

REPORTS ON A ROMAN POTTERY-MAKING SITE AT  
FOXLEDGE COMMON, WATTISFIELD, SUFFOLK.

- I. INTRODUCTION BY G. MAYNARD.
- II. THE SITE AND FINDS THEREON, BY BASIL BROWN.
- III. THE KILN FOUND ON SITE NO. 7, BY H. E. P. SPENCER.
- IV. REMARKS ON THE KILN, BY W. F. GRIMES, F.S.A.
- V. THE POTTERY, BY IVAN E. MOORE, M.A.

I. INTRODUCTION.

The exhibition in the Ipswich Museum of the kiln discovered on site No. 7 at Foxledge Common, Wattisfield, together with the pottery associated with it, having necessitated the publication of an account both of the site and of the antiquities found thereon, the following reports have been drawn up at the suggestion of the present writer by those specially concerned with the questions with which they deal. Mr. Basil Brown, to whose field survey of the district this and other important discoveries are due, has contributed the account of the discovery of the site, together with notes on the various antiquities found thereon. Mr. Ivan Moore, who has made a special study of the Romano-British pottery found in Suffolk, has prepared a review of the ceramics discovered with the kiln from Site No. 7 and in "dumps" close by. Mr. W. F. Grimes, of the National Museum of Wales, whose paper\* on the Roman Legionary Station at Holt, Denbighshire, contains an important classification of the kilns of the Roman period so far discovered in Britain, has added a note on the present example and, as details of the methods used in the removal of the kiln may be of service to other excavators these have been recorded by Mr. H. E. P. Spencer, of the Ipswich Museum, who also describes the structure of the kiln itself.†

Information of the nature of the find made by Mr. Brown having been brought to the Ipswich Museum by the Hon. Secretary of the Suffolk Institute (Rev. H. A. Harris), the site, despite its remote position, was visited by the writer within a few hours. It was found that the remains consisted of the lower portion of a kiln, the encircling wall of which, as well as the central domeshaped platform, and the arched furnace or stoke hole, had been faced with clay, which, by the heat of the fires had been hardened to the consistency of coarse pottery.—See (*frontispiece*).

\* 1. Y Cymmrodor Vol. XLI. 1930.

† Thanks are due to the Hon. Society of Cymmrodorion and to Mr. W. F. Grimes for the use of the block illustrating types of round kilns appearing with this paper.

