

# THE MEDIEVAL PAVINGTILES OF WINCHESTER COLLEGE

By E. C. NORTON

## INTRODUCTION

THE medieval tiles of Winchester College are less well known than those of its neighbours, the Cathedral and St. Cross, for the simple reason that all but a few are laid in rooms which have always been kept locked. They are of interest because among the tiles of widely differing provenance and date which survive in a state of some confusion, there are many which antedate the foundation of the College by nearly a century. Their significance for the study of medieval tiles in general lies in the fact that the College account rolls preserved in the College archives record in some detail the purchasing and laying of large numbers of tiles. It is thus possible to provide for many of them accurate dates which are clearly important in a field where chronology is based to a considerable degree on stylistic comparisons.

There survive scattered around the medieval College buildings over five thousand tiles, both plain and patterned, in varying states of preservation. In the Cloister, laid against the walls, remain some tiles which are mostly in a poor condition, and there are also a few built into a doorway in the north wall of the Cloister which leads to the Chapel Tower and which was opened up in the nineteenth century. The rest are all in rooms which are now used to house the archives and for that reason are generally better preserved. Over the Vestry, by the east end of the Chapel, are two rooms, one above the other, named respectively Upper and Lower Muniment Room, which retain complete their original floors of plain tiles. There is also in one corner of Upper Muniment Room a small but interesting group of patterned tiles. The floor of Lower Muniment Room has received little

wear, but that of the Upper is well worn, as it contained documents that were in common use, except for some patches which must formerly have been covered by cupboards or chests. At the west end of the same range of buildings, behind the College Hall, are two more rooms, both on the second floor, called Exchequer Room and Audit Room. These have floors partly wooden and partly paved, and, together with the short passage that connects them, contain a medley of tiles in disarray, which for the most part have lost their glaze, but are otherwise well preserved. Those in Audit Room were relaid in 1970 in a new arrangement under the direction of Dr A. B. Emden, together with a few tiles which were found under the Victorian floor of the Vestry. They had been used as packing but are nevertheless in good condition. The Vestry tiles have been set within a border of modern inscribed tiles made at Farnham, whence was brought some of the clay for the tiles for the Chapel and Vestry (see below). When the tiles in Audit Room were taken up prior to relaying it was found that the wooden beams which had supported their great weight for centuries were in a very precarious state and the floor had to be strengthened.

That completes the list of places where tiles are still to be found. The names are confusing, but for the discussion that follows it will be necessary to distinguish between the different rooms; however the two Muniment Rooms will generally be treated together, and the discussion of Audit Room and Exchequer Room, where both are named, will implicitly include the passage between them, as they all have substantially similar tiles.

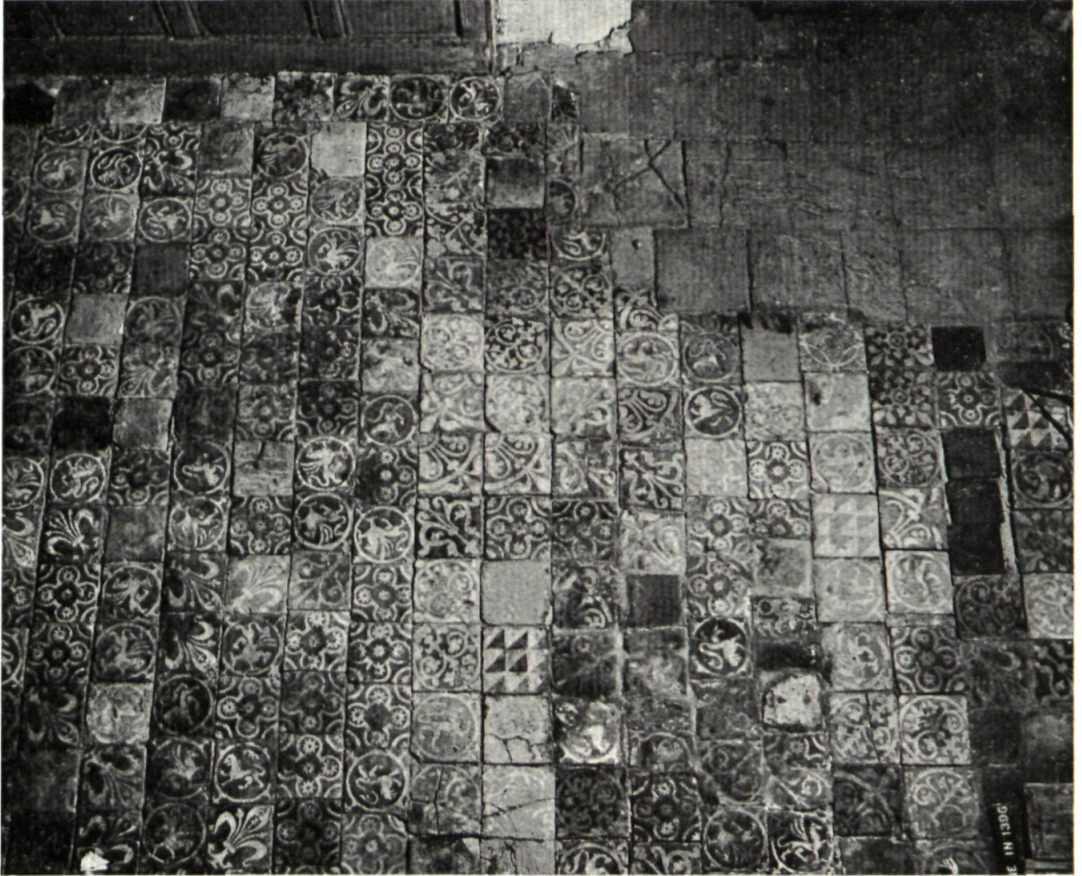


Plate 1. Winchester College. Part of floor of Audit room before relaying; note 5 inch tiles grouped together on left (Photo: E. A. Sollars).

#### DESCRIPTION OF TILES

In the following descriptions the information on the keys is derived from notes made by Mr. J. H. Harvey, former College Archivist, on the tiles in Audit Room and from Vestry, all of which were examined before they were relaid. It has also been possible to look at the backs of a few of the tiles in Upper Muniment Room. The measurements of the thickness of the tiles and the depth of inlay are taken from some tiles from Audit Room which were not relaid and again a few from Upper Muniment Room. In most cases only one tile of any pattern has been available

for measurement, but the small number that have been measured seems to be sufficiently consistent to enable generalisations to be made about each group. Details of which tiles have been examined for their keys, and which for their thickness and depth of inlay, can be found in the table on p. 40, together with their numbers and distribution in the College. Any dates given in this section anticipate the results of the later discussion for the sake of completeness.

The notes on the distribution of the tiles outside the College are only intended to give a general indication of their range, unless

otherwise stated. Detailed information on their occurrence in Hampshire can be found in Greenfield (1892) and Knapp (1954). Descriptions of the process of tile manufacture can be found in Greenfield (1892, 143) and in detail in Haberly (1937, 44-63), and of the uses of glazes in Eames (1968, 1-3).

#### Plain Tiles

There are five types of plain tiles, of which only the first are present in any number.

##### Type A.

*Size:* c.5 in. × 5 in. × 1 in.

*Keys:* None.

*Clay:* Pale red-brown colour; apparently no reduction has occurred.

*Colour:* Two colours, 'black' and 'yellow': 'black' tiles, with glaze applied directly onto the red clay, range from dark brown to black to dark green, the colouring often mottled or uneven; 'yellow' tiles, with glaze on a thin layer of white clay, range from orange-yellow to pale yellow; some tiles have an orange-yellow border with yellow centre, while in other cases the colours are reversed.

