'Excavations in Hungate, York', *Archaeol. J.*, cxiv (1959), 76-81. A corpus of Yorkshire finds by Mrs. H. E. J. Le Patourel and J. Radley is to be published in *Yorks. Archaeol. J.*

⁷² P. V. Addyman, 'A dark-age settlement at Maxey, Northamptonshire', *Med. Archaeol.*, viii (1964), 47-58.

⁷³ For recent finds and distribution see J. B. Whitwell, 'Some middle Saxon pottery types in Lincolnshire', *Antiq. J.*, forthcoming.

⁷⁴ In 1969. Information from Dr. M. G. Jarrett.

⁷⁵ A meeting was held at Ilkley in November 1968 at which Mrs. H. E. J. Le Patourel brought together all the known Yorkshire pottery which was thought to belong to the middle and late Saxon periods. This was examined by P. V. Addyman, J. Cherry, Miss R. Cramp, Miss B. Harbottle, J. G. Hurst and Mrs. H. E. J. Le Patourel and compared with other wares of the same date brought by the participants. A classification for Anglo-Saxon wares in the north was agreed; this is used in this report for the first time. Mrs. H. E. J. Le Patourel will expand it further in her forthcoming corpus of middle and late Saxon pottery from Yorkshire, *op. cit.* in note 71.

⁷⁶ *Op. cit.* in note 64, I (1956), 29-42.

