

## FURTHER DISCOVERIES OF TILE FRAGMENTS AND WASTERS IN CONNEXION WITH FOURTEENTH- CENTURY PAVING-TILE AND ROOF-TILE KILNS AT PENN

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FRESH evidence of the existence and approximate location of one of the Penn tile-kilns known to have been in operation in the fourteenth century has lately been forthcoming. It seems desirable to place the information on record at this stage, though further developments may be hoped for.

Fragments, of both roofing- and paving-tiles, have been found in various gardens at the Tyler's Green end of Penn for many years. The first positive evidence of a concentration of tiles, many of which were clearly wasters and debris in connexion with a kiln, was found in 1939 in the garden of an old cottage on the north side of the road from Penn to Tyler's Green, opposite Slade's Garage, and the lane to Beacon Hill between the cottage (which lies at right-angles to the road) and the road itself, just over half a mile a shade north of west from Holy Trinity Church, Penn. (Ordnance Survey, six inches to one mile, Bucks. Sheet XLVII, N.E.)

This find was made in digging a cess-pit in the cottage garden, but unfortunately conditions did not allow of an extension of the excavation. Layers of mixed clay and a jumbled deposit of tile fragments, both roof and floor, were encountered at a depth of 18 inches to 3 feet, and no intelligible stratification could be observed. The find was referred to, and the types identified were listed in Mr. Christopher Hohler's paper in *Records of Bucks.*, vol. XIV, 1-49 and 99-132.

The other finds have been made in the grounds of 'Cobblers', the residence of Mr. J. D. Broadbent, on the corner of Penn Road and Beacon Hill Lane opposite the original site, and on the adjoining property of Mr. Winter, at 'Grass-Side', some 350 feet south-east of the first location.

Mr. Broadbent submitted the finds to the Department of British and Medieval Antiquities at the British Museum, who reported on them as follows:

Wasters of Tiles of Penn series found in the garden of John Broadbent, Esq., 'Cobblers', Penn, Bucks., and at present in his possession.

- Hohler's P/50. 2 contiguous surface fragments.  
" P/68. Without the border-line at the edges of tile.  
    { 1 whole.  
    { 1 surface fragment, about  $\frac{2}{3}$  tile.  
    { 1 fragment about  $\frac{1}{2}$  tile fused on to the top of another during firing (the design of the lower fragment is completely concealed).  
" P/89. 1 corner fragment.  
" P/101. 1 fragment about  $\frac{2}{3}$  tile; 1 corner fragment.

- Hohler's P/104. 1 fragment about  $\frac{1}{2}$  tile, right-hand side.  
 .. P/158. 1 tile with corner broken off, and surface fragments.  
 .. ? P/159. 1 very small fragment.

Not identical with any design in Hohler's series:

- 1 fragment resembling P/144 and 150.
- 1 corner fragment, apparently a lion's mask crowned outside the arc of a circle.
- 1 corner fragment of a single-tile design, which appears to consist of a foliate motif in a square set diagonally to the side of the tile, in the existing outer corner a dog-toothed line running parallel with the line of the square, and an indecipherable ? foliate motif in the outermost corner.

Fragments and Wasters of Tiles of the Penn series found in the garden of Mr. Winter, 'Grass-Side,' Penn, Bucks., and at present in his possession.

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|--------------------|---|--|
| Hohler's P/50.     | { | 1 fragment, top left-hand corner.<br>1 small ditto.<br>1 ditto right-hand corner.<br>1 fragment, left side.  |
| " P/48<br>or 50.   | { | 2 fragments, each about $\frac{2}{3}$ lower part of tile.<br>1 fragment: centre fleur-de-lys surrounded by 4 segments of circle. Could be any design of this type, as there are no corners to identify the exact one.<br>1 fragment $\frac{2}{3}$ tile, right side: surface chipped. |
| " P/62.            | { | 1 corner fragment.<br>1 corner fragment probably of this design.   |
| " P/68.            |   | Without border-line surrounding the tile, 4 corner fragments.  |
| " P/88.            |   | 1 surface fragment.  |
| " P/101.           |   | 1 corner surface fragment.   |
| " P/152<br>or 153. |   | 1 corner fragment.   |
| " P/158.           |   | 1 fragment about $\frac{1}{2}$ tile.   |
- A number of fragments of plain tiles, yellow, brown, and green.  
 6 wasters on which the pattern cannot be identified.  
 3 fragments with small portions of pattern which do not appear to be part of any of Hohler's series, but are insufficient to indicate the probable form of the design.  
 1 fragment of a slightly different tile. The design is not in Hohler's series. Design and execution are better than most of the Penn tiles. The design has sharp edges depressed slightly below the surface of the tile in the same manner as some of the tiles from St. Albans. The tile is about 1 inch thick, which is thicker than the usual Penn series, and the clay is pinker.  
 1 corner fragment, a lion's mask flanked by fleur-de-lys under a portion of an arc. This may perhaps be early and a prototype of the commoner Penn series.