*Preservation:* Many in Lower Muniment Room are almost unworn, while some in Upper Muniment Room and the Cloister have hardly any colour left.

*Date:* 1397.

These tiles have on the upper surface traces of nail-holes. These were produced by the tile, when still soft, being pressed onto a wooden board of the appropriate size which had nails sticking up at the four corners to hold the tile in place while the edges were trimmed. These nail holes are found on 17th and 18th century Dutch tiles (Lane 1960, 58) and Mrs. Eames of the British Museum has informed me that they are also a distinctive feature of medieval Netherlandish tiles.

These tiles were probably biscuit fired – that is, they were fired both before and after glazing – as was usually the case with continental tiles. However it is not possible to

check this for certain when the tiles are still *in situ*.

The two Muniment Rooms are paved with these tiles, nearly 5,000 in all, and they constitute the majority of the surviving tiles.

##### Type B.

*Size:* c.9 in. × 9 in. × 1½ in.

*Keys:* ?

*Clay:* Pale orange-brown colour.

*Colour:* Apparently 'black' and 'yellow' as type A.

*Preservation:* At least two tiles, one of each colour, are built into the 19th century north doorway of the Cloister; also some tiles round the edge of the Cloister preserve traces of black glaze.

*Date:* 1397.

##### Type C.

*Size:* c.6 in. × 6 in.

*Keys:* None.

*Clay:* ?

*Colour:* Variable, ranging from yellow-brown to olive-green to dark red-brown.

*Preservation:* A few from Vestry and Audit Room which retain their glaze.

*Date:* 1396.

##### Type D.

*Size:* c.5 in. × 5 in. × 1 in.

*Keys:* None.

*Clay:* Bright orange-red.

*Colour:* Apparently dark brown.

*Preservation:* One tile in Upper Muniment Room worn down to the red clay except for a few spots of dark brown glaze.

*Date:* ?

##### Type E.

*Size:* c.6 in. × 6 in.

*Keys:* ?

*Clay:* Pale grey, but sometimes with a few lumps of red clay mixed in.

*Colour:* Bright green; glaze applied directly to the body of the tile with no white slip.

*Preservation:* A few worn fragments in Exchequer Room with most of the colour worn off.

*Patterned Tiles*

There are 35 patterns which can be divided into 6 groups on the basis of their style and manufacture.

Group 1. Nos. 1-15.

*Size:* 1-14 c.5 in. x 5 in. x 1 in.; 15 c.5½ in. x 5¼ in. x 1 in.

*Keys:* Four large shallow scooped cavities, round or oval, made with a knife or some other sharp tool (Pl. 2).

*Depth of inlay:* c ⅙ in.

*Clay:* Dull red-brown; on most tiles some reduction has occurred, while not a few have the whole surface grey.

*Glaze:* Clear yellow.

*Preservation:* A few preserve some glaze, but apart from some in the Cloister the pattern is intact, although in some cases the inlay has fallen out.

*Date:* c.1300 (Emden 1948, 12).

*Distribution:* Widespread in South Hampshire.

It may be noted that some of the patterns do not quite fit onto a 5 in. tile.

In the many examples of No. 4 it is possible to trace a break in the stamp developing: on a few tiles the pattern is complete (as illustrated), but on most there is a break running down the back of the lion's neck, until in some cases the back of the neck is detached from the rest of the lion. There is also a slight break in one of the arms of No. 12 (as illustrated).

No. 15, by virtue of its larger size, may not have been made at the same time as the others, but it is probably roughly contemporary with the rest.

Group 2. Nos. 16 and 17.

*Size:* c.5¼ in. x 5¼ in. x 1 in.

*Keys:* None.

*Depth of inlay:* Very thin.

*Clay:* Red-brown colour.

*Glaze:* Thick and greenish.

*Preservation:* Both tiles are quite unworn so that the thick glaze tends to obscure the pattern.

*Date:* ?1412.

*Distribution:* In Hampshire No. 16 recorded only from St. Cross (Greenfield 1892, Fig. A5); the same design but reversed is also found at St. Cross and in the Winchester City Museum (unknown provenance). No. 17 only from Selborne Priory (Knapp 1954, no. 70). Both are also sparsely scattered through Wilts. and Berks.

These two are 'printed' tiles and not of the Wessex school. This is indicated by the blurred design, the uneven application of the inlay and surface of the tiles, the lack of keys, and the thick greenish glaze. No. 16 is part of a 16-tile design depicted by Shaw (1858) as from Great Bedwyn, Wilts. No. 17 is one of a 9-tile design whose corner tile has been recorded from Childrey, Berks.

Group 3. Nos. 18-27.

*Size:* c.5½ in. x 5½ in. x 1 in.

*Keys:* Four large shallow scooped cavities as Group 1 (Pl.2).

*Depth of inlay:* c ⅙ in.

*Clay:* Dull red-brown; many have some reduction, but rarely over the whole surface of the tile.

*Glaze:* Clear yellow.

*Preservation:* Similar to Group 1, but about half retain some glaze and few have lost their inlay.

*Date:* Probably early 14th century.

*Distribution:* Widespread in South Hampshire.

These tiles are very similar to those of Group 1 in their manufacture, apart from their larger size, and many of the patterns are also similar. Stylistically they form a coherent group. They are to be dated later because they did not form part of the original floor of the Retro-choir in the Cathedral (Emden 1948, 8).

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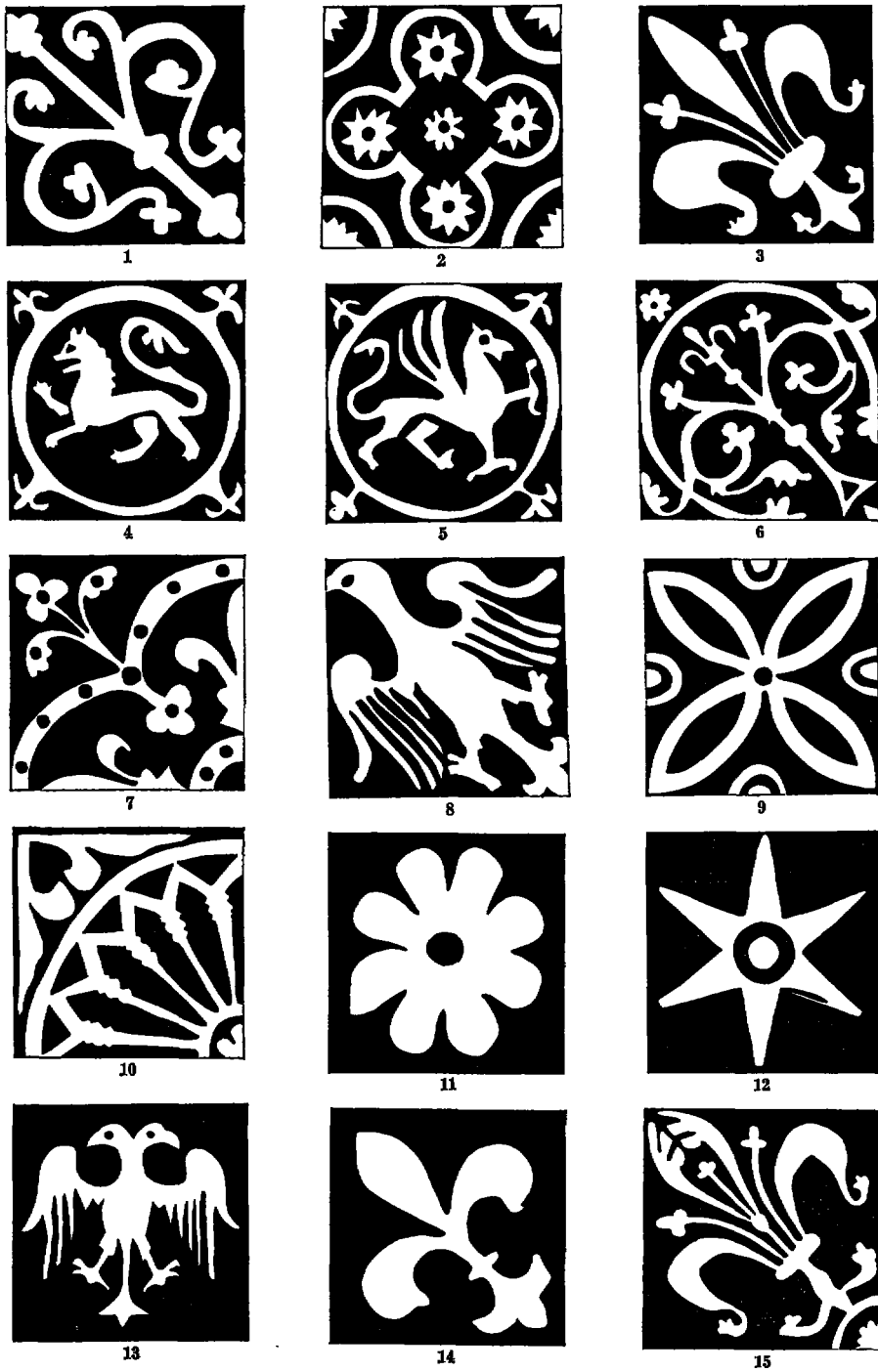


