

PAVING TILES OF READING ABBEY

C. F. SLADE

CONSIDERABLE work has been done on the subject of Berkshire's medieval paving tiles, but very little has yet been published¹. It is to be hoped that a comprehensive survey will emerge in the foreseeable future, and the aim of the present article is as a contribution to such a work, for none of the very few Reading Abbey paving tiles that remain *in situ* are visible: a few, of unknown design, probably remain in the area of the abbey church; and a few, of known design but badly decayed, remain in the cloister area. The reason for this loss and destruction is implicit in the fate of the abbey, whose ruins saw at various times military trenching, market gardening and gravel digging. There are a few nineteenth-century references to abbey paving tiles, mainly in connection with their destruction in building or digging operations, but the references are few compared with the amount of such activity that took place. Archaeological excavations² in the cloister area in 1964 and 1967 gave many types previously unknown, some still in their mortar bed, others in the *débris* layers, and the excavations also made it possible to confirm the attribution to Reading Abbey of certain tiles in Reading Museum and elsewhere. There remain in these collections several tiles for which excavation has produced no parallel; but as excavation has been limited it seemed reasonable to accept the honesty of donors of times past and to include such tiles as genuinely from the abbey.

Paving-tile makers were among the humbler craftsmen of medieval times and many, though not all, appear to have been peripatetic, making their tiles somewhere near the building for which they were required. At one stage, however, during the late thirteenth and

fourteenth centuries a tilery was established at Penn, Buckinghamshire, that produced as a major commercial concern, sending its products well beyond the immediate locality, and it is likely that this tilery pioneered, in the south at least, a new technique in the manufacture of patterned tiles. It is impossible to make any sure chronological division between the two techniques, but what in general was the earlier consisted in stamping the leather-hard clay with an embossed wooden stamp, filling the impressions with soft white clay and scraping off the surplus. The later technique was to coat the stamp with the white clay which was then impressed into the tile. Difference in technique shows in the finished product. The designs of the first group, usually called inlaid tiles, have sharp lines and the white inlay is rarely less than $\frac{1}{8}$ in thick; the designs of the second group, usually called printed tiles, are very slightly indented, have less clean lines, and the white rarely exceeds $\frac{1}{16}$ in thickness. In the illustrations of tiles in the Appendix those inlaid have the prefix I, those printed the prefix P.

The tile-box in which the tile was made and the stamp that impressed the design would normally be of the same size, so any faults would be due to bad stamping or to badly carved design. At times, however, certain motifs may have been carved individually and added to the design as required. Patterns could wear out or be lost, so that a new one might have to be cut if it was desired to replace a worn or damaged tile by a new. An example of this is I.17a,b although it is impossible to say which was the original. Where half or quarter tiles were needed to complete a design they were normally produced by cutting from the surface at leather-hard stage to half

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the depth and the remainder broken after firing. Where small tiles were required they might be manufactured in blocks, usually of four, and separated in the way described above. Such divided tiles have vertical sides, but the sides of those made individually are normally battered, sloping inwards from the top, so that when they were levelled in their mortar-bed it would allow mortar to rise between them but not to appear at the surface. The amount of batter is something under $\frac{1}{4}$ in for an inch-thick tile. A feature of the inlaid tiles is that they have keying-holes scooped in the base of the tile with, apparently, a mason's trowel, the larger tiles having four or five, the smaller tiles one. The only variation occurs in I.13 where a number of diagonal holes half an inch deep were made with, presumably, a stick. The object of these keying-holes is hard to perceive, but is probably best explained as a survival from times when tiles were essentially wall tiles, for which keying-holes would be a necessity. Why I.5, I.17a,b, I.20a,b, I.24 and I.27 should lack such holes is not obvious: it may be due to oversight on the part of the tiler or it may indicate a later date for manufacture. Printed tiles do not have keying-holes.

The present examples are of clay which fired red, but for all the inlaid and for some of the printed tiles oxidization was incomplete and tile centres remained grey, the grey in some cases being visible on the top surface. This is one factor that gives variation to the surface colours, for the yellowish glaze with which tiles were coated appears brownish over red, greenish over grey. A second factor is in the nature of the glaze, a lead glaze that contained impurities of copper, manganese and iron that give spots and areas of green, purple-black and brown respectively. A third factor is in the white clay used for the design, for if infiltrated into too soft a surface it would pick up a pinkish tinge from the surrounding red or if surplus was carelessly scraped off red could be trailed over the remaining white: white thus affected became pink which shows as orange through the yellow glaze. Tiles were glazed to save wear and tear.