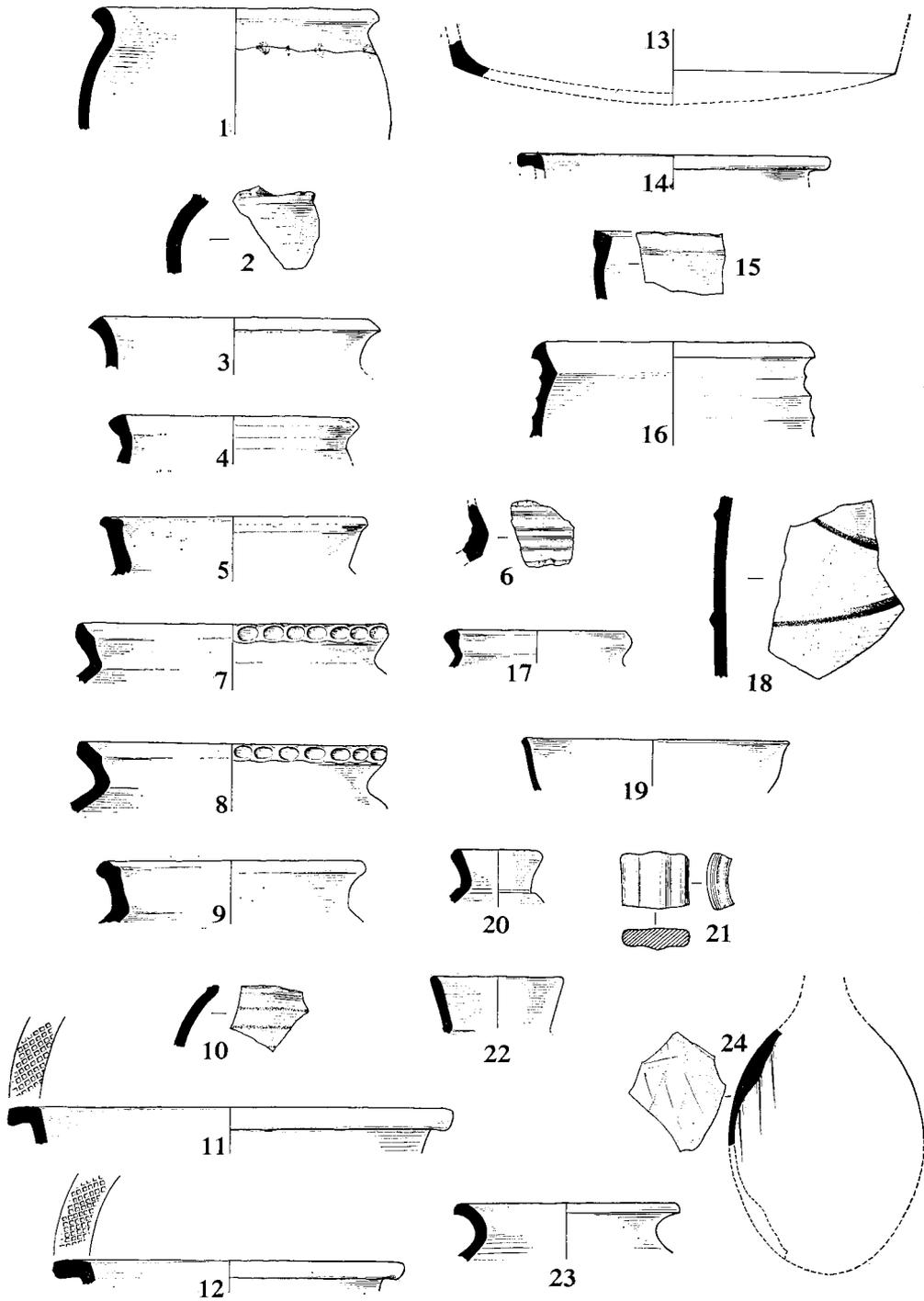


FIG. 25

TYPES OF POTTERY, MONKWEARMOUTH AND JARROW, CO. DURHAM

(pp. 60, 62). Sc. $\frac{1}{4}$

1, type A, hand-made; 2, type B, Whitby-type ware; 3-8, type C, simply Ipswich-type ware; 9, type D, sandy Ipswich-type ware; 10, type E, fine Whitby-type ware; 11-16, type G, York-type ware; 17, type H, northern Stamford ware; 18, type I, Thetford-type ware; 19-24, imported(?) or Roman survivals

A reassessment of the material from Whitby Abbey⁷⁷ and a comparison of it with that from Monkwearmouth and Jarrow demonstrate that this is an important fabric type with a wide distribution in the north-east. Examination of the sherds from Whitby⁷⁸ shows that hand-made wares and other vessels made on a slow and on a fast wheel are all in an identical micaceous fabric. It therefore appears that most of the material from Whitby, with certain exceptions which may still be regarded as imports,⁷⁹ was made locally, or at least in NE. England.

C. *Pimply Ipswich-type ware* (FIG. 25, nos. 3-8)

Hard dark grey fabric with sand and small grit inclusions fired hard so that the grits stand out to give a pimply surface. Thick walls with uneven girth grooves.⁸⁰

D. *Sandy Ipswich-type ware* (FIG. 25, no. 9)

Similar, but tempered with sand and fewer grits. Not fired to such a high temperature so that the surfaces have a smoother sandy feel.

WHEEL-THROWN

E. *Fine Whitby-type ware* (FIG. 25, no. 10)

Identical fabric to Whitby-type ware but thrown on a fast wheel with thin walls and more even shapes.⁸¹

F. *Local wheel-thrown ware* (not illustrated)

Similar to fine Whitby-type ware but not micaceous. Fine, thin pale grey sandy fabric. At first this was thought to be Thetford-type ware but consistent association of the sherds with middle Saxon deposits must make it earlier. No rims were found which might have confirmed the early date.

SAXO-NORMAN, 850-1150

G. *York-type ware* (FIG. 25, nos. 11-16)

Very hard fabric with much grit included. Firing uneven, often with marked contrasts and very wide colour range although light colours are rare; some oxidation.⁸²

H. *Northern Stamford ware* (FIG. 25, no. 17)

Smooth hard fabric somewhat darker than true Stamford ware because of partial reduction; usually lead-glazed.⁸³

I. *Thetford-type ware* (FIG. 25, no. 18)

Hard grey sandy fabric.

IMPORTED(?) POTTERY OR ROMAN SURVIVALS (FIG. 25, nos. 19-24)

See below, p. 63 f.

⁷⁷ G. C. Dunning, 'The pottery' in *op. cit.* in note 44, pp. 75-82.

⁷⁸ I am indebted to the Trustees of the British Museum through Mr. J. Cherry for allowing the Whitby sherds to be borrowed for comparison with the sherds from Monkwearmouth, Jarrow and Yorkshire sites.

⁷⁹ *Op. cit.* in note 77, p. 81, fig. 26.

⁸⁰ S. E. West, 'Excavations at Cox Lane, Ipswich (1958)', *Proc. Suffolk Inst. Archaeol.*, xxix (1963), 246-9.

⁸¹ *Loc. cit.* in note 79.

⁸² H. E. Jean Le Patourel, 'Appendix B. The pottery' in C. V. Bellamy, 'Pontefract Priory excavations, 1957-1961', *Pub. Thoresby Soc.*, xlix (1962-4), 109-10.

⁸³ Defined by Prof. H. H. Swinnerton and quoted by G. C. Dunning, 'Trade relations between England and the continent' in D. B. Harden (ed.), *Dark-age Britain: Studies presented to E. T. Leeds* (Methuen, 1956), p. 230.

DETAILED POTTERY DESCRIPTIONS

I. MONKWEARMOUTH

MIDDLE SAXON

A. HAND-MADE

FIG. 25, no. 1. Part of rim and body of cooking-pot. Grey core with buff internal and external surfaces. Rough tooling on neck. From stone-filled slot under wall F.