Fig 1. Winchester College tiles, Group I (Scale  $\frac{1}{4}$ ).

Group 4. No. 28.

*Size:* c.5¼ in. × 5¼ in.

*Keys:* The same as groups 1 and 3.

*Depth of inlay:* Thin; in places the pattern has been worn away.

*Clay:* Dull red-brown; in neither tile has there been any reduction.

*Glaze:* All worn off.

*Preservation:* Both examples are well worn so that the pattern cannot be entirely reconstructed.

*Date:* ?14th century.

*Distribution:* Not recorded from elsewhere.

From its method of manufacture this tile seems to belong to the Wessex school. The pattern is degenerate, but this does not necessarily indicate a late date.

Group 5. Nos. 29–34.

*Size:* c.6 in × 6 in. × 1 in.

*Keys:* Five small shallow keys of distinctive shape, made with some blunt tool. The 'lobes' all point in the same direction (Pl.2).

*Depth of inlay:* Very thin; in many cases the inlay has worn off while there is still some glaze left.

*Clay:* Bright orange-red; very few have been slightly reduced.

*Glaze:* Orange-yellow.

*Preservation:* Most of those from the Vestry and Upper Muniment Room retain most if not all their glaze; the others, including the tile (No. 33) built into the doorway of the Cloister, are well worn.

*Date:* 1396.

*Distribution:* Found throughout Hampshire and in neighbouring counties in large numbers.

All the examples of the castle pattern (No. 33) have the well-known break in the right turret. In some cases No. 34 has a slight break in the rings to the right of the leaf (as illustrated). A tile very similar to No. 29, but 4¾ in. square, is shown by Haberly (1937, 297) as the centre of a 9-tile design. No. 32 shows the 'armorial bearings of the ancient

family of St. John, Barons of Basing, viz. on a heater shaped shield, argent on chief gules, two mullets pierced of six points or, supported by two monkeys, endorsed rampant and regardant with long tails cowardised proper' (Greenfield 1892, 150). There is no known connection between this family and the College or Wykeham, but as this tile is found in many places in Hampshire without such connections, this is not significant.

Group 6. No. 35.

*Size:* c.9 in. × 9 in.

*Keys:* ?

*Depth of inlay:* ? – it has almost all disappeared.

*Clay:* Dull red-brown, no reduction.

*Glaze:* None remains.

*Preservation:* Very worn; there are only a couple of spots of inlay left, but fortunately the pattern can still be made out.

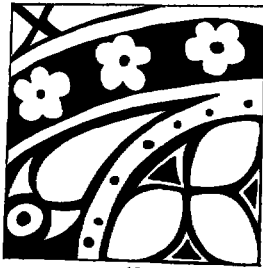
*Date:* ? c.1430 (Knapp 1959).

One of the few Wessex tiles with an inscription. It belongs to the same set as the Wykehamist tile at Timsbury described by Knapp (1959). It was formerly thought to be one of the well-known 'Have Mynde' series (Hohler 1942, 22; Knapp 1956(b), 18; 1959, 102), but the mitre and croziers of the Timsbury tile are clearly visible. It is most unfortunate that the inscription has defied all attempts at decipherment, but it can at least be seen that it is not 'Maner Makyth' as on the Timsbury tile. This confirms Knapp's view that the pattern was made up of four different tiles and not the same one repeated.

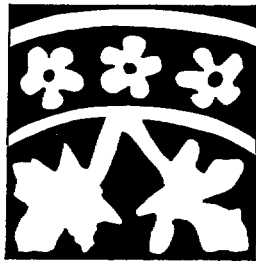
THE ACCOUNT ROLLS

In the course of normal work in the College archives the account rolls have been extensively examined from 1394 (the date of the first roll) to 1490 and less fully thereafter. There are four references (whose latin texts are given in the appendix) which record expenditure on pavingtiles, which may be paraphrased thus:—

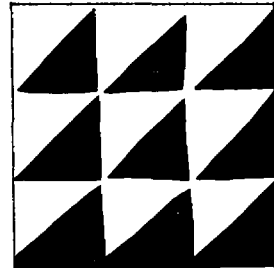
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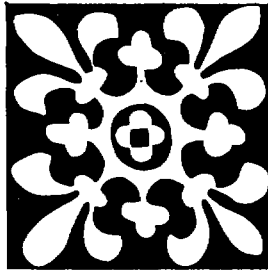
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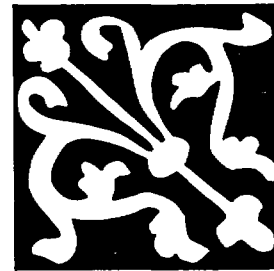
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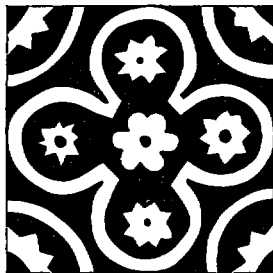
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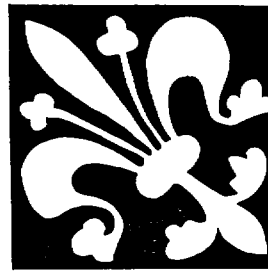
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Fig 2. Winchester College tiles, 16, 17, Group 2; 18-27, Group 3 (Scale  $\frac{1}{4}$ ).

1395-6; To Richard Porteur of Farnham for having clay dug there and carted to Otterbourne for the making of tiles to pave the chancel and vestry (of the Chapel) 18s.6d.

To William Tyelere of Otterbourne for 8,000 pavingtiles made for paving the chancel and vestry, at 10s. a thousand £4

1396-7; For the purchase of 45,800 pavingtiles from Flanders, at 6s.8d. a thousand £15.5s.4d.

For one thousand pavingtiles of a larger size 13s.4d.

For their unloading from the ship 4s.10d.

For their carriage 60s.6d.