To what extent tile sizes, judged by the present examples, were standardized is difficult to say. The majority of inlaid are about $6\frac{1}{2}$ in square, and the next largest group $3\frac{1}{2}$ in square. The majority of printed are $4\frac{1}{2}$ in square with one only of $6\frac{1}{2}$ in. This last is about one inch thick which is the usual thickness of inlaid tiles as against the $\frac{3}{4}$ in of the printed. Approximately equal thickness in the tiles being laid at any one time would be an advantage but not a necessity, for the mortar-bed, usually some 3 in deep, would take up any reasonable difference. On the other hand the greater the uniformity in linear measurement the better among tiles covering a particular area both from the aesthetic point of view and for ease of fitting, for tiles were laid in patterns often of considerable ingenuity and complexity. Four laid groups are known for the cloister area of Reading Abbey: three of these are shown in Plates I and II, the fourth was so badly worn that few designs survived. They are comparatively simple, but the destroyed areas between them make it impossible to know the way in which one pattern joined with another. The first is uniform but the second and third show signs of patching. The date of such repair cannot be deduced and it could even have been after the abbey ceased to function as such but was still in use for residential purposes; in this case repairs would have been done with tiles already in existence. Group I lay in the south walk of the cloisters. It is of reasonable size and preservation and shows no signs of patching and so gives a fair representation of how the cloisters looked when in use. The tiles used are I.2, 3, 4, 14, 21, and unpatterned type I. Group II was towards the north end of the west walk. Its condition was not good, but most of the types used could be identified; these were I.1, 8, 15, 24 with triangular unpatterned tiles of types I, II and III used along the inner edge; in addition I.6, 7, 25 had been used for patching. There was thus no identity of tile types between the two areas although both show a similar concept of design with tiles laid diagonally and the design divided by a horizontal band and by an offset

diagonal band. The last group, Group III, lay between them near the south end of the west cloister but had a concept of design that was quite different with two varieties only, I.1 and unpatterned type I: the others, I.3, 16, 33 and unpatterned types I and III represent rather rough repairs.

The patterns on the tiles themselves are markedly unreligious. Possibly I.17 can be regarded as the cock associated with St. Peter, but it could equally well be considered with the other animals and birds. Human beings do not appear apart from the conventional heads shown on I.2, 3 and P.1. The more complex patterns are composed of geometrical shapes, flowers and foliage, some pleasing, some fussy and overdone: some of these were designed to lie on their own, others in groups of four. The mythical animal of I.15 has a later parallel in P.7, likewise the stags of I.16 in P.8: in this latter case naturalism has given way to abstraction. The small tiles are generally of formalized individual animals or flowers. There are three heraldic tiles: I.32 and P.12 are somewhat stereotyped—the latter has been identified at St. Augustine's Abbey, Bristol—but P.11, a well-made tile, shows the three scallop shells that figure on the abbey arms and was clearly a special order. I.1 represents the lower part of a draped figure.⁴ Scale drawings of all types will be found in the Appendix.

It is impossible to say where or under what circumstances the great majority of these tiles were made. Nine of the printed tiles can be paralleled by those made at Penn or similar tileries, and it can be presumed that these particular Reading tiles were made there (P.1-9). The remaining three printed have no certain attribution although the Bristol parallel to P.12 suggests wide distribution from some centre. Parallels can at present be found for 5 of the inlaid (I.5, 7, 11, 12, 15). These are examples of so-called Wessex tiles, made in that part of the country during the thirteenth century. Others of equally good design but with no parallel examples at present known may be presumed to be of the same variety. The very professional I.13 has a number of

parallels, and its unusual fabric suggests that it came from some established tile works. From whence came the others is surmise. Reading Abbey possessed a tillery, possibly that at Tilehurst, by the later twelfth century,³ but the medieval kilns have never been found and it may have manufactured roof-tiles only. Possibly some of the tiles unique to the abbey may have been made at Tilehurst or elsewhere local by tilemakers who, so to speak, were but on the fringe of floor-tile professionalism.

