

created between blade and shaft. The shoulders of all ten spades are sloping, and useless for putting the foot on to exert pressure for digging. It is probable, therefore, that the type is a shovel rather than a spade, and a slight obtuse angle, although little use for digging, is quite an advantage for shovelling. It is interesting to note that the Shetland 'fleeter', a modern folk example of a wooden tool with separate blade and shaft, is hafted in a similar way.

It is possible that the shovel was made in two pieces because it was of two species of wood. All ten blades are of oak, which is strong and hard-wearing. The shafts are likely to have been of ash, which is flexible and supple, and still used today for handles and hafts. The blades would wear out more quickly than the shafts and whereas shafts could be reused, new blades could be pegged on to them. It is perhaps important to note that all the spades except that from Perth are broken, worn, or split in some way. Moreover they were not found with their shafts.

Having established that these tools were probably shovels, it would be interesting to consider what they might have been used for. There is no evidence to suggest that any of them were iron-shod. This would imply that their strength lay not in the blade edge but in the capacity for lifting. They may, therefore, have been used to shovel soft, loose materials such as mortar, loose earth, dung, mud, grain, powdery substances, etc. Some indication as to their use comes from an early 14th-century manuscript.³³ Three scenes show this shovel being used for different purposes. One scene shows two men clearing mud from a water-course. One man is using a long-handled shovel whose shaft appears to pass through the blade and emerge on the reverse side. Another scene shows two shovels being used for mixing mortar. It is likely that they were all-purpose tools for moving or working soft materials in either domestic or 'industrial' contexts.

Except for the Durham blade, all the dated examples fall within the period from the 12th to the 14th centuries. The Egerton MS was written and illustrated probably between c. 1310–20, and this would seem to confirm the dating suggested by the spades themselves. The earliest example is the Durham blade of 10th to 11th-century date. Perhaps this was an early example of a type of tool which became most popular two centuries later.

Future discoveries may serve to provide better dating for these shovels. Meanwhile, this note may indicate the sort of work which can now be done with medieval wooden material, and provide us with information about the sort of wooden tools used in everyday activities of the early medieval period.

CAROLE MORRIS

A Department of the Environment publication grant was received for this paper.

NOTES

²⁶ M. O. H. Carver, 'Three Saxo-Norman tenements in Durham City', *Medieval Archaeol.*, xxiii (1979), 1–81.

²⁷ *Ibid.*, 24, 26, and fig. 16.

²⁸ First published as Roman: R. Newstead, 'A descriptive account of Roman and other objects recovered from various sites in Chester and district, 1898–1901', *Jnl. Chester Archaeol. Soc.*, viii (1902), 84–85 and fig. 2.

I am very grateful to the following museums and units for their permission to publish the spades in their collections: Grosvenor Museum, Chester; Herbert Museum and Art Gallery, Coventry; Derby Museum; The Lynn Museum; Norwich Survey; Perth High Street Excavation Editorial Committee; York Archaeological Trust; Mill Museum, Durham.

²⁹ J. C. Cox, 'Duffield Castle: its history, site and recently found remains', *Jnl. Derbyshire Archaeol. Soc.*, ix (1887), 161.

³⁰ H. Clarke and A. Carter, *Excavations in Kings Lynn 1963–70* (Society for Medieval Archaeology Monograph Series No. 7, 1977), 372–73 and fig. 173, nos. 81, 82.

³¹ Newstead, *op. cit.* note 28, 84.

³² Now in the Lund Historical Museum.

³³ London, British Library, MS Egerton 1894, fols. 5, 14 and 17.

A TRANSITIONAL CLOISTER ARCADE AT HAUGHMOND ABBEY, SHROPSHIRE (Fig. 5)

Excavations at Haughmond Abbey by the DoE are reported elsewhere in this issue (p. 240), but one product of the 1979 season merits immediate publication in more detail.

