The chancel floor of All Saints' church, Icklingham, is now made up of medieval grave slabs, medieval decorated tiles and early 20th-century plain quarry-tiles. Two steps lead to the eastern part or sanctuary which is floored with medieval tiles, except for the altar area and for one medieval grave slab in the south-east corner. The tiles, of different shapes, combine to form a number of mosaic patterns. Although very worn in places the tiles show that the patterns were polychrome. The tiles are impressed with a variety of different linear designs. These two techniques produced a tile pavement which may be called line-impressed mosaic. There is a tradition in the literature that the medieval tiles were dug up in a field in the parish and relaid in the church. This statement appears first in 1818\(^1\) when an anonymous work on Suffolk records that in the church of All Saints 'within the rails of the communion table, and about the chancel is a considerable quantity of Roman bricks that were ploughed up in the neighbouring field: they are of different shapes, slightly traced with the figures of animals, flowers, human faces, etc., and some few of them are vitrified'. Kirby uses the same account in 1829\(^2\) and further acceptance is added by White in 1844.\(^3\) However, in 1893-4, Singh suggests that this story is clearly an error.\(^4\) But by then it seems to have been accepted that the tiles were in situ. They are referred to in 1875 in notes on the church.\(^5\) By 1894 the church was apparently in a very bad state and a report was prepared by the Secretary of the Society for the Protection of Ancient Buildings.\(^6\) This report was read during a visit of the Suffolk Institute of Archaeology in August 1901\(^7\) when the

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\(^1\) Excursions in the county of Suffolk: comprising a brief historical and topographical delineation of every town and village . . . (London 1818), p. 76.

\(^2\) J. Kirby, A topographical and historical description of the county of Suffolk . . . (Woodbridge 1829).

\(^3\) W. White, History, Gazetteer and Directory of Suffolk . . . (Sheffield 1844), p. 59.


\(^5\) H. Prigg, Icklingham Papers, Manors, Churches, town-lands and Antiquities of Icklingham (Woodbridge 1901), pp. 83-6; tiles are illustrated pp. 84-5.

\(^6\) Ibid., pp. 132-3.

\(^7\) Proc. Suff. Inst. Arch., xi (1901-3), pp. 62-3; a footnote refers to the reference to the tiles in n. 1 of this paper.
church was evidently still in a poor condition with gaps in the roof. Between this visit and 1904 the church was restored. A typescript describing this work was presented to T. D. Atkinson by the author, W. M. Fawcett, in 1904.\(^8\) This account states that the whole floor was relaid with the exception of parts of the tiles in the chancel.\(^8\) It does, however, describe the floors before this work was carried out: ‘the floors of nave and aisle were very rough plain tiles, and they had been in a good many places repaired with common bricks. The floor of the chancel was formed with figured tiles in pattern work. Some are very rude but there is an interesting example of ancient work which had not been interfered with excepting by the rough hand of the local builder who had substituted common bricks in the place of some much worn tiles. This floor has been hardly touched during the present restoration as I felt it necessary to keep the old design as much as possible intact’.\(^9\)

It is therefore clear that the tiles were not very disturbed in the restoration. However, it appears that some portions of the pavement were reset in cement and that an area 1.13m x 2.45m in the northeast corner of the sanctuary was given over to odd pieces disturbed in the process.

**Colour arrangements, glaze and fabric**

There are considerable variations in the surface colour of the tiles. However, two main colours can be seen, combining in the various patterns to produce distinctive and striking colour arrangements. The yellow tiles, produced by applying lead glaze\(^11\) to a layer of white slip\(^12\) covering the earthenware body, contrast with dark brown or almost black tiles. The dark browns were presumably achieved by a lead glaze applied directly to the body of the tile while the blacks may have been produced by copper or

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\(^12\) This white clay is referred to in connection with mosaic tiles at Thornton Abbey in 1313, when payments were made for two cartloads of clay from Leeds for the coloured tiles of the church: *in ij caretariis terre de Ledes pro tegula ecclesie coloranda xs iiiijd*. Quoted in I.H.P., ‘Thornton Abbey, Lincolnshire’, *Arch. Jour.* ii (1845), p. 364. Higden, writing in the first half of the 14th century, apparently thought the white clay of Britain distinctive enough in pottery and tile manufacture to mention in his *Polychronicon*; *est etiam ibi argilla alba et rubea ad compendium vasa fictilia, et tegulis tingendis*, translated by Trevise as ‘there is also white clay and reed for to make of crokkes and stenes and other vessel and brent tyle to hele with hous and cherches’. C. Babington (ed.), *Polychronicon Ranulphi Higden*, ii (1869), Rolls Series no. 41, 16, 17.
possibly manganese in the glaze. Only one tile was noticed which had a distinctive green appearance; this was achieved by the addition of copper to the glaze. The majority of tiles have a yellow fabric distinctive of the Cambridgeshire region: an analysis of the fabric suggests that the tiles were produced locally (see below, p. 167). The tilers were evidently very careful in producing the desired effect with their glazes. It was noticed that some dark glazes were produced by glazing tiles of red earthenware and on one tile discovered loose in the churchyard a thin layer of red earthenware had been applied to the surface of the yellow fabric of the tile.