No documentary evidence survives for detail of building works on the abbey, whether original work or repairs. All the printed tiles excavated came from the *débris* layers and may show a relaying of the floors of the offices and refectory that adjoined the cloisters. The four tile-groups *in situ* in the cloisters are inlaid tiles as, incidentally, are those used for patching them. The building of the abbey started in 1121 and the church was consecrated in 1164, so the first flooring of the cloisters must have been done between these dates. If the existing patches, or some of them, represent this first flooring then they are at least a generation or so earlier than is usually taken for the extensive use of patterned floor-tiles. The suggestions—they are hardly strong enough to be called reasons—for an early date are that in each case the mortar-bed appears uniform with no perceptible evidence of relaying; the mortar-bed of the third group illustrated contained five small sherds of the twelfth or early thirteenth century; and the mortar-bed of the second group contained a small piece of cut lead discarded during building operations.

Glazed, unpatterned tiles were frequently used in the design over areas of floor, and classification by colour gives three types:

I. Very dark green. This is due to very heavy glaze of that colour. Two sizes are known: *c.* 6½ in square by up to 1½ in thick, and 4½ in square by 1 in thick. These surface sizes correspond with those of the majority of inlaid and printed tiles respectively, and the larger have trowel-made keying-holes. The tiles of this colour *in situ* are each one-third

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the width of the larger sized mentioned above: in Group I in the cloister area they frame the central border and are an integral part of the design.

II. Light brown. This is the result of yellow glaze over clay fired red. All square specimens were found in the débris layers, and those complete or whose sizes could be reconstructed were all $6\frac{1}{2}$ in square and about $1\frac{1}{2}$ in thick. A few triangular were *in situ* in the area of Group II in the cloister area.

III. Dull yellow. The surface of the tile has a layer of white slip over which is yellow glaze. Most surviving specimens are fragmentary, but those reasonably preserved are of two sizes, 6 in square by $1\frac{1}{4}$ in thick and $7\frac{1}{2}$ in square by up to $1\frac{3}{4}$ in thick. Examples of the smaller type, some cut diagonally, are *in situ* in Groups II and III although the larger whole ones in the latter area would seem, with their poor fit, to be repairs. Both sizes have trowel-made keying-holes.

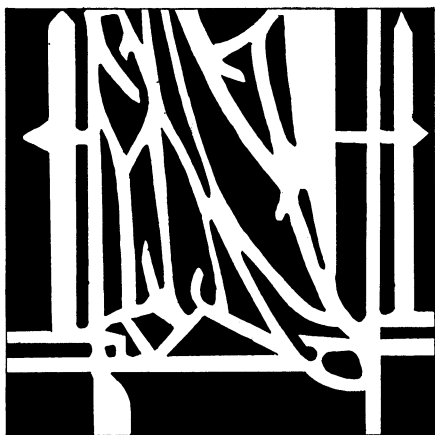
There are, finally, a few unglazed floor-tiles, whose surfaces are red although broken specimens show that some centres were grey. They are of two sizes, $6\frac{1}{2}$ in square by $1\frac{1}{4}$ in and $4\frac{1}{2}$ in square by $\frac{3}{4}$ in, measurements that again correspond with those of the majority of inlaid and printed tiles respectively. Some of the smaller were *in situ* in Group III but had clearly been used for repairs.

REFERENCES

- ¹ An important exception is in B.A.J. 42 (1938): *Medieval Floor-tiles at St. Mary's Priory, Hurley, Berks.*
- ² An excavation report will appear in Vol. 65 of the B.A.J.
- ³ Brit. Mus. Cott. MS. Vesp. E. xxx, f. 151.
- ⁴ No tile with the upper part of this figure has been found. That examples of I.1 were *in situ* in two areas hints that they were treated as complete in themselves. Could they have been left-overs bought on the cheap?