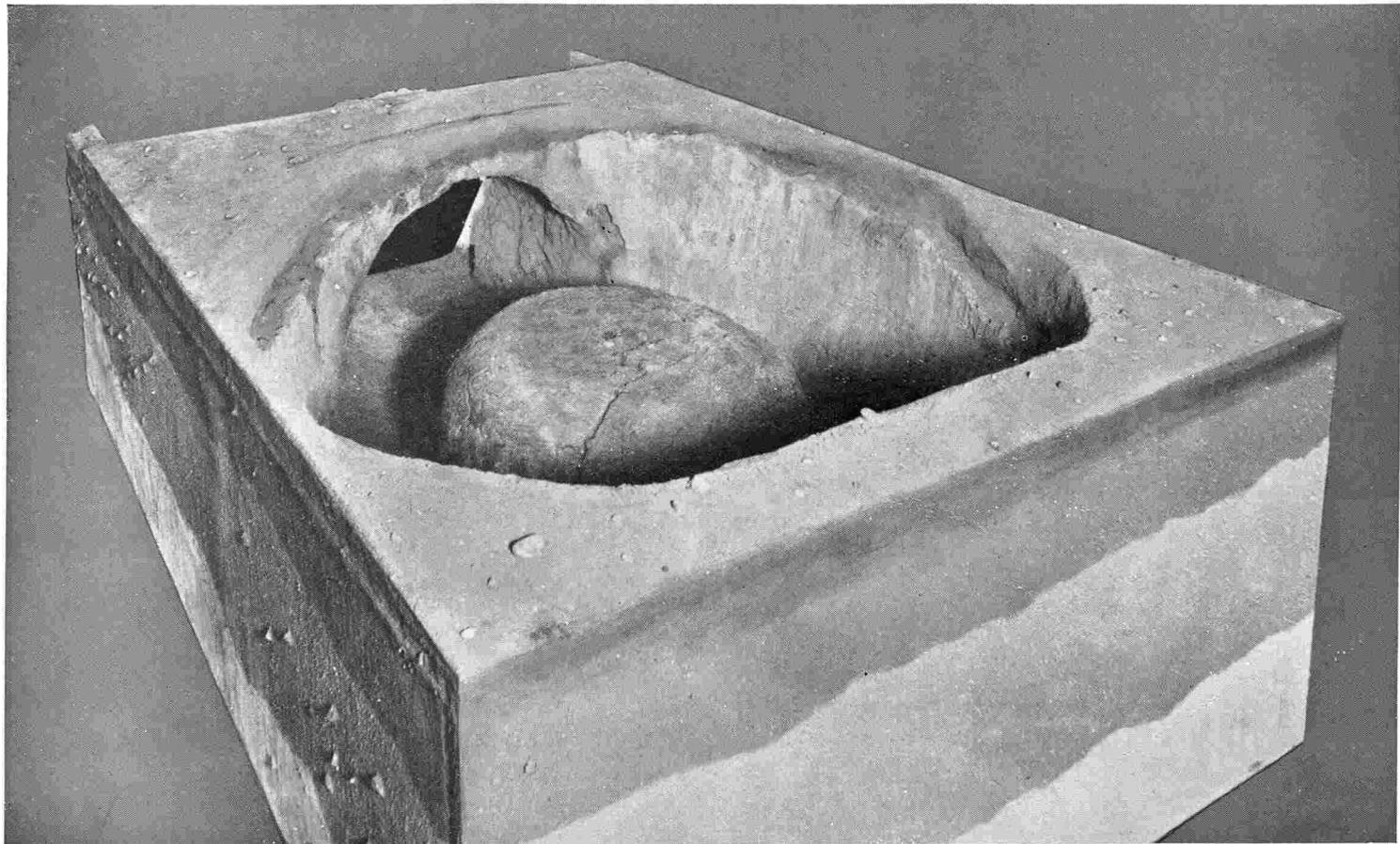


PLATE I. Roman Kiln from Foxledge Common, Wattisfield, Suffolk, as Reconstructed in the Ipswich Museum. (*Frontispiece*)

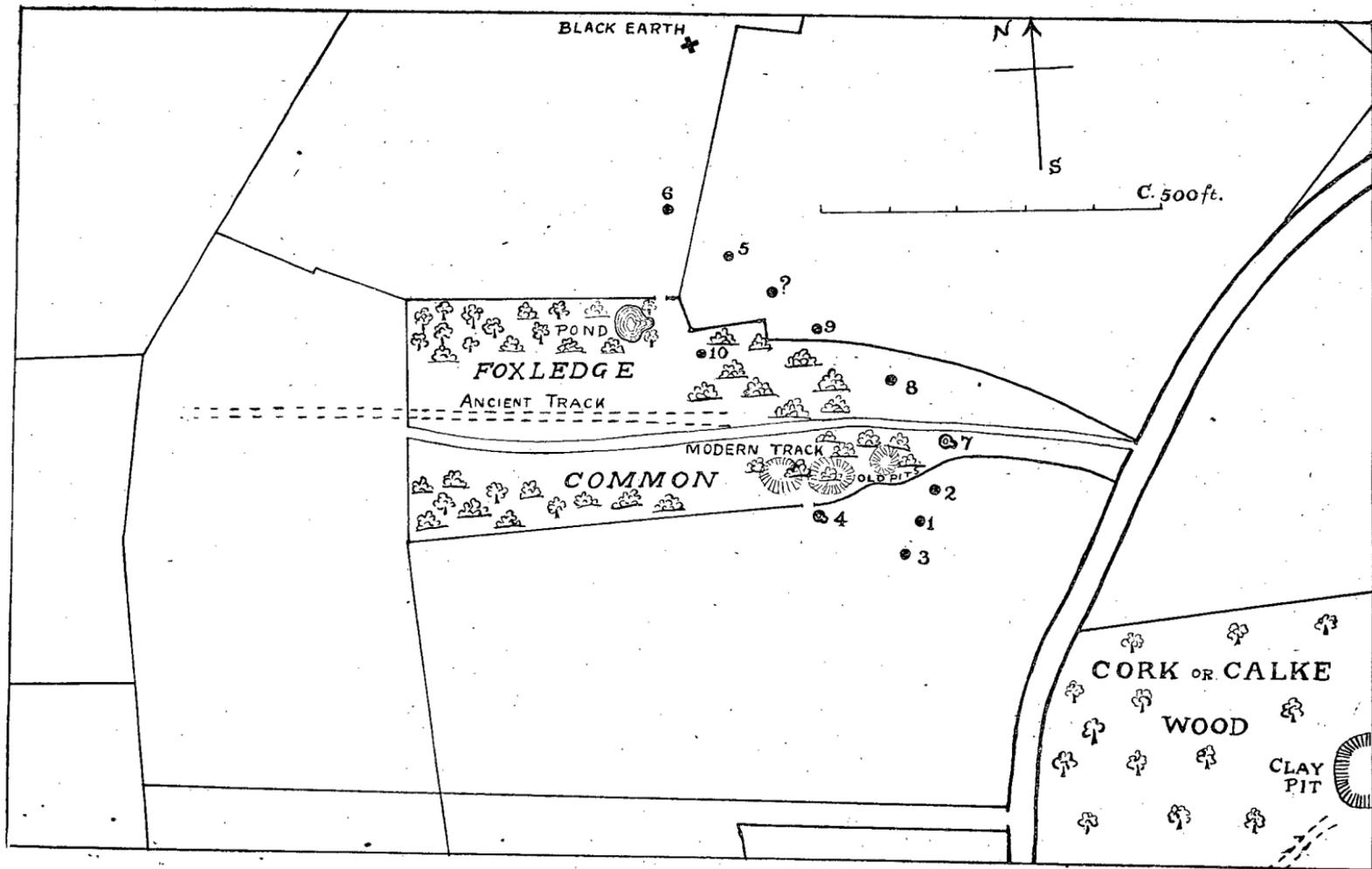
Although considerably cracked and fissured the walls appeared to be sufficiently complete to warrant an attempt to remove the entire structure and this difficult work was subsequently carried out with marked success by Mr. H. E. P. Spencer, of the Ipswich Museum Staff, with the co-operation of Mr. B. Brown. Special thanks are due to Mr. Black, the owner of Walnut Tree Farm, for very kindly allowing this important and interesting specimen to be removed, and also for placing at the disposal of the Ipswich Museum the pottery and other objects found on the site. Mr. Kilner, of Ixworth, gave most valuable assistance by providing means of transport for both the staff and materials, and in safely conveying the kiln itself by road to Ipswich. Mr. J. B. Watson also gave much valuable time and personal assistance. As prepared for exhibition the remains of the kiln have been removed from the plaster wrappings, and mounted in a casing made up to represent as closely as possible the actual conditions of the superimposed layers of clay, sand, black earth and debris in which it was discovered.