For laying 28,000 tiles in the cloister, 3,000 in the entrance to the cloister and the chapel, 2,480 in two upper treasuries and 1,120 in the pantry, at 2s. a thousand 69s.2d.

For the laying of 8,000 tiles bought and accounted for the previous year in the vestibule, choir, chancel and body of the chapel 24s.

1397-8; To John Davy and his helpers for paving the buttery and granary beneath the brewery with 5,500 pavingtiles at 2s. a thousand 11s.

1411-2; For pavingtiles bought at Newbury in this year to pave the library, and for laying them, and for the expenses of the paviour staying in the Soke for 5 nights 25s.5d.

For carting the pavingtiles from Newbury to Winchester 12s.

It should be noted that Kirby (1892, 145) wrongly dated the second account roll to 1397-8, and gave the figure for the tiles as 45,300. These errors are repeated by Hohler (1942, 21, n12a) and Keen (1971, 148).

The clay brought from Farnham in 1395-6 almost certainly refers to the white clay used for the inlay, since there is a deposit of white clay at Farnham which is still used today, and there are records of potters coming from as far afield as Bishop's Waltham in the middle ages to fetch some (I am indebted to Mr. B. Toole-Stott of the Farnham Museum Society Archaeological Group for this information). Red clay suitable for making tiles was available at Otterbourne (Knapp 1959, 104). The site of the kiln has not been identified, but an account of 1402 for the cartage of (presumably roof-) tiles from Otterbourne suggests that the kiln may not have been simply a structure for the manufacture of floor tiles alone.

The existence of a small trade in tiles through Southampton at this time has been documented by Knapp (1956(a), 32-3). It was suggested by Kirby (1892, 145) that the tiles were brought ashore at St. Denys. There are certainly references in the account rolls to unloading of building materials there, but tiles are not mentioned.

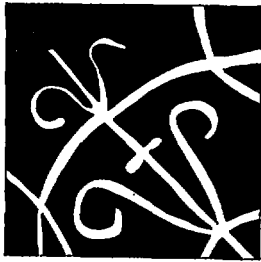
CORRELATION OF EXTANT TILES AND REFERENCES IN THE ACCOUNTS

*The Otterbourne Tiles*

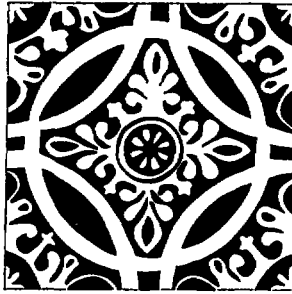
The account roll of 1396 records the purchase of 8,000 tiles made at Otterbourne for the vestry and chancel, and in the next year they were laid in the 'vestibule', choir, chancel and body of the Chapel at a cost of three shillings a thousand. The tiles which were recently found in the vestry are all six inches square, being of Type C and Group 5 (see table on p. 40). Eight thousand tiles of this size would cover the floor of the vestry and the Chapel to about fifty-three feet from the east wall, which is a little over half the length of the Chapel. There was a screen dividing the Chapel about sixty feet along, so that the tiles would cover almost the whole



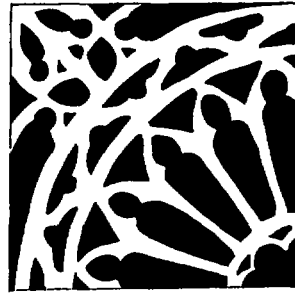
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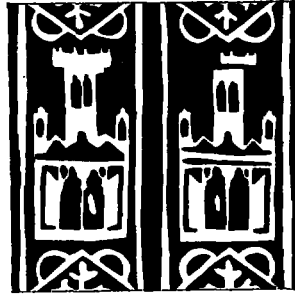
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Fig 3. Winchester College tiles, 28, Group 4; 29-34, Group 5; 35, Group 6 (Scale  $\frac{1}{4}$ ).

of the chancel; but the mention of the body of the Chapel in the second account suggests that the tiles may have been more widely spread through the whole of the Chapel. However it may be confidently stated that the tiles found in the Vestry are the remnant of those bought in 1396 from William Tylere of Otterbourne at ten shillings a thousand.

There is equally no reason to doubt that the other tiles of Group 5 – Nos. 31, 32 and 34 – are also of that date, for their method of manufacture is exactly the same. How they may have come to be in their present positions will be discussed later. Confirmation of this conclusion can be found in the Cathedral. The floor of Wykeham's Chantry is paved, apart from a few plain tiles round the edge and some later repairs, with examples of Nos. 29, 30, 33, and 34. Many are so worn that the keys show through from the back, and they are the same as those of the College tiles. The Chantry was completed before Wykeham's death in 1404, and as the tiles appear to go under the tomb-chest they must be original. Furthermore, that Nos. 31 and 32 are of the same date is shown by a homogeneous well-preserved group, comprising examples of Nos. 29, 31, 32 and 33, set apart from the earlier tiles in front of the altar in Langton's Chantry in the Retro-choir. There can thus be little doubt that all of the tiles of Group 5 date from 1396 and the similar tiles in the Cathedral may be given the same date.

It is interesting to note that the examples of the castle pattern (No. 33) in Langton's Chantry do *not* have the break in the right-hand turret, while those in Wykeham's Chantry and the College do. It also appears to be the case that the examples of No. 34 in the Cathedral were not made with the broken stamp, although on many of them the pattern has been obliterated. This suggests that the tiles in Langton's Chantry were made before the others, and also that those in Wykeham's Chantry slightly antedate the College tiles.

### *The Flanders Tiles*

In 1397 45,800 tiles were bought together with another 1,000 '*maioris quantitatis*'. Kirby (1892, 145) thought that the Flanders tiles were the patterned tiles in Audit Room and Exchequer Room (Groups 1, 3, 4, 5). This view is repeated by Hohler (1942, 22) but corrected in a corrigendum (p. 131) (cf. Knapp 1959, 104), where he rightly says that the Flanders tiles must be the plain glazed tiles still in the two Muniment Rooms. This is confirmed by the typically continental nail-holes in these tiles (see above, p. 25). It is probable that the tiles of Type B are the remnant of the one thousand larger ones bought at the same time, as they appear to be 'black' and 'yellow'. (It is not possible to see if they have the distinctive nail-holes as the only certain examples are built into the doorway in the Cloister.)

That the two Muniment Rooms are those referred to as '*ii cameris superioribus thesaurariis*' (which had been disputed) is confirmed by other evidence in the account rolls. However the figure for them of 2,480 tiles is incorrect, as the two rooms, which are of the same size, in fact contain *c.*2300 each. It seems that the scribe made a mistake, and indeed in the version of the account given here (see Appendix) the number '*ii*' has been inserted later, though the number of tiles has not been altered.

28,000 tiles were laid in the Cloister. If these were all 5 in. tiles, the whole floor would not be covered, but if the one thousand 9 in. tiles are included, then very nearly 28,000 in all would be needed to pave the whole floor. So it seems that the 9 in. tiles were laid in the Cloister, and this would account for the fact that the only survivors are found there. If this is correct, the 9 in. tiles were apparently no more expensive to lay than the 5 in. ones. The Otterbourne tiles presumably cost a shilling more because they had to be laid in a pattern.