It will be seen from the report that there is the possibility of adding some new types to Hohler's list. The occurrence of a St. Albans type tile is of interest. It is possible that this was, in fact, a pattern, and not a product of the local kiln. The yellow, brown, and green plain tiles are also a fresh addition to the wares produced at Penn.

Mr. Broadbent has kindly drawn the sketch-map to illustrate the article (Fig. 2), as well as the St. Albans tile fragment, and he has contributed the following observations on his discoveries. We are grateful to him for his interest and co-operation.

'The first finds of the present series were made during the winter of 1947-1948,

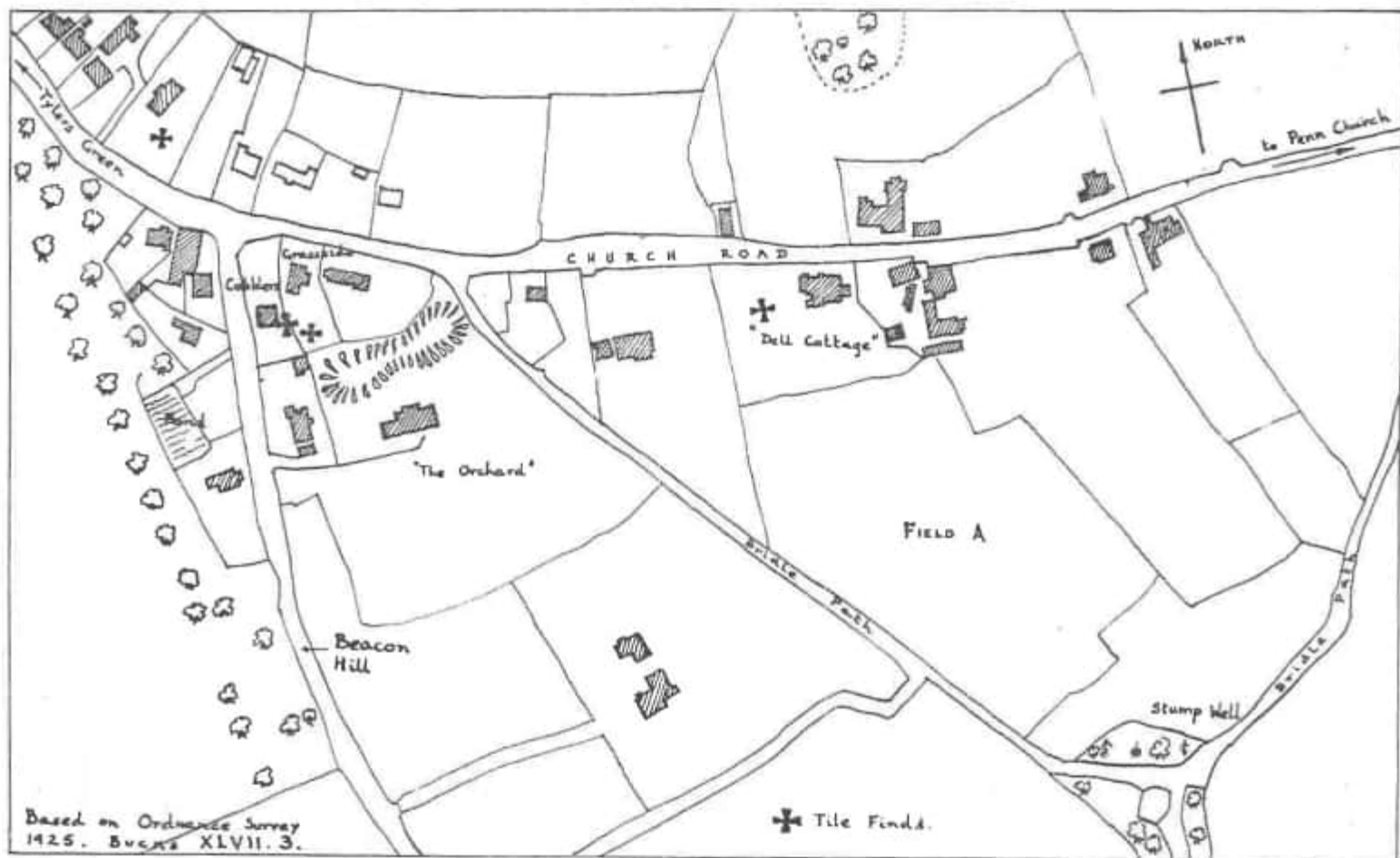


FIG. 2.