MADE ON A SLOW WHEEL

B. *Whitby-type ware*

Two sherds (cf. Jarrow, B, this page) on bottom of mortar-flecked clay level. One sherd of what looked like partially oxidized Whitby-type ware in robbed wall-trench g.

C. *Pimply Ipswich-type ware*

Sagging base of vessel in rough pink-buff fabric. From interconnecting foundation-trenches of wall 4 and wall F (cf. sherd from collapsed drain west of building A at Jarrow (Jarrow, C, vi, p. 64).

WHEEL-THROWN

E. *Fine Whitby-type ware*

Sherd of reddish brown fabric with decoration in incised lines. From foundation-trench of wall 4. Two other sherds have been found on the site.

F. *Local wheel-thrown ware*

Several sherds from bottom of mortar-flecked clay level.

G. *York-type ware*

SAXO-NORMAN

i. FIG. 25, no. 12. Rim of bowl with rouletted decoration. From deposit of architectural sculpture west of building A.

ii. FIG. 25, no. 13. Sagging base of cooking-pot, grey core with buff internal and external surfaces. From near top of pit 1.

Several other sherds of York-type fabric have been found at Monkwearmouth and Jarrow associated with the Saxon demolition.

H. *Northern Stamford ware*

FIG. 25, no. 17. Rim of small unglazed vessel. Associated with Saxon rubble west of building B.

IMPORTED(?) POTTERY

i. FIG. 25, no. 19. Rim of small bowl in fine red wheel-thrown fabric with whitish external surface. From mortar-flecked clay level near church.

ii. FIG. 25, no. 20. Neck of bottle in wheel-thrown fine hard grey ware with external burnish (cf. strap-handle from Jarrow, FIG. 25, no. 21). Associated with stone debris west of wall 4.

II. JARROW

MIDDLE SAXON

MADE ON A SLOW WHEEL

B. *Whitby-type ware*

FIG. 25, no. 2. Part of small globular cooking-pot. From floor of annex to building A.

C. *Pimply Ipswich-type ware*

- i. FIG. 25, no. 3. Rim of cooking-pot, partially oxidized on outer and inner surfaces. From floor of building A.
- ii. FIG. 25, no. 4. Rim of cooking-pot. In rubble over gravel floor west of wall 2A.
- iii. FIG. 25, no. 5. Rim of cooking-pot. From grave cut into floor of building A.
- iv. FIG. 25, no. 6. Part of body and neck of cooking-pot with coarse double grooving. In weathered clay over natural soil south of building B.
- v. FIG. 25, no. 7. Thumbed rim of cooking-pot. From grave cut into floor of building A.
- vi. FIG. 25, no. 8. Thumbed rim of cooking-pot oxidized inside and out. From disturbed levels outside building A.

D. *Sandy Ipswich-type ware*

- FIG. 25, no. 9. Rim of cooking-pot.

WHEEL-THROWN

E. *Fine Whitby-type ware*

- FIG. 25, no. 10. Three sherds from disturbed level over floor of building A.

SAXO-NORMAN

G. *York-type ware*

- i. FIG. 25, no. 11. Everted rim of oxidized bowl with rouletted decoration. Topsoil over wall 2A.
- ii. FIG. 25, no. 14. Everted rim of bowl. From floor of annex to building A.
- iii. FIG. 25, no. 15. Upright folded rim and part of body of cooking-pot. In Saxon to medieval level south of building A.
- iv. FIG. 25, no. 16. Part of rim and body of cooking-pot, grey core with brown surface and deep external grooving. From burnt clay level under hearth 2 and over Saxon gravel floor and stone debris. Could be later than Norman conquest.

Several other sherds of York-type ware were found associated with debris surrounding building A.

I. *Thetford-type ware*

- FIG. 25, no. 18. Part of large storage vessel, grey core with brown surface decorated with applied strips. From same position as G, iv, above.

IMPORTED(?) POTTERY OR ROMAN SURVIVALS

- i. FIG. 25, no. 21. Strap-handle of pitcher in hard grey burnished sandy ware (cf. Monkwearmouth, FIG. 25, no. 20). In trench of wall 2A.
- ii. FIG. 25, no. 22. Part of neck of bottle in pink sandy ware. From disturbed Saxon level inside building A.
- iii. FIG. 25, no. 23. Rim of cooking-pot in fine black-grey sandy ware. Under collapsed S. wall of building B.
- iv. FIG. 25, no. 24. Three fragments of costrel in hard fine red fabric with buff knife-trimmed outer surfaces. From disturbed level over building A.