The '*introitu versus capellam et claustrum*' is now the antechapel called Crimea and it would indeed require about three thousand

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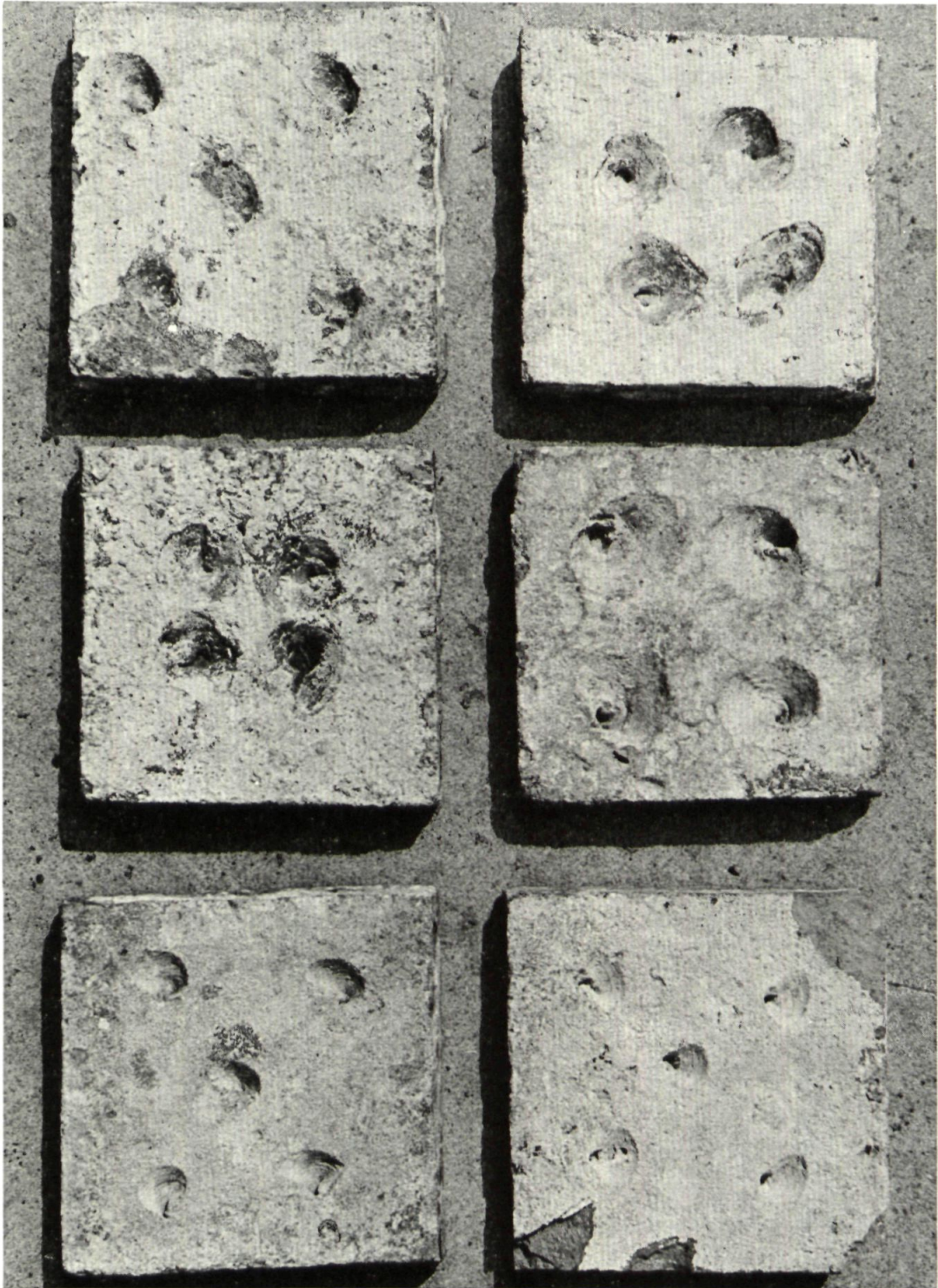


Plate 2. Undersides of six tiles showing the two types of keys: top left, no. 33; top right, no. 18; centre left, no. 22; centre right, no. 26; bottom left and right, no. 24. (Photo: E. A. Sollars).

5 in. tiles. Finally 1,120 were laid in the Pantry, which was the central of the three rooms at the west end of the College Hall, under Audit Room and Exchequer Room, which is now called Middle Hatch. However to cover the whole floor about twice that number would be needed.

And so, when allowance is made for a scribal error, the figures, as was only to be expected, are substantially correct and confirm that Types A and B are the Flanders tiles. All of the larger tiles are accounted for and 36,080 of the smaller ones, if the figure for the Muniment Rooms is doubled. To this number should be added those laid in 1398 in the buttery and the granary. They cost two shillings a thousand to lay, like the other Flanders tiles, and there are no other tiles recorded as having been bought at this stage. The buttery was one of the rooms at the west end of the Hall next to the pantry, which had been paved the year before, while the granary was one of the rooms in the north range of Outer Court. This brings the total up to 41,580 tiles out of 45,800, and there is no mention of the remainder. They may be presumed to include tiles broken on the journey from Southampton and others left spare.

#### *The Newbury Tiles*

The identification of the Newbury tiles is difficult and contentious. There is only one reference in the accounts, unfortunately not as detailed as the others, to cover all the various other tiles, and an explanation is needed for the appearance of patterned tiles in the Cloister and Upper Muniment Room, both of which were, as has been shown, paved with plain tiles.

The Newbury tiles were bought to pave the Library. In the original plans for the College no provision was made for a library and its position has been doubted. However there is strong evidence in the account rolls that it was situated in what is now Audit Room, while Exchequer Room was probably used

from the beginning as a Bursary. The early history of the College Library has been discussed by Oakeshott (1954); it is probable that Audit Room was at some unknown time abandoned as a library and used as a bursary, and was then restored for use as a library in 1662 (though it may have served both functions throughout). It is interesting to note here that the floors of the two Muniment Rooms which were originally intended to be paved are laid upon stone vaults, and so were those of the Pantry and Buttery, while the floors of Audit Room and Exchequer Room, which were presumably at first entirely wooden, are supported only by wooden beams.

It is reasonable at first to suppose that the tiles still surviving in Audit Room are those from Newbury. This view was formerly subscribed to by Mrs Eames (1968, 13), but she has informed me that she is no longer of the same opinion; for there are some serious difficulties. In the first place it appears that Audit Room and Exchequer Room were paved at the same time, since they contain similar tiles. But in that case the account roll ought to mention both rooms and not just the library (i.e. Audit Room). Secondly, if these are the Newbury tiles, it must be supposed that some tiles were taken up from these two rooms at some later date and used to patch up the floor of the Cloister. This is possible but unlikely; and the Cloister could not have needed repairing by 1412. Thirdly, tiles of Groups 1 and 3 which make up the vast majority of the tiles in the two rooms are widely distributed round Winchester, but in the Newbury area are found only at Kingsclere. Finally, and most important, these tiles date from around the beginning of the 14th century, long before the College was founded; and there is no doubt that the examples of pattern No. 4 at any rate were made at the very same time as those of the same design in the Cathedral, since the break down the back of the lion's neck (see above) is exactly matched in all stages in the tiles in the Retrochoir. The tiles are thus certainly early, and

there is no question of the same stamp being somehow preserved for a hundred years. Thus for these to be the Newbury tiles they must have been bought secondhand at a time when there was no shortage of new tiles and for which there is no evidence of a trade in secondhand ones. It is possible that some tiles were removed from the Cathedral when it was being reconstructed under Wykeham, but it is not easy to imagine them being taken to Newbury and then bought back again, especially in view of the close connections between the College and the Cathedral at that time.

