

ART. V.—*The Roman tiler, Scalesceugh, 1970-1971.*

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*Read at Kendal, July 13th, 1973.*

IT has been accepted for many years that the site of the present Scalesceugh Hall and the fields immediately south of it covered the remains of a substantial Roman tiler, probably established in the 1st century. Mr R. L. Bellhouse has recently (CW2 lxxi 35) reviewed the evidence, and recorded his examination of the area carried out in 1961; up to 1970, however, no buildings or kiln structures had been located. The present paper reports the excavation of the first structural remains which have been uncovered on this site. A small pottery kiln which, with its stokehole, had been filled in and levelled off in Roman times, to be covered by a paved and cobbled working floor, and part of the foundations of a substantial stone enclosure wall, were exposed. During the excavations a magnetometer survey was carried out by the Department of the Environment, which gave clear indications of the existence of about 25 kilns in the two fields south of Scalesceugh Hall.

### *The site.*

The fields in which the tiler lies are situated on either side of the private road running northwards from the foot of Wragmire Bank, on the A6 Carlisle-Penrith road, to Scalesceugh Hall. This road lies approximately on the presumed line of the main Roman road from Voreda (Old Penrith) to Carlisle. The western field is bounded by a steep scarp above the river Petteril and a small tributary stream. Examination of this scarp revealed quantities of tile fragments,

most of them clearly wasters from the kilns. The underlying stratum is the normal red boulder-clay of the Solway plain. Mr Bellhouse commented on the possible use of this clay for tile making; it may be noted that tile manufacture was carried on in comparatively recent years on a site on the other side of the A6 only some 300 yards south of the Roman tilerly.

**SCALESCEUGH  
ROMAN TILERY**

MAGNETIC SURVEY  
1971

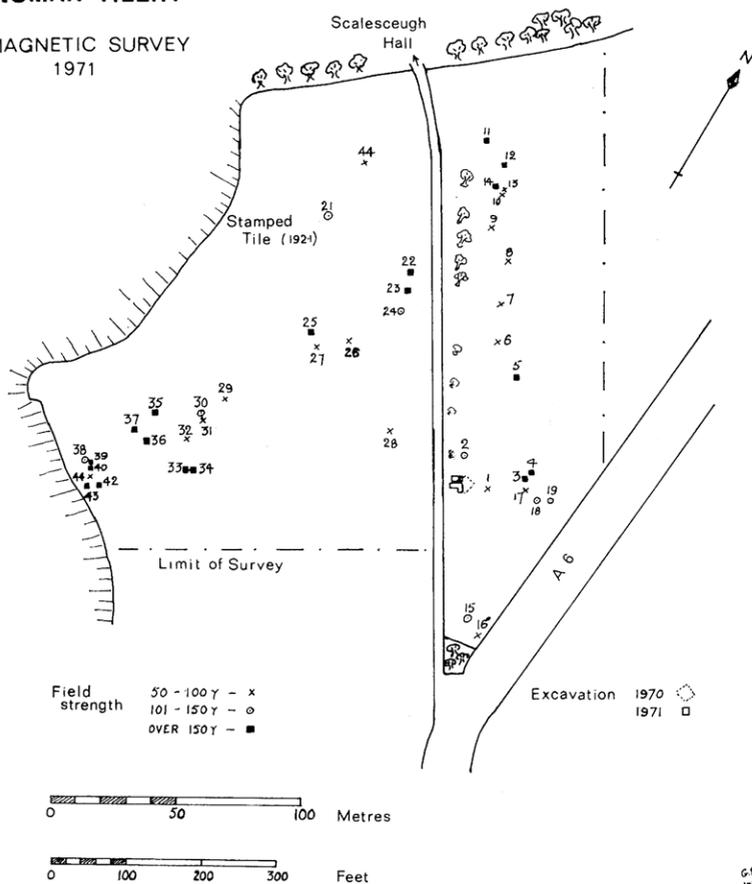


FIG. 1.—Magnetic survey.