No reconstruction has been attempted beyond the necessary cementing together of loose pieces and filling up of fissures which endangered the stability of the structure, but a model has been made to illustrate the probable character of the destroyed upper part of the kiln when the platform for supporting the pots was in position and the hut-like cover or cowl partly erected over it.

Pottery, which from its frequent occurrence on ancient occupation sites and in many burials, constitutes one of the most valuable classes of dating evidence, usually forms a large part of the exhibits in an archaeological museum, but the industrial and technical processes involved in its production are seldom realised by the average visitor. On account of the difficulties of removal very few such specimens as the Wattisfield Kiln are to be found in museums in this country and the success attending the preservation of the example now in the Ipswich Museum therefore has added greatly to the significance and interest of the collection of Romano-British and other pottery in that collection.

G.M.

Plan of the Wattisfield Kiln Sites, based upon the O.S. Map (6 inch, Suffolk, E. and W. Sheet 24, S.W.) with the sanction of the Controller of H.M. Stationery Office.



PLAN. Roman Pottery Kiln Sites near Wattisfield, Suffolk.

## II. THE SITE AND FINDS.

By BASIL BROWN.

Evidence of an extensive Romano-British pottery making site in North Suffolk, which does not seem to have been recorded previously, was obtained in 1934 and 1935 during a field survey of the district carried on by me for the detection of archæological evidence.

The remains in question lie chiefly on Walnut Tree Farm within the parish of Wattisfield, eleven miles north-east of Bury St. Edmunds. But the neighbouring area, over which traces of kiln débris and Romano-British potsherds, as well as urn and skeleton burials, have been discovered, is extensive, as definite finds of the period have been made by the writer, in conjunction with Mr. J. B. Watson, in Calke or Cork Wood, Rickinghall, and in Hinderclay Wood, the former lying 160 yards and the latter 1,000 yards from the kiln site presently to be described. (See O.S. Suffolk, Sheet XXIV, S.W.). On April 17th, 1934, fragments of Roman pottery found during a superficial examination of fields in this vicinity led me to suspect that a "Villa" site existed nearby, and from this date the locality was searched whenever possible, evidence being also taken from workmen and others as to the potsherds, etc., noticed by them. Particular attention was paid to the clay pit in Cork Wood from which Messrs. Henry Watson and Sons, owners of the present Wattisfield Pottery, obtain their clay and sand. The interest of the staff and workers being aroused, they kept a look out for ancient remains with the result that in the following July one of the men, Mr. L. Kemp, reported the unearthing of a nearly complete Roman urn. Shortly after this Mr. J. B. Watson became interested and subsequently helped both in field research and week-end excavations and in many other ways. My thanks are due to all the above mentioned as well as to Mr. Black, the owner of Walnut Tree Farm, and his foreman Mr. Miller, who gave me every facility for exploration, and also to Mr. F. Mole, the owner of Calke Wood, for his kind permission to carry on investigations there.

On Christmas Day, 1934, the first kiln site in this area was located. Trial excavations in Cork Wood a short distance from where the urn had been found by Kemp having yielded no evidence of a definite Roman-period occupation-layer, it was decided to test the field adjoining the wood where Roman sherds had been noticed in some profusion, these in all probability having been brought up to the surface by deep ploughing incidental to the cultivation of sugar beet. A trial hole dug where several small sherds occurred close together, revealed sooty black earth, stones coloured red or blue by fire, and several sherds of Romano-British pottery, some of which appeared to be "wasters" or badly fired specimens. Following this evidence Kiln Site No. 1 (see plan) was located on December 26th.

A section drawn at the time is given in Figure 1.