Patterns (Fig. 47—49)

Seven mosaic patterns can be identified but the exact details of two of these are unclear (patterns 3 and 4). At least twenty differently shaped tiles were needed for these arrangements. However, a few of the shapes were broken down from large modules. For instance, a large square (14 of pattern 5) could provide both the rectangles (12) which were half the square, and the small squares (13) which were quarters. Similarly the large diamonds (10 of pattern 4) were broken in half to produce the parallelograms (8 of patterns 2 and 3) which in turn produced the small diamonds (7). The design arrangement is least clear with the tiles of pattern 4, which does not exist as such but which can be postulated on the basis of information from other sites (see below).

Designs

A very large proportion of the tiles making up the patterns were decorated with shallow line-impressed designs. Fifteen designs are recorded (Figs. 44–46). Two designs demonstrate that they cannot have been intended for the Icklingham pavement. No. 14, the pinnacled canopy, makes little sense without its ‘base’ which is known from other sites. The large lion’s face (design 9) occurs eight times but it can be seen that the stamp is larger than the tiles on which it is used.

Layout

The original layout seems to have consisted of seven bands of decoration laid north-south and running east to west, now seen only in the sanctuary. The central band of the steps and sanctuary (pattern 1) is four roundels wide. The centre of each roundel is a yellow five-foil (1) with stamped decoration. This is surrounded by a dark circular tile, originally in one piece (2). Four narrow yellow

18 E. S. Eames, Medieval Tiles (British Museum 1968), p. 2.
FIG. 44.—Line-impressed designs 1—8.
Fig. 45.—Line-impressed designs 9—13.
Fig. 46.—Line-impressed designs 14 and 15.
Fig. 47.—Mosaic pattern I.
Fig. 48.—Mosaic patterns 2—4 (no. 4 based on Ely).
tiles (3) surround this in a band interrupted by four dark coloured circular tiles (4) which act as a link to the next roundels. The tiles are decorated with design 5. The only other component in this pattern to have decoration is the central five-foil (1) which has patterns 2, 8 and 10. In the sanctuary the band is surrounded by decorated rectangular and square tiles. Component 4 is cut in half and 5 lacks the fourfoil (6) where they meet the border. This zone continues down the steps to the chancel. The top step is one roundel wide with no border to east or west. The lower step is also one roundel wide but has a border of shape 8 on the east.

The original arrangement is most clearly seen on these steps. To the north and south of the band of pattern 1 is a narrow band 30cms wide of pattern 6. The step is wide enough to accommodate two six-pointed stars (17). These are yellow and are decorated with designs 10 and 11. The stars are separated by small dark tiles (18). A row of narrow tiles (16) on either side of the stars fills in the area between the points. To the south of this band on the top step is a zone of pattern 2 about 103cms wide (Plate XIII). This consists of two large six-pointed stars, light in colour, made up of 7 and 8, enclosing a dark six-pointed star of no. 7; the step is not
wide enough for all the stars to be fitted in. The small diamonds (7) and parallelograms of this pattern are broken up from large diamonds with sides about 140mm long. The majority has decoration of designs 3, 4 and 8. The lower step has the same decoration. To the south of this zone, against the south wall is a band of pattern 5, approximately 50cms wide. This is set diagonally. The large square is light in colour with dark, almost black, rectangles on each side; the vacant areas are filled by small yellow squares. Both the rectangles and the small squares are broken from large squares: four of these large squares are decorated with design 8, on the rectangles and small squares are found designs 6, 8, 10, 12 and 15. This pattern occurs on the north too in a zone 89cms wide: the large squares have designs 6, 10 and 12. Between this and the narrow band with pattern 6 is a zone of pattern 2 but the layout is not very consistent.

In the sanctuary itself, except for the central panel, the arrangement is extremely confused. To the north there is the area of fragmentary tiles and against the kerb stones are tiles which would combine to form pattern 4, although the large hexagon is missing entirely. Next to this a band of diamonds (10), decorated with designs 4, 8 and 10, and seven lines of tiles 8 and 7 are set in a herringbone pattern 46cms wide north-south; the tiles are decorated with designs 4 and 8. Six of these lines form pattern 3 against the central zone of roundels: the pattern is too worn for the colour arrangement to be worked out.