APPENDIX

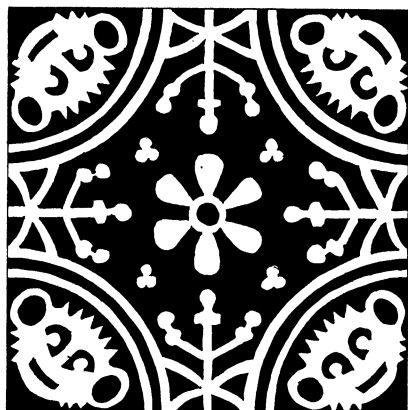
TILE DESIGNS: Scale $\frac{1}{3}$



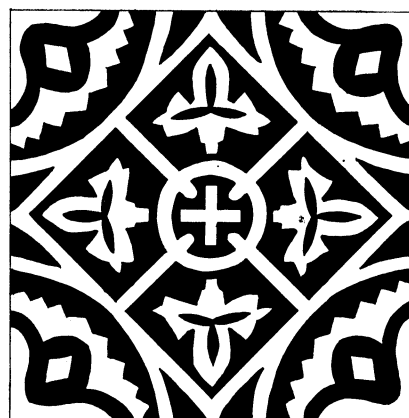
I.1



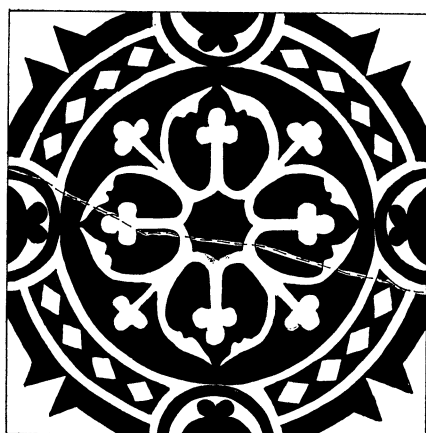
I.2



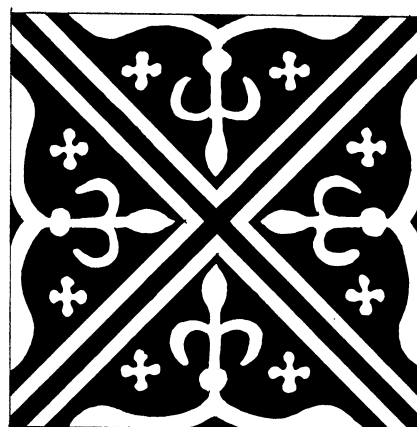
I.3



I.4



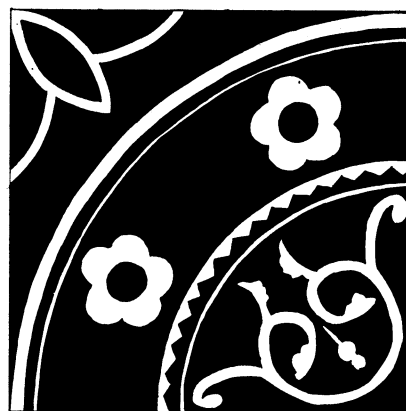
I.5



I.6



I.7



I.8

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I.9



I.10



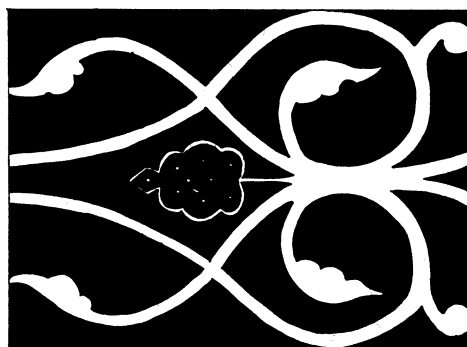
I.11



I.12



I.13



I.14



I.15



I.16



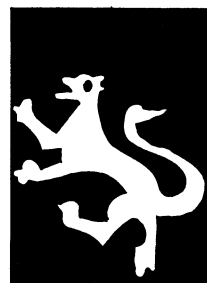
I.17a



I.17b



I.18



I.19

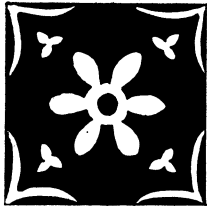


I.20a

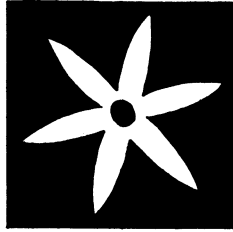


I.20b

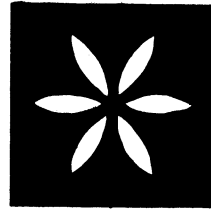
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I.21