There are thus good reasons for believing that the tiles now in Audit Room and Exchequer Room are not the Newbury tiles. In this case there are clearly three questions to be answered: What were the Newbury tiles? When and why were they taken up? When were the present tiles laid and where did they come from? For the last of these questions there is an attractive possibility which cannot, however, be confirmed from the account rolls. On 18th April 1544 the College bought from Sir Thomas Wriothesley the buildings of the College of St. Elisabeth, which adjoined the College to the east and had been dissolved in 1536, on the condition that they were either used for a grammar school or demolished. In fact demolition started a year after and much of the stonework was used to build the wall surrounding the College Meads. Now it is known that after the dissolution of the monasteries there was a considerable trade in secondhand floor tiles (see for instance Preston 1935, 119-20, 143, for tiles removed from Reading Abbey, and Hohler 1942, 1) and it is reasonable to suppose that the College would not have wasted any that were in St. Elisabeth's. However this is not mere conjecture; for there are in the College archives some tile fragments which were found on the site of the Chapel of St. Stephen in 1921. This was part of St. Elisabeth's College and was pulled down in 1548. They are all fragments of patterns found in the College, being Nos. 2, 7, 19, 21,

24, 25, 26 and some of Type A. There are some more fragments in the Winchester City Museum from St. Stephen's; they are Nos. 3, 18, 19, 21, 25, 26, 31; one more tile of the same series as Group 5; and a few other patterned fragments; also some fragments of Types A and E. These include representatives of all the groups and types of tiles found in Audit Room and Exchequer Room with the exception of Type C, which is of the same date as Group 5 (see above), and No. 28 which has only been recorded from the College. This close correspondence makes it a reasonable supposition that the two rooms are paved with tiles from St. Elisabeth's College.

The account rolls for the years 1543-4 to 1572-3 together with a few of later date have been searched for any mention of pavingtiles. There are some references to tiles being brought from St. Elisabeth's, but there is no reason to believe that these were anything but roof-tiles. However in 1562 there was a major renovation of the old library (i.e. Audit Room). Some of the craftsmen and their work are detailed, but there is no mention of tilers or tiles. On the other hand there need not have been any record of the tiles if they came from College property, while the College would not have had a resident specialist paviour, so that the workmen could have been included in the group who are simply called '*et alii*' in the account.

So there is some evidence to support this hypothesis and it does provide possible answers to most of the problems. One of the puzzling features of the Audit Room tiles before they were relaid was that they were in complete disarray except that almost all the 5 in. tiles were laid together with the larger ones round them. If these were the Newbury tiles they would hardly have been laid in this fashion since the account says that a paviour came over from Newbury specially for the job, while the ravages of time would hardly have destroyed the arrangement of the tiles while leaving them grouped by sizes. But if one of the College workmen laid a mixed collection of secondhand tiles from St. Elisabeth's it is

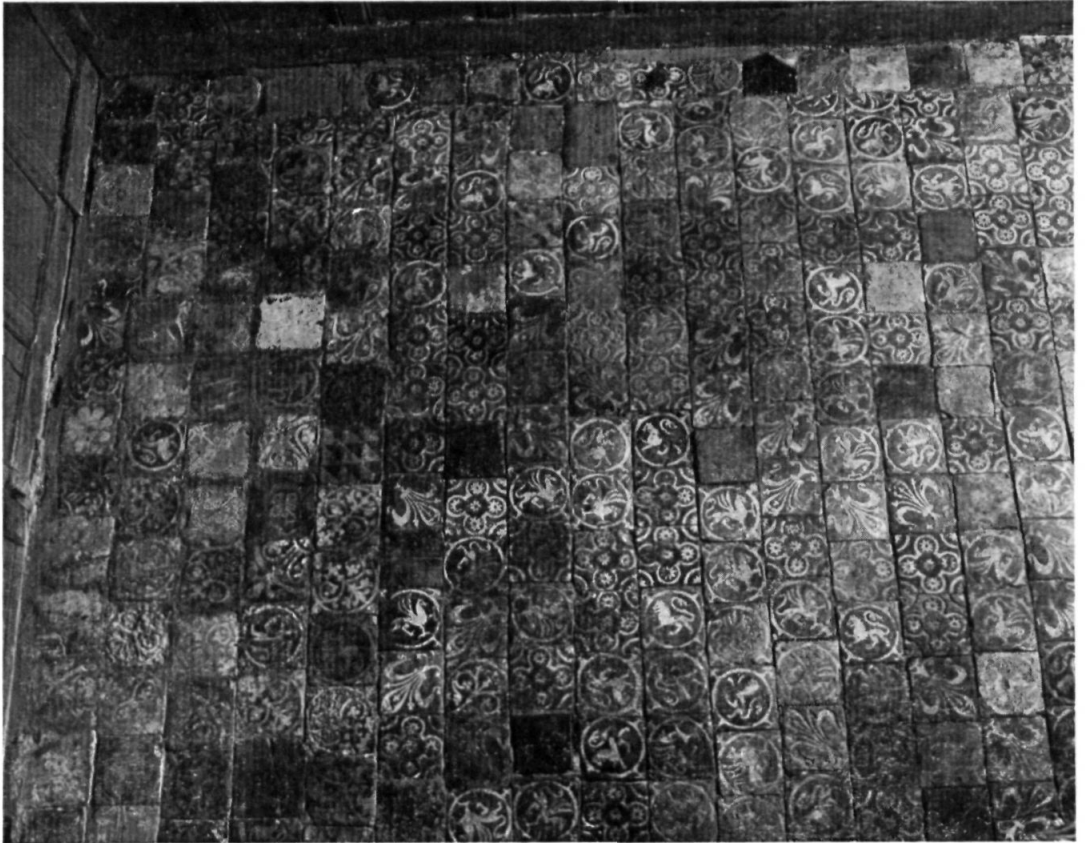


Plate 3. North-west part of Audit Room before re-laying of tiles. (Photo: E. A. Sollars).

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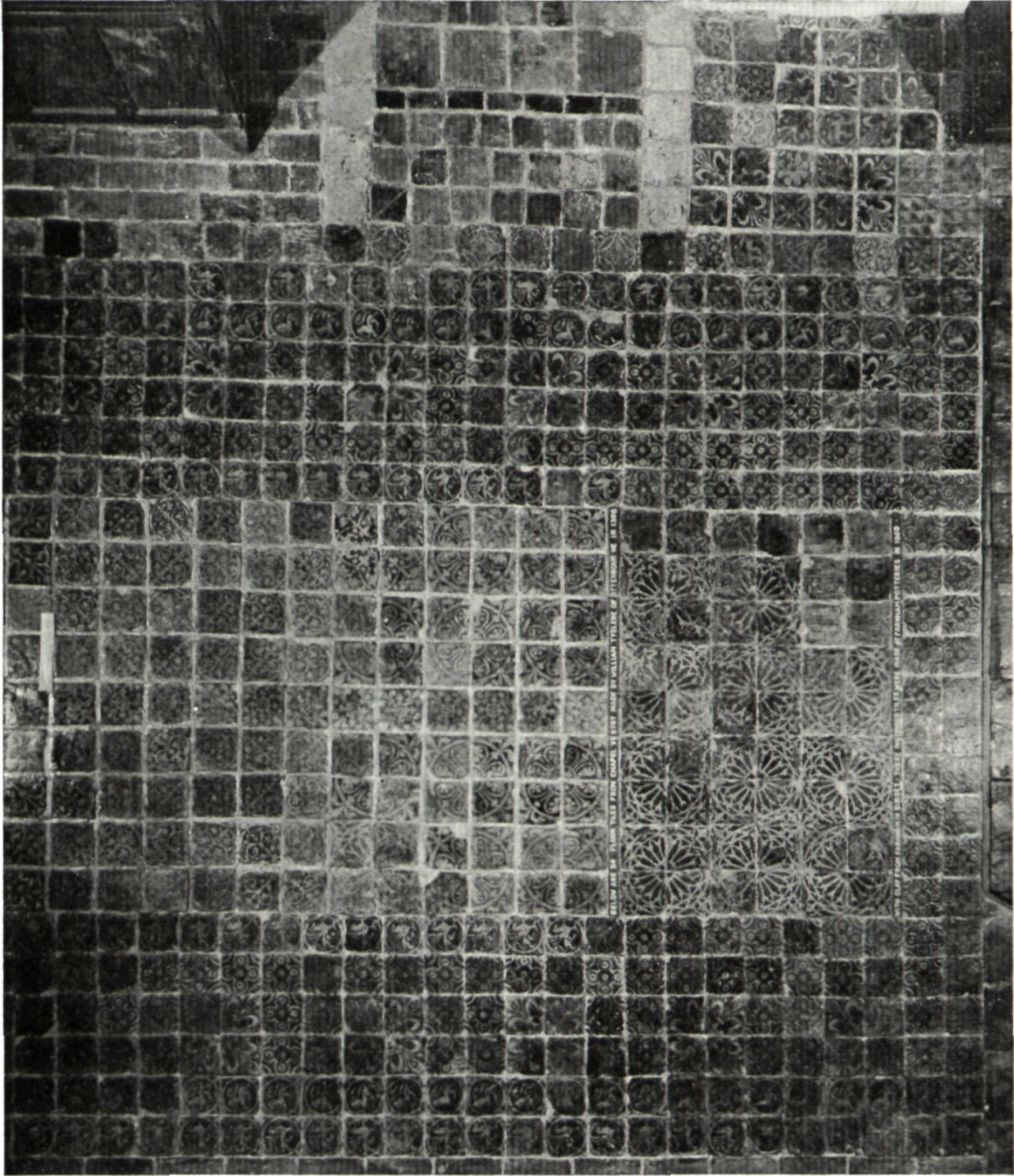