G.R.  
1971

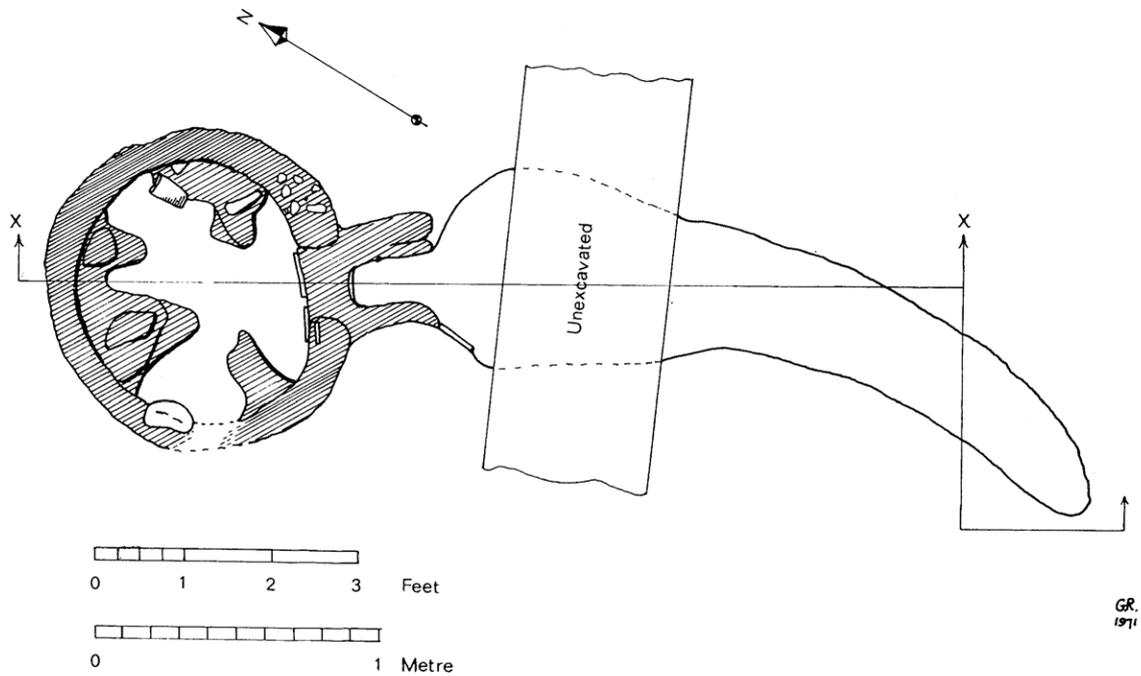


FIG. 2.—Plan of kiln and stokehole.

### *The magnetometer survey.*

The results of the survey carried out by Anthony Clark and David Hatton-Reece of the Department of the Environment, using a fluxgate gradiometer, are plotted in Fig. 1. A total of 42 clear indications of kilns or hearths were recorded. The kiln described in the present report gave a field strength of 90 gamma; allowing for paired anomalies which pointed to large kilns, it can reasonably be estimated that there are substantial remains of at least 25 kilns on the site, in addition to hearths and more fragmentary kilns. In a number of cases, notably nos. 4, 37, 39, 40, it was possible to trace the outline of a probable kiln structure. The layout shows a line of kilns parallel to the presumed course of the Roman road and another line, including some of the largest as judged by field strength, running out from it in a south-westerly direction. The latter area particularly suggests a promising site for total excavation when opportunity offers.

### *The pottery kiln.*

The excavations during 1970 and 1971 covered an area of about 25 metres by 40 metres on ground sloping slightly south-westwards. On the western and southern edges the trenches revealed a hollow in the underlying boulder-clay, filled with a softer and somewhat sandy clay. A spread of large river boulders which had been laid on the south side of the site (Fig. 4) may have been placed to consolidate the edge of the working area where the surface was soft in Roman times.

The first structure erected on the site had been a circular pottery kiln, 0.80 m. in internal diameter, which had been cut back slightly into the boulder-clay and shaped in a mass of puddled clay. Its stokehole was 1.4 m. wide close to the kiln, and tapered off southwards for a length of 2.6 m., with a maximum depth below the kiln floor level of 0.35 m. (Figs. 2 and 3).