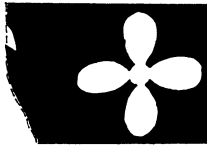
I.22



I.23



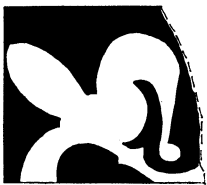
I.24



I.25



I.26



I.27



I.28



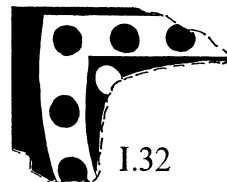
I.29



I.30



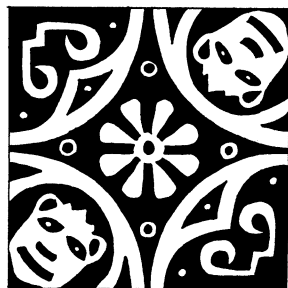
I.31



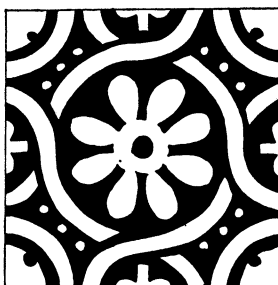
I.32



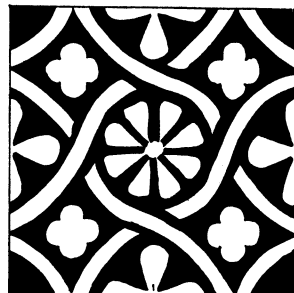
I.33



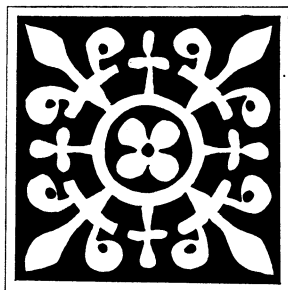
P.1



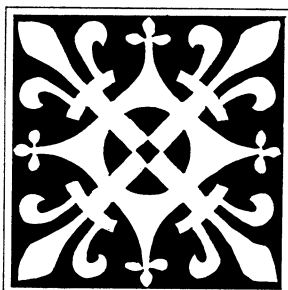
P.2



P.3



P.4



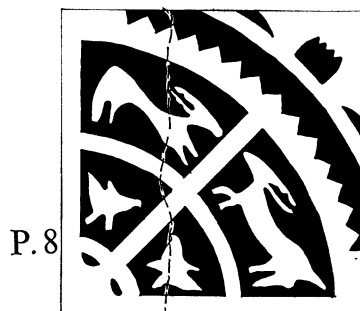
P.5



P.6



P.7



P.8



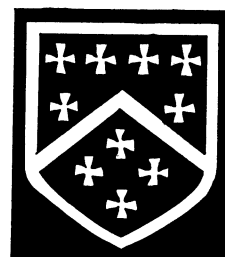
P.9



P.10



P.11



P.12

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NOTES

These notes give the provenance of each tile and, where possible, any parallel. Tiles found in the cloister area of Reading Abbey during the excavations of 1964 and 1967 are noted as 'Cloisters' and then described as *in situ* or in *débris* layer, and, unless the find was fragmentary, no reference is made to museums where other reputed Reading examples are. Those that are known only from examples in museums have the name of the museum or, occasionally, museums. Specimens of all types except I.9 are now in Reading Museum. For examples from other places of the tiles shown here reference is made to Hohler, Haberley and L.M. These are:

- C. Hohler, *Medieval Pavingtiles in Buckinghamshire*, Records of Buckinghamshire, vol. XIV.
- L. Haberley, *Medieval English Pavingtiles*, Blackwell, 1937.
- London Museum Medieval Catalogue.

