

## ROMAN TILE-KILN AT ELSTREE, HERTFORDSHIRE

By HELEN E. O'NEIL, F.S.A.

DR. NORMAN DAVEY, F.S.A., located the site of this kiln at Elstree during the summer of 1947 in the garden of Mr. A. J. Child, of High Street, Elstree. A great deal of the area in the gardens on the hill-top, on the west side of Watling Street at the north end of the village of Elstree, is thickly strewn with broken fragments of Roman tiles and bricks which led Dr. Davey to suspect the presence of kilns. From local information it was learnt that at every point dug into and cultivated masses of broken tiles were encountered and that on the fall of old elm trees bordering the back of the gardens quantities of tiles had been uprooted, in fact so many that one report stated that a paved floor had been seen.

A trial trench was dug by Dr. Davey with the help of Mr. G. F. Cole from which it was realised that further excavation might be profitable. I was therefore invited by Dr. Davey to undertake the examination of the site.

With the permission of the owner, Lord Aldenham, and the tenant, Mr. A. J. Child; to the latter I am much indebted for every facility and hospitality, the excavation was carried out from October, 1947, to March, 1948. I wish also to record my thanks to Mr. F. C. Vickery, Mr. G. F. Cole and other friends for help with the digging, to Miss K. M. Richardson for help with the pottery and to Mr. A. W. G. Lowther for identification of stamp patterns on tiles.

The site (6-inch O.S. Herts, 45 N.W.) lies 60 yards west of Watling Street in the back garden of the house in High Street, adjoining the south side of the Holly Bush Inn which is situated at the north end of the village.

The village of Elstree is on high ground, just over the 400 foot contour line, at the west end of an isolated spur of hilly ground bordering the northern extent of the London basin. There is steeply sloping ground on three sides, south, west and north. The geological formation is of Claygate Beds, with the slightly higher ground to the east of the village on Pebble Beds, while below the 400 foot contour line lies the London clay (1-inch Geo. Survey. Drift, Sheet 256).

The area available for excavation in Mr. Child's garden measured 14 feet by 9 feet and from this it was possible to

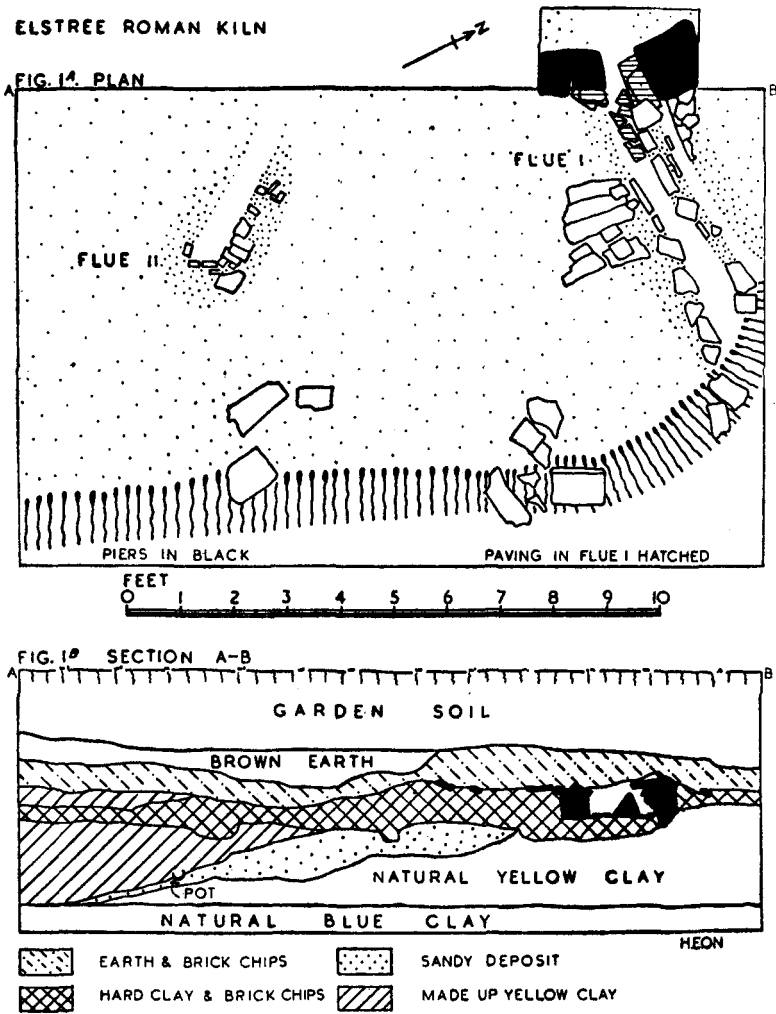


FIG. 1. Plan and Section of Elstree Roman Brick Kiln.

recover the north-east half of the edge of a large clay construction with the remains of two flues within it (Fig. 1A, Plan). This mass of clay was thickly interspersed with brick and tile chips which constituted the remains of one of the layers forming the body of what seemed to be a very large kiln. The area

found represents probably only a quarter of the kiln. A construction of this size seemed to point to the fact that the kiln must have been for the manufacture of bricks and tiles and not one for pottery.