The ground was found to contain many irregular tabular fragments of hard baked clay, black, brown, and red in colour and bearing on both sides the imprint of straw, hay, twigs and possibly reeds and

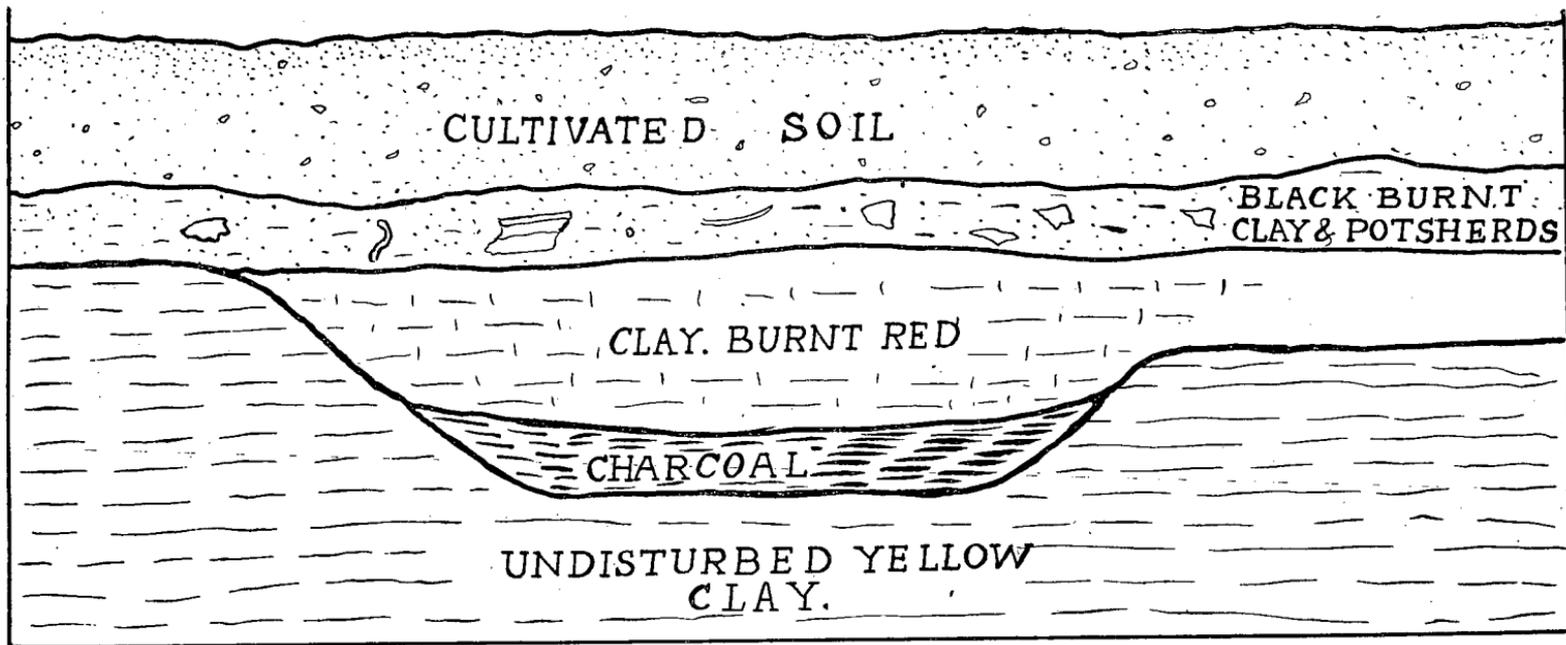


FIG. 1. Section of deposits site No. 1, Wattisfield.

rushes. Apparently these were the débris from the top or dome of the kiln which would require reconstruction after each firing. Subsequent excavation suggested that a layer of rough gravel and sand surrounding this kiln was continued between it and the neighbouring kilns, thus forming tracks alongside which had been dug a shallow trench or ditch, found to contain residue from the kilns and other débris, consisting of sooty black earth, charcoal, stones which had been subjected to heat, and animal bones, principally those of oxen and pigs. Very few oyster shells were seen. The rest of the dumped material consisted of broken pottery and the before-mentioned pieces of burnt clay from the kiln top. Near the site of the kiln itself were the remains of dumps of mixed clay.

The following table (from notes made at the time of discovery) relating to pottery is appended and is of course open to revision by later evidence and expert opinion.

In general it was observed that overfired, perfect, and underfired examples were present. The pottery found consisted of urns, cooking pots, mortaria, dishes, bowls, unguent vessels, strainers, etc., while black, brown, grey and red wares were present in this order of frequency.

The vessels varied from rimless and bead-rim forms, to frilled and flanged types, with a few incurved rim forms. The flanged vessels constituted but a small portion and were found near the top layer of the dump.