Plate 4. Part of floor of Audit Room after re-laying in new arrangement by Dr. A. B. Emden, including within the inscription the tiles from the Vestry. (Photo: E. A. Sollars).

conceivable that he was incapable of laying them in any special arrangement, but placed them according to size for convenience. Those left over were then laid in Exchequer Room and the passage between the two.

The patterned tiles in the Cloister may then have been taken up from St. Elisabeth's and used to patch the original plain floor, which might well have needed repairing by that time. Finally it should be noted that the tiles of Group 5 in the Cloister and Audit and Exchequer Rooms could have come either from St. Elisabeth's or from the Chapel, whenever the tiled floor there had to be replaced. In either case they are dated to 1396.

For the Newbury tiles there is now one obvious candidate. The two 'printed' tiles, Nos. 16 and 17, can be roughly dated to the first half of the 15th century on stylistic grounds, and they are not of local manufacture. They are found over a fairly large area, but of the total of ten places where either of them has been found, seven are within the Newbury area, mostly to the north and west. They are found together only at Childrey, Berks. Newbury itself was not within the range of the Wessex school but was covered by the flourishing 'printed' tile industry of the Thames valley. These then are most likely to be the Newbury tiles.

The 'Wykehamist' tile, however (No. 35), is firmly in the Wessex tradition. The similar 'Have Mynde' tiles are found only within a short distance of Winchester, while the other 'Wykehamist' tile is nearby at Timsbury. Thus it is unlikely that No. 35 was made at Newbury, although the date would be possible. Knapp (1959, 106) tentatively dated the Timsbury tile to c.1430, and this fits well with the College tile. For in 1437 was consecrated Fromond's Chantry which stands in the middle of the Cloister, and housed the library when it was not in Audit Room. John Fromond died in 1420 and the expenses were borne by his trustees so that they do not appear in the College accounts. This could explain the absence of any record of the pur-

chase of the tiles. The date is about right and it is not unlikely that the tile was moved a few yards to patch up the floor of the Cloister when the Chantry was repaved.

The main difficulty with this reconstruction of the situation is that no reason has yet been suggested why the Newbury tiles were removed from Audit Room. It seems improbable that the Fellows' feet could have worn out the floor in a hundred and fifty years (for the library was not open to the scholars). But 'printed' tiles do wear out more quickly than inlaid tiles, and there are cases known where a tiled floor was replaced after about the same period of time, while the function of Audit Room during this period is still not entirely certain. However this problem is less serious than those raised by supposing the present Audit Room tiles to be the Newbury tiles.

There are three final points. According to this theory No. 28 and the tiles of Type E came from St. Elisabeth's College with the others. The problem of dating is unresolved; the 14th century is perhaps the most likely for No. 28, and the green tiles of Type E are probably Tudor. Nothing can be said of Type D, of which there is only one badly worn specimen, except that, as it is of the same size as Nos. 16 and 17 and is laid next to them, it may perhaps be of the same origin. As for the group of patterned tiles in the corner of Upper Muniment Room, no one has yet produced an explanation of how they might have got there. Fortunately this is not an important problem.

#### *Conclusions*

The results may be briefly summed up:—

The tiles of Group 5 and Type C found recently in the Vestry are part of the original floor bought from William Tylere of Otterbourne in 1396. The similar tiles in the Cloister, Audit Room, Exchequer Room and Upper Muniment Room could have come from St. Elisabeth's (in which case they are still to be dated to 1396), or could have been



used for repairs after the Chapel floor had been taken up.

The tiles of Types A and B are from Flanders and were bought in 1397. The floors of the two Muniment Rooms are still paved with the 5 in tiles, and some of the original floor of the Cloister survives there. Again the Flanders tiles in Audit Room and Exchequer Room could have come from St. Elisabeth's or from elsewhere in the College.

The tiles of Groups 1 and 3 are dated to c.1300, so they must have been acquired by the College secondhand. They are very unlikely to have come from Newbury, and may have come from St. Elisabeth's College. Excavation of the site might produce some evidence.

The two tiles of Group 2, Nos. 16 and 17, in Upper Muniment Room probably came from Newbury in 1412. The single example of Type D may also be from Newbury.

Tile No. 35 (Group 6) is to be dated c.1430 and may have been originally in Fromond's Chantry.

Tile No. 28 (Group 4) and the tiles of Type E probably came from St. Elisabeth's College.

The dating of many of the tiles is certainly not firm, but this attempt at correlating the tiles and the account rolls seems to involve the fewest difficulties. The firm date for the Otterbourne tiles is important as they are part of a series that is both widespread and common.

#### *Acknowledgements*

I should like to thank the Warden and Fellows of Winchester College for permission to publish material from the College archives and for a generous grant towards the cost of publishing the photographs, and the Dean and Chapter of Winchester Cathedral for permission to record the Cathedral tiles. I should also like to acknowledge my indebtedness to Mrs. E. S. Eames of the British Museum and Dr. A. B. Emden who have made many helpful suggestions, and to Mr. P. J. Gwyn, the College Archivist who has constantly helped over many problems and granted me free access to the tiles at all times.

#### APPENDIX

The texts of the references in the account rolls are as follows:—

*Custus Operum* 25 Nov 1395 – 6 Nov 1396 (Winchester College Muniments 73).

*Et solutum Ricardo Porteur de Farnham pro vadiis diversis laborariis fodientibus ibidem lutum et diversis carectariis cariantibus dictum lutum a Farnham ad Oterbourne pro tegulis faciendis ad paviammentum cancelli et vestiarii prout patet in papiro eiusdem Simonis* xviiij s. vj d.

*Et solutum Willelmo Tyelere de Oterbourne pro viij Ml de pavynngstone ad paviammentum cancelli et vestiarii factis capienti pro Ml x s. ut patet in papiro dicti Simonis* iiij li.