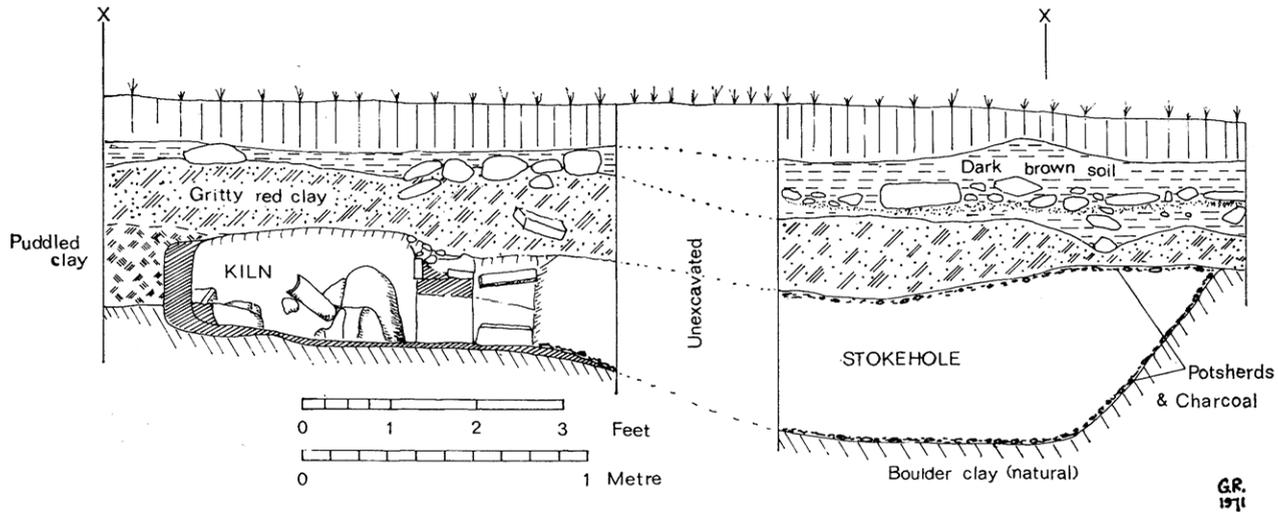


FIG. 3.—Kiln section (partly projected).

The kiln appeared to have been a rather crude variant of Corder's Type B (*Arch. J.* xciv) with three clay pilasters projecting from the walls to carry an arrangement of firebars. Remains of some probable firebars were found in the fill of the interior of the kiln but it was not possible to reconstruct their original positions. Considerable use had been made of pieces of broken tile to reinforce the supports, and pieces of flat tile had been used with clay backing to form the flue. The flue was intact, although its arch was sagging somewhat, and was 0.25 m. wide, 0.19 m. long, and probably originally about 0.19 m. high. The clay walls of the kiln interior were, of course, baked hard, and showed traces of having been faced with a mixture of clay, crushed tile, and broken tile. The tough clay behind the fired layer was backed in the region of the flue with small river cobbles.

The stokehole was cut directly into the natural boulder-clay, and was lined with an almost continuous layer of pottery sherds embedded in charcoal. A peculiar feature of the stokehole fill was that an almost identical pottery/charcoal layer was found 0.60 m. above the bottom of the stokehole, separated from it by a layer of tough red-brown clay; this upper layer was immediately below the burnt clay in the centre of the flagged area referred to below. The lower pottery layer extended up the sides of the stokehole and practically met the upper one at its edges. The upper layer might have been a vestige of the stokehole of a later kiln otherwise completely obliterated, but no distinction could be drawn between the types of pottery represented in the two layers. When the kiln was abandoned, possibly owing to a failure of the west wall, part of which was missing, it was filled with broken tiles, lumps of fired clay, including probable fragments of firebars, and tough yellow clay, with a few pottery sherds. The stokehole was levelled off with

tough red-brown clay, containing no admixture of debris, and the whole area had been covered with a layer of red-brown clay and partly surfaced with gravel. (Fig. 3.)