To the south of the central zone of pattern 1 six lines of tiles nos. 6 and 7 are set in a similar herringbone pattern about 39cms wide north-south: the tiles have the same variety of designs plus no. 3. Six lines of this follow pattern no. 3/4. A single line of originally decorated rectangular and square tiles separates this from a band of square tiles decorated with designs 8, 10, 12 and 14, a band of pattern 7 and another band of square tiles decorated with 3, 8 and 14. The line of pattern 7 gets narrower to the east. The sub-circular yellow lines (20) are impressed with design 9; the dark tiles in between are undecorated. The area between these and the south wall is occupied by a grave slab. Between the grave slab and the east wall is a line 122cms long of 5 square tiles 24cms square, alternating dark and light.

The western part of the chancel has three panels of medieval tile. Two of these are of pattern 5 and the alignment of the tiles in the two panels suggests that this area was originally floored with this pattern, which followed the same colour and design arrangement as described above. The greatest variety of linear designs is found here: 1, 6, 7, 8, 10, 12, 14 and 15, with designs 10 and 12 used on the same tiles. Against the north door and up against the
sanctuary step is an area 97cms north-south by 198cms east-west. The arrangement is not entirely consistent. Immediately to the south of this area are two grave slabs with indents for brasses with a band of fragmentary tiles approximately 12cms wide between them. The southern slab is roughly in the centre of the chancel. From the west of this is another area of pattern 5 272cms east-west by 90cms north-south. A line of roughly decorated rectangular and square tiles separates this from a small area of pattern 1 (Plate XII) immediately against the chancel screen; the zone is three roundels wide east-west (111cms) by four roundels north-south (128cms). The colour and design arrangements are as described above. The remaining area of the chancel is floored with red quarries and another grave slab.

![Distribution map of sites with line-impressed tiles.](image)

**DISCUSSION**

The Icklingham pavement provides important additional information about a very distinctive type of tiled floor which appears to have been common in the churches of eastern England. The distribution map (Fig. 50) shows the sites known at present and demonstrates that the type extended as far as Oxfordshire. It is, however, clear that line-impressed mosaic was well known in
western England and Wales as well. There are many similarities, not only in mosaic patterns, but also in the actual sizes of the tiles themselves. The study of this type is not yet far enough advanced for many definite conclusions to be drawn. However, it is valid at this stage to point out some of the major similarities.

The most important pavement in this group is without doubt the pavement of Prior Crauden's Chapel at Ely Cathedral. There are similarities in size between panels, on the basis of individual tiles, of pattern 1, which occurs at Ely (Prior Crauden’s Chapel), Icklingham and Meesden, the south transept of Ely, and Coggeshall. The same patterns can be shown to have existed at Pipewell and Denny Abbey. Pattern 2 is found at Ely and it is clear that tiles 9 and 10 which do not form a coherent pattern at Icklingham were intended to form pattern 4 which is drawn out from the existing pattern at Ely. The presence of tile 9 at Denny demonstrates yet another connection. It is the Ely (Prior Crauden) pavement which suggests that the two bands of pattern 3 at Icklingham may well be restoration work, since at Ely, in the sanctuary itself, pattern 2 occurs and this is made up entirely of tiles 7 and 8, of which there are now so many at Icklingham in a not very convincing arrangement. The few tiles of pattern 4 at Icklingham would seem to reinforce this view. Pattern 6 occurs too at Ely (Prior Crauden) and Meesden. Further similarities in size between tiles from Icklingham and other sites suggest further common origins; the large diamond (10) is the same size as tiles at Higham Ferrers and Elizabeth Eames & Laurence Keen, 'Some line-impressed tile mosaic from Western England and Wales: an interim statement', Jour. Brit. Arch. Assoc., 3rd Ser., xxxv (1972), pp. 65-70; J. Patrick Greene, Laurence Keen & Beryl Noake, 'The decorated mosaic tile floor from Warrington Friary, Lancashire: a reassessment', forthcoming.


15 Plan in W. Wilkins, 'An account of the Prior's Chapel at Ely', Archaeologia, xiv (1803), pl. XXVIII; another by W. Fowler, published 20 May 1801 as 'Principal patterns of the Roman floor in Prior Crauden's beautiful Chapel at Ely'. See also H. Shaw, Specimens of Tile Pavements (London 1858) and R. Gough, 'A mosaic pavement in the Prior’s Chapel at Ely', Archaeologia, x (1792), pp. 151–5; F. Renaud, Proc. Soc. Antiq. Lond., 2nd ser. xi, pp. 203–6, mentions the pavement. His drawings, like Wilkins', are preserved in the Society of Antiquaries' library; and J. R. Colling, Gothic Ornaments, ii (1850), pl. 9 and 14.