The small number of flanged types has since been observed as a general feature at the Wattisfield site, but this type of pottery has been found to be very common at the neighbouring site in Hinderclay-Wood, where the indications suggest that pottery making was also carried on, but which is at present only partly investigated. The following observations on the distribution of the pottery found near Kiln 1, has been found to apply to the Wattisfield site generally. Usually the grey ware was found at the bottom of the dumps and on or in the top of the yellow subsoil, above this it occurs mixed with buff ware and brown ware dish sherds, and higher up mixed with finely surfaced black ware. Coarse black and red wares were found just below the surface soil. Fragments found in the surface soil are mainly of coarse black ware. The other varieties are only found in quantity in the excavations. After locating Kiln No. 1, further search and excavation revealed Kiln Site No. 2, 72 feet north of No. 1. To this the same description given in respect to No. 1 applies. The discovery of the second kiln site made it seem possible that others might have existed in the same area, and in this case it seemed not unlikely that some fairly regular spacing might have been observed in their arrangement. Kiln No. 2 having been found 72 feet to the north-north-east of Kiln No. 1, search was made at the same distance on the south side of the latter and here another site No. 3 was located. The three being nearly, but not quite in a straight line, the slight divergence of No. 3 being due probably to the contour of the slope of the site. Owing to the field having been ploughed for cultivation it was possible only to

dig a few trial holes in site No. 3, but these revealed the sooty earth, red burnt clay, and débris characteristic of sites No. 1 and 2. On testing the ground 72 feet to the N.N.E. of Kiln No. 2, only a spread, apparently artificial, of gravel was encountered, which subsequent experience suggested may have been a track way about 9 feet wide crossing the line of kilns. The next site discovered was that marked No. 4, in the plan; approximately 315 feet to the west of the line of sites 2, 1, 3. Another definite kiln site, No. 4, was detected through the extra deep ploughing having turned out much red burnt clay from the furnace. The characteristic débris from the kiln top was also present. A dump was located close by and large quantities of sooty earth and potsherds were found in the trial excavations. Further search revealed sites 5 and 6, where trial holes again yielded evidence similar to the foregoing, but associated with No. 5, were portions of a shale bracelet as well as tile fragments and other traces of building material, the date of which is not yet determined, but may be Roman.

The discovery of site No. 7, came from a re-examination of the possibility that the above-mentioned measurement of 72 feet represented the normal spacing between the kilns. As only gravel, possibly a track-way, was found 72 feet to the N.N.E. of Kiln No. 2, the ground 72 feet further to the N.N.E. of this point was examined. Fragments of pottery and black earth were found in earth upcast by moles, and a trial hole sunk at this spot was found to be dug down on to the dome-like platform in the centre of the kiln. Owing to the fact that Kiln No. 7 is situated in a piece of uncultivated grass land the walls of the kiln had not been disturbed by the plough, and it was possible to excavate it completely, and as recorded elsewhere in this report, to remove it entire to the Ipswich Museum.

During the clearing of the outer wall of the kiln, a dump was located to the N.W. of the kiln. It consisted of a trench which appeared to run beside a spread of gravel, presumably a track or path, and was filled with the usual sooty earth and much broken pottery, while at Site No. 8 on the plan much burnt clay and kiln débris occurred. Sites 9 and 10 were subsequently found, but further investigation is needed to establish their character. Site No. 6 lies in the field to the west of the pond in the grassy grove. On this area pottery, a lead ring, and various bones were found by clay diggers some thirty years ago, and on the same field black earth mixed with much ferruginous matter is present.\* The actual site of the Roman potteries at Wattisfield occupies gently rising ground. There is an abundance of good potting clay at no great depth covered in places by thin spreads of sand and gravel, much of which may be humanly deposited, as where the same feature occurs in Cork Wood it is often superimposed on sooty black earth. While further investigation would be needed to clear up some of the points the evidence at present available suggests that the kilns were arranged outside a large elongated and somewhat "rectangular" area within which were the clay pits. It was noted that while spreads of gravel and sand occurred round several of the kilns the mass of the burnt clay debris from the wrappings of the

\* at the spot X on plan.

kiln top was as a general rule dumped on the north-east side of the kiln itself, and it looks as if the furnace apertures were in much the same position, as in Kiln No. 7.

#### NOTES ON EARLIER FINDS.

Lead ring, 3-in. diameter (exterior), 2-in. diameter interior. The ring is of pure lead with no apparent join, possibly made in a mould. It and most of the other earlier finds noted below were made on the field containing Kiln Site 6. A small urn or vase of red pottery, complete except for a small chip on rim (said to have passed into possession of the late Col. J. Ord Hasted, of Brook House, Rickinghall).

Pottery sherds: a large quantity.

Bones: many and varied.

The above communicated by Mr. C. Smith, a workman.

Mr. R. Landymore, another workman, still living at Wattisfield, describes how in digging a trial hole for clay he cut through a layer of black earth in which was what he termed an "elephant's head" (possibly the centre stand of a pottery kiln similar to that on Kiln No. 7).

Human skeletons: four are said to have been found at the back of the farm stackyard, about 68 years ago, in a chalk pit cutting into the ridge between Cork Wood and Walnut Tree Farm. These were sold as bones for manure. I myself have found human bones near this spot, and in 1936 trial holes dug on the ridge between Cork Wood and Walnut Tree Farm revealed a skeleton burial accompanied by an iron knife.