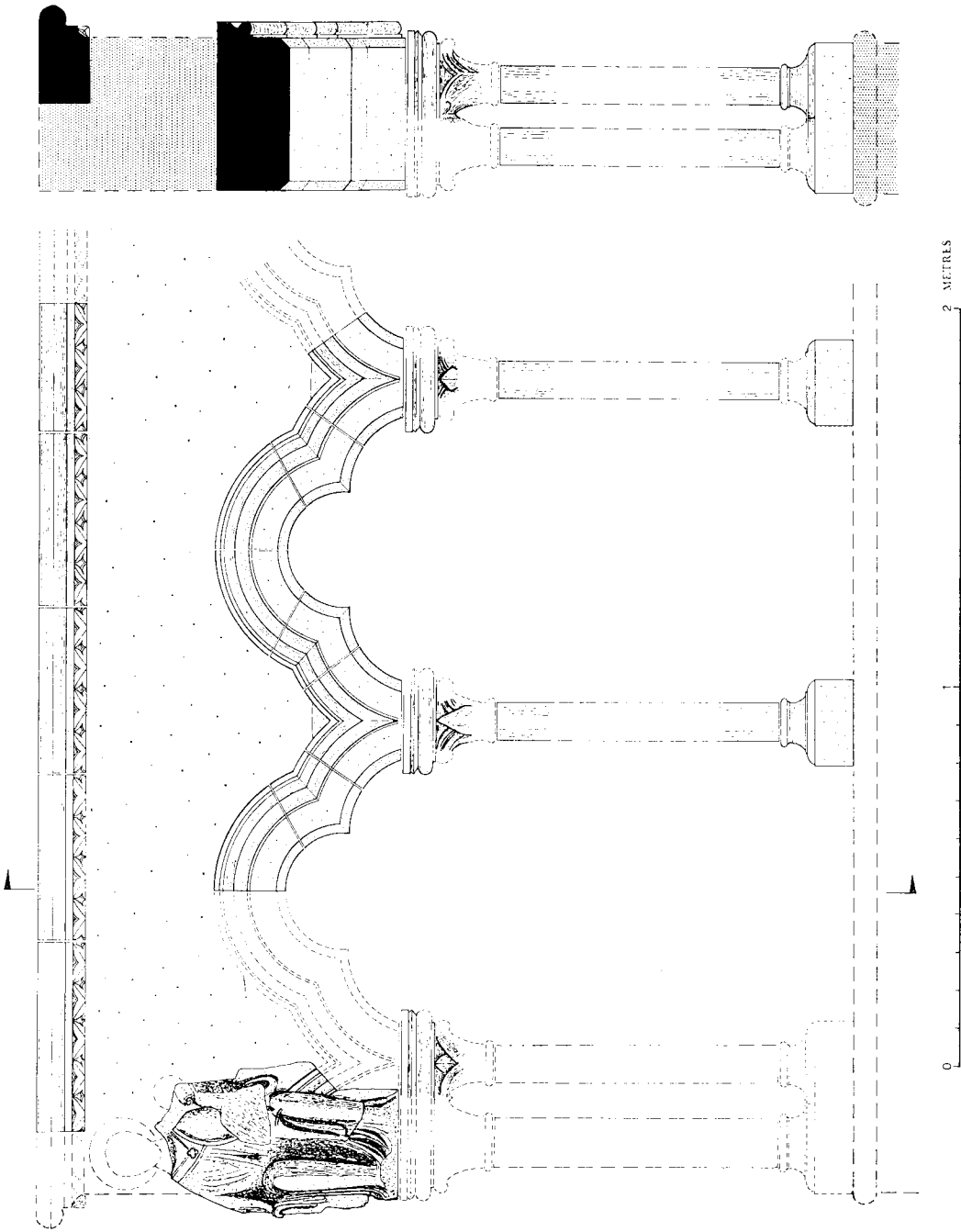


FIG. 5

HAUGHMOND ABBEY, SALOP
Reconstruction of Transitional cloister arcade. All significant extant pieces are shown, but their relationship to each other is purely hypothetical; this should especially be noted where the left-hand capital and suggested corner shafts are concerned

Architectural fragments from the excavation, together with larger pieces already extant on site, derive from a cloister arcade of *c.* 1200. Enough remains to permit a reconstruction in most details, and the discovery makes an impressive addition to the very small number of English cloisters known from before the late 13th century.