INLAID TILES

- I.1 Cloisters, *in situ*.
- I.2 Cloisters, *in situ*.
- I.3 Cloisters, *in situ*.
- I.4 Cloisters, *in situ*.
- I.5 Reading Museum, no accession number. See Hohler W/11. The part below the broken line has been reconstructed from Hohler's drawing.
- I.6 Cloisters, *in situ* and in *débris* layer. No complete tile is yet known. Some of the surviving pieces show deliberate quartering along the diagonals.
- I.7 Cloisters, *in situ* (one fragment) and in *débris* layer; a complete tile is in Reading Museum, no accession number. See Hohler W/35.
- I.8 Cloisters, *débris* layer; Reading Museum, no accession number. There is an illustration of this type in *Berks. Arch. J.* 46 (1942), p. 105, where it was reported by T. H. Morley as *in situ* in 'the passage leading to the Abbot's apartments', and thus near the cloister area.
- I.9 Victoria and Albert Museum.
- I.10 Cloisters, *débris* layer. The portion illustrated has been reconstructed from two fragments.
- I.11 Reading Museum, no accession number, part of a well-made tile; Victoria and Albert Museum, a poor specimen. See Haberley no. CCXXXVIII, a drawing of a vanished Dorchester Abbey printed tile. In view of these two Reading Abbey specimens it may be wondered whether the Dorchester tile was not inlaid rather than printed.
- I.12 Cloisters, on mortar bed but not certainly *in situ*. This surviving piece can be paralleled in Haberley nos. XVII, XVIII, XIX and, a poor specimen, in Hohler W/29.
- I.13 Cloisters, *débris* layer. See Hohler W/18: other parallels in fabric or pattern come from Bradfield, Rewley and Dunstable (information kindly supplied by Mrs Eames of the British Museum). The parts outside the broken lines have been reconstructed.
- I.14 Cloisters, *in situ*.
- I.15 Cloisters, *in situ*. See Hohler W/25, with very slight variation. The two specimens in Reading Museum were probably found by T. H. Morley in 1942: see note to I.8.
- I.16 Cloisters, *in situ*.
- I.17 a. Archaeology Museum, University of Reading.
b. Cloisters, *débris* layer. The outlying parts of the design have been reconstructed.
- I.18 Cloisters, *débris* layer (a fragment); Reading Museum, no accession number.
- I.19 Reading Museum, no accession number.
- I.20 a. Cloisters, *in situ*.
b. Cloisters, *débris* layer.
- I.21 Cloisters, *in situ*.
- I.22 Cloisters, *débris* layer (a part); Reading Museum, no accession number.
- I.23 Reading Museum, no accession number.
- I.24 Cloisters, *in situ*. The centring of this design varied so much from tile to tile that the stamp can have consisted of little other than the actual design.
- I.25 Cloisters, *in situ*.
- I.26 Cloisters, *débris* layer.
- I.27 Cloisters, *in situ*.
- I.28 Cloisters, *débris* layer.
- I.29 Cloisters, *débris* layer.
- I.30 Cloisters, *débris* layer.
- I.31 Cloisters, *débris* layer.
- I.32 Cloisters, *débris* layer.
- I.33 Cloisters, *in situ*.

PRINTED TILES

- P.1 Reading Museum, accession number 52/44/4. See Hohler P/73; L.M. fig. 76, no. 6.
- P.2 Cloisters, *débris* layer (a part); Reading Museum, marked 'Reading Abbey'. See Hohler P/64; L.M. fig. 77, no. 20, although both are slightly different forms with blanks instead of three dots in the interstices. The Reading Museum specimen is far superior to that found in the *débris* layer, which is badly printed and badly fired.
- P.3 Reading Museum, no accession number. See Hohler P/62, which has two dots instead of quatrefoils in the interstices.
- P.4 Reading Museum, no accession number. See Hohler P/69; L.M. fig. 80, no. 4.
- P.5 Reading Museum, no accession number; British Museum, R. 46. See Hohler P/71; L.M. fig. 80, no. 50.

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- P.6 Reading Museum, no accession number. See Hohler P/107; L.M. fig. 82, no. 74. Hohler illustrates a group of four; the Reading Abbey specimen was finally parted from others of its group after firing.
- P.7 Cloisters, débris layer (a fragment); Reading Museum, no accession number. See Hohler P/121; L.M. fig. 77, no. 19.
- P.8 Cloisters, débris layer. See Hohler P/128; L.M. fig. 76, no. 10. The smaller part was found in the débris layer, the rest is reconstructed from Hohler.
- P.9 Reading Museum, marked 'Reading Abbey: 90: 30. Given by T. H. Morley Oct 1930'. See Hohler P/142, P/143. The Reading abbey specimen has slight differences in detail from each of these.
- P.10 Cloisters, débris layer (a fragment).
- P.11 Cloisters, débris layer. This tile has a foliate design containing the Abbey crest of three scallop shells.
- P.12 Reading Museum, accession number 44.36. The Alwyn Compton Collection, Society of Antiquaries, shows a parallel in Bristol Cathedral Vestry.