An ancient skeleton was dug out at Snape Hill, near the N.E. corner of Calke Wood about a century ago. (Old files, *Bury and Norwich Post*), but no cultural age is given. B.B.

### III. THE EXCAVATION AND REMOVAL OF THE WATTISFIELD ROMAN POTTERY KILN.

By H. E. P. SPENCER.

The interior of the kiln having been cleared by the discoverer, a trench was next dug completely round it, a bank of earth being left to support the walls.

For the purpose of removing the kiln to Ipswich Museum, it was proposed that it should be encased with sacking soaked in Plaster of Paris, a method which proved to be entirely satisfactory. Owing to the wet condition of the ground it was impossible to use size or to paste on paper to hold the fragments together, the structure having been much cracked by heat and by the penetration of roots from a nearby hedge.

The first stage was to remove all possible dirt by careful brushing and to cover the walls with newspaper, which was intended to prevent the plaster from adhering and thus facilitating its subsequent removal in the Museum workroom. For the casing, the sacking was cut into

strips about nine inches wide and in two lengths; short pieces were placed vertically on the walls, each piece slightly overlapping the piece previously applied, the long strips were affixed diagonally as a second layer. The interior having thus been made secure, the earth remaining against the walls on the outside of the kiln was removed a small section at a time and short strips of plaster soaked sacking were applied over paper as before. When the first layer was completed the long strips were placed so that they turned over the top edge of the wall and down on the inside.

In the casing of the fire-hole difficulties were encountered owing to the top having been crushed in on one side. This part of the kiln had only been partly cleared when the site was discovered and when the rubbish had been entirely removed the damaged condition was revealed; the original outer edge was also found to be missing. The most fragile parts were packed with wet clay, and after the plaster casing had been applied a scaffolding was constructed inside with laths held together by narrow strips of sacking in plaster; this method proved well able to withstand the jolting of the lorry on the journey to Ipswich.

When it came to the casing of the floor, tunnels had to be cut through the tough clay in which the lower part of the kiln had been originally constructed and this was perhaps the hardest job of all, as the clay could only be removed in small pieces owing to its tough plasticity. Five such tunnels had to be made; two under the furnace about 3-ft. long, two under the middle 5-ft. in length, and one at the back about 4-ft.

On working upwards to find the outer or lower surface of the floor it was found that no artificially prepared floor existed so that it became necessary to case the lower edge of the walls lest fragments dropped out. When this had been done pieces of wood were put through the tunnels and these were bolted at each end to two longitudinal pieces, forming a frame work, on which the kiln could be moved about. Short lengths of scaffold pole were placed under the frame to act as rollers, and the remaining clay beneath the kiln removed. A slope was then dug from the front of the kiln to the ground level up which the kiln was drawn by a motor-lorry by means of a rope attached to the timber frame. The next problem was to get the kiln into the lorry. To accomplish this a skid, such as is used by draymen in handling barrels was placed against the back of the lorry, and by means of chain gear (kindly lent by Messrs. Watson, the modern Wattisfield Potters) the kiln on its supporting platform was slowly drawn up, steadied by many willing hands.

The structure of the kiln resembles a very large pottery vessel constructed in the position in which it was to be used. In size, it is about four feet in diameter and is roughly circular, with the firehole projecting two feet to one side similar to the bonnet of a motor-car. In the making of this particular type of kiln, which is a not unusual one, it is evident that a hole was dug large enough for the purpose in mind