*Custus Operum* 6 Nov 1396 – 25 Nov 1397 (WCM74).

*Et in soluto pro xlvMlDccc pavynngtiel emptis provenientibus de Flandre, per Ml vj s. viij d. ut in papiro praedicti Simonis* xv li. v s. iiij d.

*Et in soluto pro Ml pavynngtiel maioris quantitalis ut in praedicto papiro emptis ibidem* xiiij s. iiij d.

*Et in soluto pro portacione earundem de navi in quandam domum prout patet in papiro eiusdem Simonis* iiij s. x d.

*Et in soluto pro praedictis pavynngtieles cariandis sicut continetur in papiro praedicto* lx s. vj d.

*Et in soluto pro xxviiij Ml pavynngtiel ponendis in claustro; iij Ml [in] introitu versus capellam et claustum ponendis;*

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>I</i>	<i>J</i>	<i>K</i>	<i>L</i>
1				3	2			4			5
2				149	14	1		4	1	$\frac{1}{10}$	5
3	2			2	1			4		$\frac{1}{10}$	5
4				83	4			4		$\frac{1}{10}$	5
5				124	3	2		4	1	$\frac{1}{10}$	5
6				4	37			4	1	$\frac{1}{10}$	5
7	3										5
8				5	2			4	$\frac{3}{4}$ -1	$\frac{1}{10}$	5
9	2			1	1			4			5
10	2						1				5
11				1				4			5
12	2			1				4	1	$\frac{1}{10}$	5
13	1									$\frac{1}{10}$	5
14	8				1						5
15				92	17	$\frac{1}{2}$		4		$\frac{1}{10}$	$5\frac{1}{2}$
16		1						0	1	—	$5\frac{1}{2}$
17		1						0	1	—	$5\frac{1}{2}$
18	1			14	7			4	1	$\frac{1}{10}$	$5\frac{1}{2}$
19	9			44	32			4	1	$\frac{1}{10}$	$5\frac{1}{2}$
20	1			22	12			4			$5\frac{1}{2}$
21	7			23	13			4		$\frac{1}{10}$	$5\frac{1}{2}$
22	2			6	4			4	1	$\frac{1}{10}$	$5\frac{1}{2}$
23				1				4		$\frac{1}{10}$	$5\frac{1}{2}$
24	5			21	12			4			$5\frac{1}{2}$
25	3			29	15	1		4			$5\frac{1}{2}$
26	8			54	26			4	1	$\frac{1}{10}$	$5\frac{1}{2}$
27	2			7	5			4			$5\frac{1}{2}$
28				1	1			4			$5\frac{1}{2}$
29				7	1		1	5		—	6
30	4	$10\frac{1}{2}$		5	2		47	5	1	—	6
31		1						5	$1-1\frac{1}{4}$	—	6
32					2					—	6
33	(1)	10		2	1		4	5	1	—	6
34				10	1			5	$\frac{3}{4}$	—	6
35	1										9
A	✓	✓	✓	✓	✓	✓		0	1		5
B	✓								$1\frac{1}{2}$		$9-9\frac{1}{2}$
C				✓			✓	0			6
D		✓						0	1		5
E				✓	✓						$6-6\frac{1}{2}$

*A* No. of tile  
*B* Cloisters  
*C* Upper Muniment Room  
*D* Lower Muniment Room  
*E* Audit Room  
*F* Exchequer Room  
*G* Passage between  
*H* Vestry  
*I* Keys  
*J* Thickness (inches)  
*K* Depth of inlay (inches)  
*L* Size (inches)

Group 1

Group 2

Group 3

Group 4

Group 5

Group 6

The number of keys has been checked for all the tiles from Audit Room and Vestry; for the other tiles, and for the measurements of thickness and depth of inlay, in most cases only one tile has been available for examination.

Table. Winchester College tiles.

<sup>xx</sup>  
 MlMlcccciiij in ij cameris superioribus  
 thesaurariis; Mlcxx in panetria ponendis, pro  
 Ml ij s. lxix s. ij d.

Et in soluto pro viij Ml pavyngetiel emptis  
 anno praedicto et computatis ponendis in  
 vestibulo choro cancello et corpore capelle  
 paviandis ut in papiro praedicto xxiiij s.

Custus Operum 26 Nov 1397 – 8 Dec 1398  
 (WCM75).

Et in soluto Johanni Davy et sociis suis pro  
 camera butillaria et camera granaria infra  
 brasinam paviandis cum vMlD pavyngetiell  
 dando pro Ml ij s. xj s.

Custus Domorum cum Necessariis Michael-  
 mas 1411 – Michaelmas 1412 (WCM22093).

In pavyngetiell emptis apud Neubury hoc  
 anno pro pavimento librarie una cum eisdem

ponendis et expensis positoris existentis in  
 hospicio in Soka pro v noctes xxv s. v d.

In dictis pavyngetiell cariandis a Neubury  
 usque Wynton xij s.

The Simon whose name occurs several times  
 was Simon Membury who was Clerk of the  
 Works.

The account of 1396–7 as given here was  
 in fact crossed out and was written again on  
 the back of the roll in an abbreviated form  
 and with one minor mistake.

In the account of 1395–6 'pavynystone' must  
 mean tiles and not stone slabs, cp the refer-  
 ence to 'pavyngetylestone' in the Southamp-  
 ton Brokage Book of 1443–4 (Coleman 1960,  
 30).

#### REFERENCES

*Proc.* = *Proc. Hants. Field Club & Archaeol. Soc.*

- Coleman, O., 1960, 1961. *The Brokage Book of Southampton 1443–1444* (Southampton Records Series v. 4, 5).
- Eames, E. S., 1968. *Medieval Tiles – A Handbook*, London, The British Museum.
- Emden, A. B., 1948. 'The Mediaeval Tile Pavement in the Retro-choir', *Winchester Cathedral Record*, 17, 6–12.
- Greenfield, B. W., 1892. 'Encaustic Tiles of the Middle Ages found in the South of Hampshire', *Proc.* 2, 141–166.
- Haberly, L., 1937. *Mediaeval English Pavingtiles*, Oxford, Shakespeare Head Press.
- Hohler, C., 1942. 'Medieval Pavingtiles in Buckinghamshire', *Records of Bucks*, 14, 1–49, 99–132.
- Keen, L., 1971. 'Medieval Floor Tiles from Campsea Ash Priory', *Proc. Suffolk Inst. Archaeol.*, 32, 2, 140–151.
- Kirby, T. F., 1892. *Annals of Winchester College*, London, Henry Frowde.
- Knapp, G. E. C., 1954. 'The Mediaeval Pavingtiles of the Alton Area of N.E. Hampshire', *Proc.* 18, 289–314.
- , 1956(a). 'Flemish Mediaeval Pavingtiles in Hampshire', *Proc.* 30, 29–33.
- , 1956(b). 'The Mediaeval Tiles of Winchester Cathedral', *Winchester Cathedral Record*, 25, 16–24.
- , 1959. 'A Wykehamist Tile in Timsbury Church, Hampshire', *Proc.* 31, 102–106.
- Lane, A., 1960. *A Guide to the Collection of Tiles* (2nd ed.) London, Victoria and Albert Museum.
- Oakeshott, W., 1954. 'Winchester College Library before 1750', *The Library*, 5 ser, 9, 1–16.
- Preston, A. E., 1935. 'The Demolition of Reading Abbey', *Berks. Archaeol. J.*, 39, 107–44.
- Shaw, H., 1858. *Specimens of Tile Pavements*, London.

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