The composition is made up as follows: arcade springers and voussoirs; paired capitals; paired bases; shaft fragments; sections of a slightly keeled roll and dogtooth stringcourse; and a fine though much-battered sculpture of the Virgin and Child. The excavation also produced fragments of contemporary foliage carving, possibly from panels in the wall-surface above the arcade. Traces of red and white colour on a few of the pieces await analysis.

The complete or near-complete elements shown in the reconstruction drawing are mostly unstratified, but numerous small fragments were excavated which clearly derive from the same structure. Of these about a third (comprising all those found in pre-Dissolution contexts) were incorporated in the footings of the latest cloister wall, rebuilt in the late 15th or early 16th century. This seems almost conclusive evidence that the fragments represent the predecessor of this wall, the only large arcaded structure likely to have been demolished immediately before the footing was laid.

The springers and voussoirs fit together, in only one possible combination,³⁴ to form a cusped round-headed arcade. The capitals and bases (all more or less fragmentary) match this perfectly in scale, and only the height of the shafts, of which no complete example survives, remains uncertain. The position of the stringcourse is less clear. It evidently formed part of the cloister since a complete section was found in the later footing, and absence of weathering suggests that it faced inwards;³⁵ it seems most likely to have defined the top of the arcade elevation, perhaps carrying the wallplate of a timber pentice over the walk.

The Virgin and Child is designed to be viewed from the front and one side. Sections of moulding spring from it on both these faces, set at a right-angle to each other in the horizontal plane, and it seems clear that the sculpture occupied the angle of two wall-surfaces meeting at a corner. The moulding profile is identical to that of the cloister arcade, but not matched by any other work surviving at Haughmond. The only likely context for the figure seems to be one corner of the cloister inside the walk, with the hoodmoulds of two converging arcades running into it. How it was supported is unknown; perhaps on a cluster of five shafts, or on one large shaft filling the angle between two pairs on which the arcades rested.³⁶

This cloister belonged to the standard Romanesque and early Gothic type, an open arcade resting on paired shafts set at right-angles to the wall-plane. In Britain, unlike southern France and Spain, such arcades were generally replaced in the late middle ages by glazed windows; hence only a handful are known, and most of these as *ex situ* fragments.³⁷ The rich decorative effect of the Haughmond design need not have been any more unusual in this country than on the Continent. The cusped roundheaded arch was used in the 1180s in the Glastonbury nave triforium, and became popular in the early 13th century for blind arcading.³⁸

Haughmond Abbey was rebuilt, apparently from *c.* 1170 onwards, in a lavish late Romanesque style.³⁹ The advanced drapery of the figure makes a date before 1200 seem unlikely for the cloister arcade, but in a campaign lasting over many years this would have been one of the latest parts to be built. In fact the capitals, bases and mouldings of the cloister bear a general similarity to details on the standing lavatorium, W. processional doorway and chapter-house front. All other arches of the period at Haughmond are round-headed, but a cusped opening similar in outline to the cloister arches is pierced through the central pier of the lavatorium.

JOHN BLAIR, PHILIP LANKESTER, and JEFFREY WEST

NOTE

The Society thanks the Department of the Environment for a publication grant for this paper.

NOTES

³⁴ This applies both to the form of the voussiors and to the lugs with which they were keyed together.

³⁵ Some French cloisters of this type (e.g. Arles, Mont St Michel) have moulded eaves-level stringcourses internally but not externally.