### *The enclosure wall.*

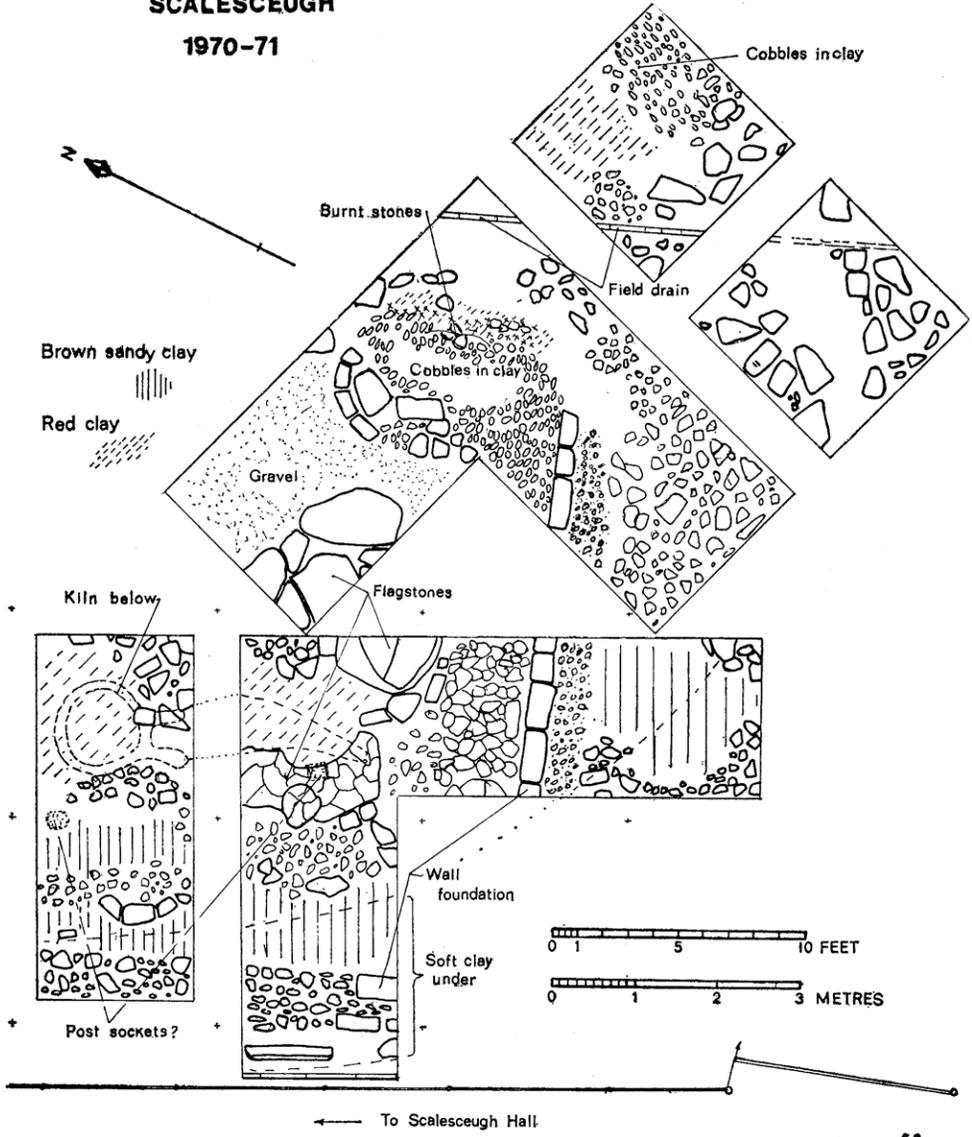
On the south and west sides of the excavated area the foundations of a wall had been cut through the levelled surface which covered the pottery kiln, and into the natural boulder-clay. (Fig. 4.) The foundation consisted of three layers of river cobbles, rammed in clay so vigorously that some of them had been cracked *in situ*, extending to a depth of 0.43 m. and with a surface width of 0.80 m. Over part of the inner side of the foundation a single course of dressed facing stones survived. Only one facing stone remained on the outer side of the wall. The core had been of small rubble, possibly with rather poor mortar. Outside the wall on the south side there was a tumble of small broken stones, probably from the wall core. On the west side, 2.5 m. from the corner, a large dressed stone 1.0 m. long appeared to have fallen outwards from the wall, which from its size suggested a threshold or lintel stone, but no other evidence of a doorway was observed. The foundations of the wall extended to the limits of the excavation in both the northerly and easterly directions.