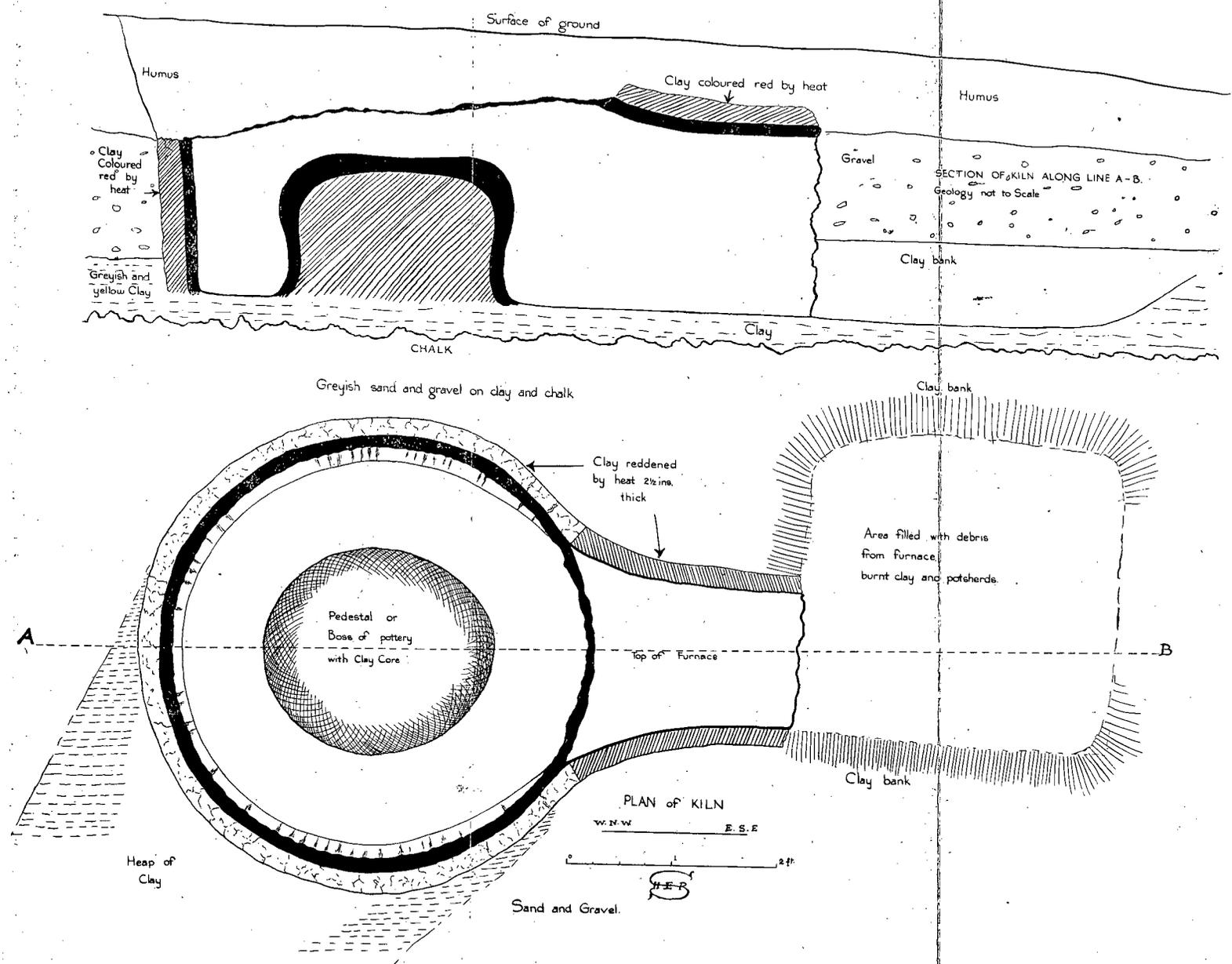


FIG. 2. Longitudinal section and plan of Roman kiln (No. 7). Wattisfield.

and that this hole was then lined with clay to the thickness of two and a half inches. Inside this again was placed a layer of prepared clay which being fired formed a great pot-like receptacle the walls of which were about one and a half inches thick. In the middle of this "pot" was built up a boss of clay (which still retains the finger impressions of its maker) and was in turn also covered with prepared clay and fired. This boss or pedestal, shaped like a partly developed mushroom, is ovate in plan with the smaller end towards the front or firehole; it is somewhat flat on top and measures 17 inches high by 26 inches along the longest diameter. The purpose of this pedestal was no doubt to support the staging on which the clay vessels were placed to be fired, as it is, it would not support many pots.

The sides or walls are not vertical, but slope outwards, and are marked on the inside with more or less regular and nearly vertical grooves, these being the impressions of the implement with which it was shaped. There is no evidence as to the total height of the structure, none of the top having been preserved; the remains are two feet high at the front and one foot six inches at the back. The furnace is 21 inches high inside. As the earth, etc., was removed from the walls the outer layer of clay referred to above was found to be still plastic but coloured a pleasing red through the action of heat; the core of the pedestal was in a similar condition. In front of the fire-hole or furnace, was an area roughly three feet square enclosed by low clay banks. This space was carefully cleared and contained various potsherds (two being marked with cut numbers cccx or ? xiii, see Fig. 6). There were a large number of pieces of burnt clay with impressions of grass or straw and a few fragments of charcoal. The furnace faced E.S.E.

The progress of the work was considerably hampered by the weather. During the nine days in which the excavation was carried out there were frost, rain and snow to contend with. During the early stages the excavation had to be filled with straw every night. When the hole was dug to about four feet, long poles were placed across from side to side on the thrown out soil, sacks and straw making a roof sufficiently weather-proof to enable the work to proceed uninterruptedly, despite the showers, though at the same time under somewhat cramped conditions.

H.E.P.S.

#### IV. NOTE ON THE FOXLEDGE COMMON KILN.

By W. F. GRIMES.

To judge by the details of the plan and section and description, the kiln is a normal example of that which I have called Type II of round or oval kilns, in my attempt to classify Romano-British pottery and tile kilns.

The study of these pottery kilns in this country is handicapped by the fact that many of them have not been subjected to expert examination, and since—from the very nature of the use to which they were put—they are frequently found in a ruined condition, it is not always easy to obtain reliable information about them.