NOTE ON GLAZED SHERD FROM JARROW (PL. IX, A; FIG. 25, *bis*)

By D. B. Whitehouse

Part of a bowl, diam. 12 cm., with a curving side and a slightly thickened rim, of a fine, extremely hard brick-red fabric with a glossy fracture, was found on the Saxon gravel floor (see above, p. 52). It is evenly potted, with a consistent thickness of 4 mm.,

and covered with a drab glaze. This is uneven and varies in colour from black, where it is thickest, to dull golden brown. On the inside is a small unglazed patch.⁸⁴ On the outside is a series of vertical zigzag lines, 6 mm. wide and the same distance apart, impressed or lightly incised before glazing. On the inside are two concentric lines, again incised, forming the border of a roundel 9 cm. across. The incisions are partly obscured by the glaze, especially on the outside, and the overall impression is rather rough.

This sherd is important because, if indeed of the early 9th century, it is one of the earliest datable finds of non-Roman lead-glazed pottery in western Europe. It is unfortunate, therefore, that we have no idea where it was made. I have seen nothing comparable in Italy and Dr. Juan Zozaya of the Museo Provincial, Soria, tells me that

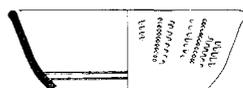


FIG. 25, *bis*

JARROW, CO. DURHAM

Part of glazed bowl from Saxon gravel floor (PL. IX, A; p. 64 f.). Sc. $\frac{1}{4}$

nothing like it is known in Spain. I have seen no Islamic parallel and Dr. George Scanlon of the Kelsey Museum, Ann Arbor, Michigan, informs me that the type is unknown at Fustât, where he finds stratified deposits of the 7th century onwards. In the Byzantine area, neither the material from Corinth nor the extensive group of 7th-century glazed pottery from Saraçhane, Istanbul, contains glazed fragments with zigzag ornament and a brick-red fabric. Indeed, while continuing to search the Mediterranean for parallels, it is also possible that the bowl was made at an unknown site in NW. Europe.

ACKNOWLEDGEMENTS

The Sunderland Corporation provided an opportunity for the Department of Archaeology, Durham University, to investigate the site at Monkwearmouth in 1959, in advance of demolition, and have generously assisted in providing tools and some paid labour. I should like to record my particular thanks to the Borough Engineer's Department for unflinching help and patience. The running expenses were borne by the University of Durham Excavation Committee, with donations from the Isabel Fleck Fund (Durham University), the Priestman Trust, Pilkingtons Ltd., and the Research Committee of the Society of Antiquaries of Newcastle upon Tyne. In addition a generous grant from the British Academy for 1966-7 enabled much work to be done on the excavated material. This was largely carried out by the late Mrs. Lucy Daines to whose organization and careful cataloguing of the material I am deeply in debt.

The excavations at Jarrow have been entirely financed by the Ministry of Public Building and Works and I should like to record my thanks to all the staff with whom I dealt for their cooperation and unflinching encouragement and assistance.

Both sites were excavated largely by volunteers; it is impossible in this report to thank individually all my site supervisors who provided invaluable help. I should, however, like to thank the vicar of Monkwearmouth, the rector of Jarrow, Frederick and Gladys Bettess, John Cooper, Alfred Eves, Barbara Harbottle, Richard Lawless, the late Humphrey Simpson, Eric Parsons who has supplied much of the

⁸⁴ Mr. G. C. Morgan of the Ancient Monuments Laboratory, Ministry of Public Building and Works, reports that the sherd was fired under oxidizing conditions. The glaze has a high lead content ($\approx 60\%$ Pb). The sherd has been fired a second time in a reducing atmosphere, probably accidentally, darkening the pot and the glaze. Experimental refiring in an oxidizing atmosphere to 800 °C. restored the fabric and glaze to a lighter colour. The very hard firing of the sherd, almost to the consistency of a stoneware, probably occurred before glazing, although the intensity of the later reduced firing may possibly have contributed towards the fusion of the clay body.

pottery dating, and Wilfrid Dodds, and the Ministry of Public Building and Works Drawing Office who are responsible for the drawing of the finds in the report. I should also like to thank Miss J. Turner and Miss V. P. Hewetson for their report on the wood and pollen samples, Appendix I; J. G. Hurst for his report on the pottery, Appendix II; D. B. Whitehouse for his note on the glazed sherd from Jarrow; and D. B. Harden for his comments on the glass which are incorporated in the text.

Finally I should like to thank Professor C. Thomas, Mr. R. Gilyard-Beer, Dr. C. A. R. Radford and Mr. J. Weaver for their helpful discussions of the problems of these sites.

NOTE

The Society is much indebted to the Ministry of Public Building and Works for a grant towards the cost of publishing this paper.