Three possible post sockets were noted about 1 m. in from the wall, suggesting the possibility that a lean-to structure existed in the period immediately following the construction of the wall, when the interior was level clay and gravel. These shallow sockets were covered by the flagstones which characterised the next recognisable period of activity on the site.

### *Second period structures.*

The 1970 excavations showed, in the upper surviving

**SCALESCEUGH**  
**1970-71**



G.R.  
1971

FIG. 4.—Second phase.

levels, an area of cobbles set in clay, underlying much fire-reddened clay, and terminating against the wall foundation on the south side. At the eastern edge of this cobbled area there were traces of a line of fire-crazed stones. To the west the cobbles terminated in a floor of flagstones, which was fully exposed in 1971, when it proved to be a horseshoe-shaped flagged area with the flags laid on sand or small gravel, overlying the earlier stokehole. The interior of the horseshoe was covered with a red-brown gritty clay which showed no sign of ever having been covered by the stone flooring. The whole area was covered and surrounded by quantities of broken stone, with burnt clay in the upper levels on the periphery, above the cobbled area, and in the centre of the flagged area. It is possible that this was the remains of a later kiln, with the cobbles as part of the foundation of the kiln itself, and the flagging part of the firing floor, but no definite outline could be established.

### *Finds.*

One coin was found, on the eastern edge of the cobble spread but in a level where stratification was disturbed by a field drain. It was in poor condition but Mr Carson of the British Museum reported: "It is a sestertius, fabric and module suggest 2nd century, and from what is left of the Imperial portrait I should say probably Antoninus Pius, A.D. 137-161."

The pottery from the kiln stokehole was very much fragmented, and much of it soft and poorly fired. It was clearly mostly waste from unsuccessful firings of the kiln. Amongst the identifiable pieces Gillam's types 214 and 216 predominated, and all the pottery from this level can be dated to the period A.D. 80-130. This kiln may well have been operating at about the same time as the tiles bearing the stamp of the Ninth Legion, previously found near Scalesceugh Hall (CW2 xvi 289

and xxii 456), were being produced elsewhere on the site.

Little of the pottery found in the second period levels could be regarded as securely stratified, but sufficient was in sealed levels to suggest an early 2nd-century date. The unstratified material from the upper levels was mainly 2nd century with a few later pieces.

As the site was clearly a major production unit it seems desirable to assess the pottery in relation to that found on other early military sites in the district, and it is hoped to submit a detailed report in due course.

### Acknowledgements.

The excavations were carried out at the request of Mr R. L. Bellhouse who participated actively in the first season's work and gave much help and advice throughout. It was his observation of a scatter of tile and pottery in a newly ploughed field which led to the location of the structures. This clue was supported in discussion with the owner of the field, Miss J. Drummond of High Carleton Farm, who had encountered stonework when trying to drain the part of the field concerned. To her and to her mother, our member Mrs D. A. C. Drummond, I am grateful for permission to carry out the excavations, and for their help and interest throughout. Thanks are also due to Mr. Blaylock, then tenant of Wreay Hall Farm for permission to carry out the magnetometer survey over his field, and to Mr Watson, warden of the Scalescough Home for Spastics, who also gave ready co-operation.

Space will not permit me to name individually the 22 members of the Carlisle Group and others who helped at various times on the actual excavations, but I would record my grateful thanks to all of them for their hard and patient work.

I am indebted to the Ancient Monuments Division of the Department of the Environment for the magnetometer survey, and particularly to Anthony Clark and David Hatton-Reece for the speed and efficiency with which they carried it out.

Finally, I would thank Mr Robert Hogg for his advice and constructive comments, especially in relation to the assessment of the pottery.