18 Tiles from excavations by Mrs. P. M. Christie on which L. K. is preparing the report.

Helpston; the square tile (14) is the same size as those at Higham Ferrers. A pavement recently excavated by Mrs. E. Baker at Old Warden Abbey has clear connections with all these pavements but full details are not yet available. It is the line-impressed designs which are the most important pointers, if not to the same manufacturing centre, to the same tilers. Work on the stamps themselves is underway but it is already clear that this line of enquiry is going to demonstrate the origin of the pavements more conclusively than pattern and size similarity. The various sorts of rosette are unlikely to be of much use. Design 4 occurs at Denny and at Northill, 5 at Elstow and Denny, 8 at Cambridge and Denny, 10 at Denny and Northill, 11 at Ely (Prior Crauden) and Cambridge, 12 at Middleton Stoney, 13 at Elstow and 14 at Elstow, Northill and Denny, although at Denny more of the stamp appears on larger square tiles. Further stamp similarities can be shown between Pipewell, Higham Ferrers and Lillingston Dayrell, between Warden, Elstow, Northill and Willington, and Cambridge and Meesden. Another link between the sites is shown by the use of sgraffito decoration on the tiles at Ely (Prior Crauden) and Higham Ferrers. It is of interest to note that sgraffito decoration was an important feature of the 14th-century pottery industry in East Anglia.

Date

The exact dating of the series is not possible but it can be shown that Prior Crauden's pavement at Ely dates from 1324-5 and the Meesden pavement dates to the first quarter of the 14th century. It can be demonstrated that pattern 6 occurs in western England at Norton Priory and Warrington: the tiles are the same size. Otherwise the mosaic line-impressed pavements in the west are very different. However, coin dating at Norton shows the floor to have been laid late in the 13th century or in the first years of the 14th. It is possible, therefore, that there is a link between the line-impressed material in western and eastern England.

21 Report by the writers.
24 F. R. Chapman (ed.), Sacrist Rolls of Ely, i (Cambridge 1907), pp. 10, n. 5 and 64, 163. £138. 8s 5d was paid in nova constructione capelle et cameræ Domini Prioris in the Treasurer's roll for Michaelmas 1324 to Michaelmas 1325.
27 F. R. Chapman (ed.), Sacrist Rolls of Ely, i (Cambridge 1907), pp. 10, n. 5 and 64, 163. £138. 8s 5d was paid in nova constructione capelle et cameræ Domini Prioris in the Treasurer's roll for Michaelmas 1324 to Michaelmas 1325.
The Icklingham pavement is likely to date to the first quarter of the 14th century, since it shows so many similarities to the Ely pavement and other tiles of this group.

ACKNOWLEDGEMENTS

The writers are very grateful to Mrs. Elizabeth Eames and Dr. R. D. H. Gem for reading this paper in typescript and for commenting on it. They are especially indebted to Mr. John Hopkins and Mr. John Kenyon of the Society of Antiquaries of London library for considerable assistance, to Mrs. A. Klingelhofer for undertaking the examination of the tiles from Icklingham and Denny Abbey, and to Mrs. E. Baker for allowing reference to the pavement at Old Warden.

REPORT ON TILES AND BRICKS FROM DENNY ABBEY AND IKCLINGHAM

by A. Klingelhofer

Because the tiles at Icklingham clearly belonged to the same group of tiles found at a number of other sites in the region it was thought desirable to carry out detailed analysis of a tile found loose in the churchyard and also to compare this with tiles from Denny Abbey, Cambridgeshire, on which one of the writers is preparing a report.

An examination of 3 glazed tiles and one brick from the Cambridgeshire-Suffolk region was carried out by thin section and heavy mineral analysis. Two tiles came from Denny Abbey, labelled Denny 1 and 2 respectively, one tile from Icklingham and the brick also from Denny. All 4 thin sections are relatively similar, though the two from Denny are more closely related. Several characteristics are common to the clay matrix of each sample; each is mottled in colour, fine grained with few mineral inclusions and with frequent pockets of clay which have not been broken down.

Denny 1 is pink in colour (Munsell 5 YR 7/4) with inclusions of quartz, some quartzite, red iron ore, and rarely microcline feldspar. The quartz grains are generally rounded with an average diameter of 0.2mm or angular with an average length of 0.3mm. Denny 2 varies widely in colour from very pale brown to light brown grey at the core (Munsell 10YR 8/3 to 10YR 6/2), however, the inclusions are the same as for Denny 1. Quartz grains are of two types fairly evenly distributed; rounded with an average diameter of 0.2mm and angular with an average length of 0.3mm. The Icklingham tile is a mottled pale yellow (Munsell 5 Y 7/3) with inclusions varying more in size than the Denny tiles. Quartz, some quartzite, red iron ore and decomposed iron ore are all present again with