Drawing by J. D. Broadbent.

but their significance was not noted. In digging foundation trenches for a wall on the line of the boundary between "Cobblers" and "Grass-Side" in Church Road, Penn, I found at a depth of about 18 inches a thick layer of roofing-tile fragments embedded in a dirty blue clay. Amongst the fragments, I found parts of glazed floor tiles and one complete specimen. This I recognized as identical with one of the fourteenth-century tiles near the chancel arch of Great Hampden Church, a fact which I later verified. I had then recently completed a survey of Penn Church, and had noted that the floor had been stripped during the nineteenth century and replaced by a timber floor between the pews. My cottage was reputed to be that of the village carpenter, and I assumed that I had struck builders' rubble. The fragments were preserved.

Early in 1950, in extending the same wall, I discovered two fragments clearly fused together by their glaze. The Ministry of Works referred me to the British

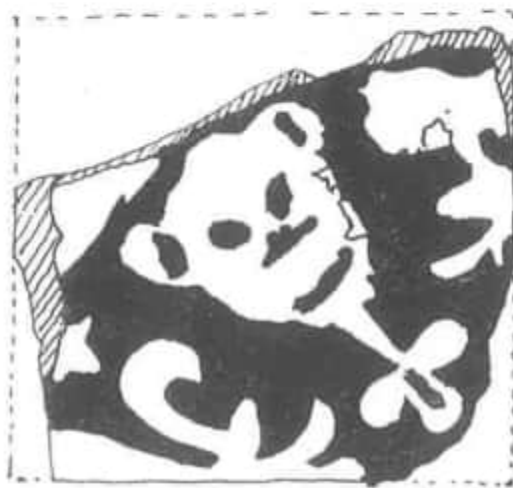


FIG. 3.

Museum, who promised to send one of their staff. I asked permission of my neighbour, Mr. Crispin Winter, to look at parts of his garden, and he mentioned that he had often found pieces of tile. Mrs. Elizabeth Eames, of the British and Medieval Antiquities Dept. of the British Museum, visited my cottage and catalogued my own finds, which are listed elsewhere. We went to "Grass-Side", where Mr. Winter greeted us with a shopping basket of fragments collected from the surface of the garden. The largest of these were catalogued, and among them was found one of a much pinker clay, thought to have come from St. Albans. This fragment is illustrated (Fig. 3).

Since, I have heard of a further find during well-digging in the grounds of "Dell Cottage", though I have not yet identified these fragments. This find is marked on the plan, as is also the original find referred to in Mr. Christopher Hohler's paper in the *Records of Bucks.*, vol. XIV, already referred to.

From observing various excavations in the area, the geological formation is seen to consist of a yellow clay with sand and gravel overlaying chalk. In Tyler's Green, the clay is 16 ft. deep, but in the vicinity of Beacon Hill there is 8-10 ft. of clay

on 2 ft. of very fine, gritty sand. I have therefore looked at the area for evidence of clay-getting. Immediately adjoining my site in the garden of "The Orchard", there is a considerable pit which the owner, Mrs. Hayter, kindly allowed me to search. The greater part corresponds in depth to the thickness of the clay, though a part has been carried deeper to get chalk. On the opposite side of Beacon Hill there is a large pond of great depth which must be lined with clay to retain water, and this may have been a clay pit. On Tyler's Green Common there are several old pits, some partially refilled. At Field "A" on the map, below the garden of "Dell Cottage", the whole surface of the ground appears to be broken, but it is difficult to say from inspection whether clay has been got from it.

'From written records, it seems to have been assumed that the bulk of the tiles were shipped from Hedsor Wharf, and it is interesting to note that old paths from Penn lead down to the Wye Valley or across higher ground towards Hedsor. Both Beacon Hill and the bridle-path system centred around Stump Well connect by remaining paths directly to Hedsor Wharf.

'From other medieval examples, it seems likely that the Penn tiles were burnt in a kiln in the form of a tile vault perhaps 25 ft. long. From talks with Mr. Hoare, director of the Daneshill Brick Co., who still produce some of their products by hand methods, it seems that such a kiln would have a limited life at the end of which it would be very fully vitrified, almost a homogeneous piece of glass, which would be very difficult to demolish. No such fragments have yet been found in heaps of wasters. The only other equipment would be hand tools and moulds, so that it would be possible when replacing a kiln to move the whole site to wherever clay, sand, water, and charcoal were most easily available.

'It would therefore be interesting to try to prove whether the scattering of finds of wasters was caused by a number of kilns working independently or by a single group of tilemakers moving from site to site, or a combination of both. It will require a proper excavation of each heap of wasters to establish real evidence to support any theory. This I hope to be able to do if expert help can be enlisted.'