³⁶ The first suggestion is illustrated by a base at Wenlock Priory (R. B. Lockett, 'A catalogue of Romanesque sculpture from the Cluniac houses of England', *Jnl. Brit. Archaeol. Assoc.*, 3rd ser. xxxiv (1971), pl. XI(4)); the second by part of a cloister probably from Fontainebleau (Victoria and Albert Museum A3-1911).

³⁷ Listed G. Webb, *Architecture in Britain: the middle ages* (2nd ed., Harmondsworth, 1965), 56-58.

³⁸ As on the W. front of Llandaff cathedral.

³⁹ R. Gilyard-Beer, *Haughmond Abbey* (HMSO, forthcoming) will be the best account.

THE USE OF QUARR STONE IN LONDON AND EAST KENT

In a useful appendix to an article by Professor Jope on the Saxon building-stone industry,⁴⁰ Dr F. W. Anderson and the late R. N. Quirk discussed the geology and use of Quarr stone, a Tertiary limestone from near Binstead in the Isle of Wight. They showed how this stone, long worked out in the quarries, was at the same stratigraphical horizon in the Bembridge limestone as Binstead stone but was in appearance quite different. Quarr stone is, in fact, a creamy-yellow limestone (but greyer than Caen), composed of committed shells which occurred only in a shell-bank W. of Binstead. Quarrymen know it as 'Featherbed stone'. In the latter part of their note Anderson and Quirk say that: 'Quarr stone was not used extensively outside the Isle of Wight, except in the Hampshire Basin and Sussex, where a good building stone was not readily available'. They go on to point out that there is no record of its use in Dorset where other good local stones could be used. In his book *The Pattern of English Building*, Mr A. Clifton-Taylor also discusses the use of Quarr stone⁴¹ and although admitting its widespread use in the Hampshire Basin and Sussex, says that Lewes Priory in East Sussex is the most distant building at which it had been identified.

Recent work in East Kent has shown that Quarr stone was used there extensively in the early Norman period alongside Caen stone,⁴² and a recent visit to the White Tower at the Tower of London showed that it was also used in this famous late 11th-century royal keep built by Bishop Gundulf of Rochester. The quarries in the Isle of Wight (the name Quarr is synonymous with quarry) were always in royal ownership from the Norman Conquest,⁴³ and it seems clear that in the late 11th century and perhaps the beginning of the 12th, it was exported widely by sea up the English Channel for royal building work (e.g. the Keep of Canterbury Castle as well as the White Tower) and for building work at major ecclesiastical houses (such as Christchurch Priory and St Augustine's Abbey in Canterbury, and St Martin-le-Grand, Dover). It is also found in quite a large number of churches in East Kent. This is mostly as reused material (e.g. Monkton, Eastry, St Nicholas-at-Wade and All Saints, Shuart)⁴⁴ but the unique parish church of St Mary's Brook, near Ashford has Quarr used for the chancel arch and all its eastern quoins. Only in the great western tower, built last but in direct sequence, is Quarr stone gradually superceded by Caen.⁴⁵ It is of significance that all these churches were owned by Christchurch Priory Canterbury or the Archbishop, and that many of them may have been rebuilt or built for the first time in the late 11th century after Archbishop Lanfranc had in the 1070s and 1080s divided the Christchurch property between himself and the monks. Archbishop Lanfranc had also regained for Canterbury many manors which had been taken by Odo, Bishop of Bayeux and others.⁴⁶ One of the most notable of those returned to the monks was Brook, where the architectural decoration of the church is very similar to that in Ernulf's crypt and choir (1096-1107) at Canterbury Cathedral, but the Archbishop had also recovered Reculver for himself and it is possible that the chapels-at-ease attached to Reculver (All Saints, Shuart and St Nicholas-at-Wade in Thanet) were also built in the late 11th century.

In Canterbury itself, three great buildings, the Royal Keep, Christchurch Cathedral Priory and St Augustine's Abbey, all contain Quarr stone used in initial Norman