A great deal of the superstructure of the kiln had been long destroyed by cultivation, so that only the very slight remains were *in situ*. Below the garden soil (Fig. 1B, Section A-B) lay an irregular level of earth mixed with a mass of brick chips and a few pot-sherds of Roman date. Some other sherds recovered from the bottom of this level were of 17th century Staffordshire brown and yellow slip ware. This level rested on one of thick clay mixed with brick chips. Built into this level were the remains of two brick piers astride the channel of a flue (Flue I), running to the north-east angle of the edge of the kiln. This channel was divided into two and was formed out of the thick clay and brick chip mixture, though some bricks were used to reinforce its sides. A soft sandy filling was found in the flue.

Only the slightest remains of Flue II were found, but this again was formed in the same material as Flue I though dug a little deeper and reaching into a level of made-up yellow clay below. These two flues were placed relatively to each other in positions which suggest a plan for the lay-out of the kiln of a central flue with others radiating from it. Quantities of large pieces of broken bricks and tiles, *tegulae* and *imbricies* were incorporated in the different levels and in the areas near the flues the clay mixture had been burnt bright red and to a brick-like consistency. It is clear that the kiln was built, used, broken up and used again many times. There was evidence of the presence of intense heat close at hand, but at no point could the central flue or the furnace be located.

Below Flue II lay a level of made up yellow clay, which partly rested on a sandy clay deposit, from whose surface came a smashed base of a thin-walled light-coloured sandy ware pot. Below these levels the natural blue clay was reached at a depth of four and a half feet.

Lying on and incorporated into the sloping bank making up the edge of the kiln were the remains of *imbricies* (some with wavy scored patterns), *tegulae*, one of which was complete ( $16\frac{1}{2}$  inches  $\times$   $12\frac{3}{4}$  inches) and now in the Verulamium Museum, and many bricks. One of the tiles was stamped with a pattern belonging to Mr. A. W. G. Lowther's Group 9 (Plain Chevron) Series of stamped patterns on Roman Flue Tiles, Die No. 36.<sup>1</sup>

Very few pot-sherds were recovered from any of the layers, but all were of the same thin-walled light-coloured sandy ware similar to the type found so profusely on Brockley Hill and dated by Miss K. M. Richardson to late first-early second century A.D.<sup>2</sup>

On the lower slopes of the hillside to the west and north of the site are large grass grown depressions in the ground. As they

FIG. 2

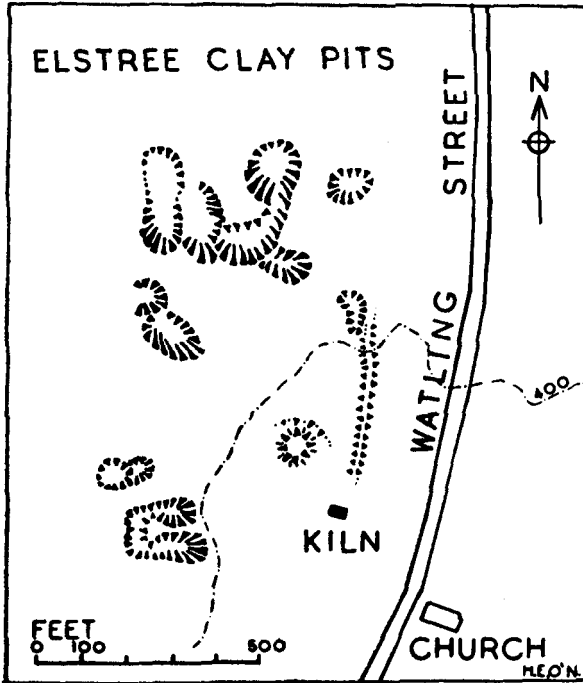


FIG. 2. Plan of Clay Pits at Elstree.

appear to be of some age, there is a possibility that they were the clay pits used by the Roman tile makers. A plan (Fig. 2) of some of these is shown. They are all situated on the London clay area and though on the slope of the hill-side must have been dug in places as deep as six feet into the ground. Some of the pits now contain water, but whether this was also intended in Roman times it is not possible now to know. It is perhaps significant that leading from the kiln northwards to the first claypit on the map, which now contains water, there is a raised track which can clearly be located in dry weather.

There is also a large circular low mound to the north-west of the kiln which would repay careful excavation, but at present there is no indication of its date or use.

NOTES

1. *A Study of the Patterns on Roman Flue-Tiles and Their Distribution.* A. W. G. Lowther, F.S.A. Research Papers of the Surrey Archaeological Society. No. 1, p. 15. Fig. 18, No. 36.
2. '*Report on the Excavations at Brockley Hill, Middlesex.*' Miss K. M. Richardson, F.S.A., London and Middlesex Archaeological Society's Transactions, New Series, Vol. X, Part I, 1948.