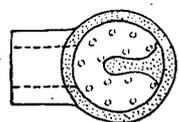
As far as can be judged, however, most of the kilns of the period which have been found belong to what is known as the "updraught type." They consist essentially of two parts: a lower combustion chamber, in which the fire is burned, and an upper oven, in which the pottery to be fired is placed. The two were separated by a floor in which were vent-holes, by means of which the heat of the fire was brought into contact with the pottery. And while the oven may have been of varying forms—in some cases domed, in others perhaps straight-sided—openings were always left as chimneys to create the necessary upward draught which should draw the hot gases amongst the pottery. The reason for the title "updraught kilns" will therefore be clear.

Such variations in structure as occur are related to the method of obtaining support for the oven floor. At Wattisfield a central roughly cylindrical column or table has been used for this purpose; but the floor itself has disappeared. This in itself is not unusual, as the floors would probably have cracked and warped under the stresses imposed by the great heat to which they were subjected, and they would probably therefore have perished very easily, so that only the more solid parts of the kiln would have survived. This however, only adds to the difficulty of deciding the character of the floor. In many cases it may have been built up of a coarse clay daub supported on a wooden framework, which would have lasted until the heat of the fire had hardened the clay sufficiently for it to support its own weight. This would probably have been the case at Wattisfield; but in some more elaborately constructed kilns (as at Caistor, Northants—V.C.H. Northants, I, 166, ff.) specially made tiles with vent-holes already pierced in them were used. Of the existence of some kind of floor, however, there can be no doubt, if the parallels provided by other sites are to be accepted. The alternative, that the pottery was stacked upon the central column, is unlikely because of the waste of space and heat which must have resulted. (It would be well, in any future examination of the site, to keep careful watch for possible fragments of daub containing complete or broken holes which may be the remains of the floor.)

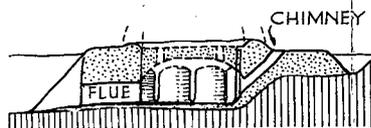
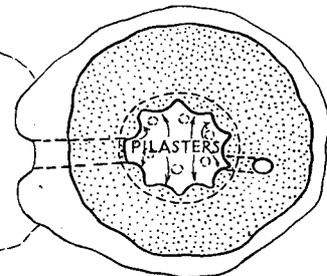
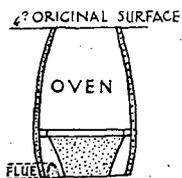
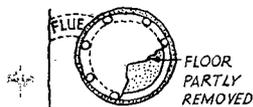
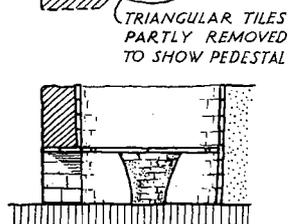
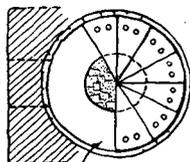
I have already said that the form of the oven probably varied, although rarely in this country has sufficient of the superstructure survived to enable its exact character to be determined. The presence of "pieces of burnt clay with impressions of grass or straw" on them suggests (as Mr. Brown has noted) that the temporary dome-structure was used here. This would have been built up of flat pieces of clay, grass, earth, etc., which would have covered the stacked pots, merely leaving the necessary holes for creating draught. It would have been broken down at the end of each firing, and a fresh dome built on each subsequent occasion. It was apparently the normal practice for small

TYPES OF ROMANO-BRITISH ROUND OR OVAL POTTERY KILNS (PLANS & LONGITUDINAL SECTIONS)

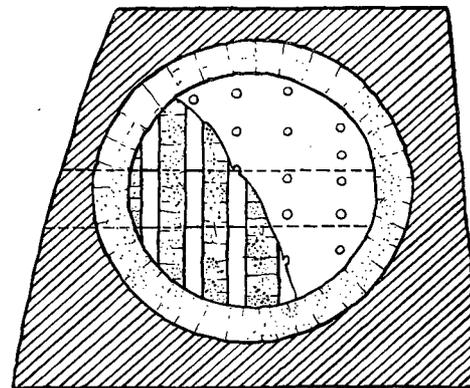
I. RADLETT, HERTS.



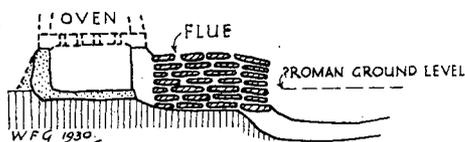
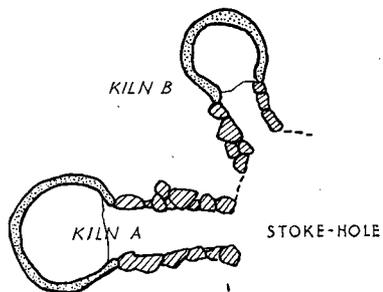
IIA. CASTOR, NORTHANTS. IIB. S. SHOEBURY, ESSEX.



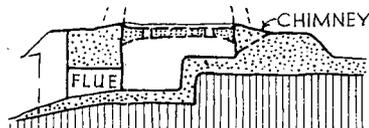
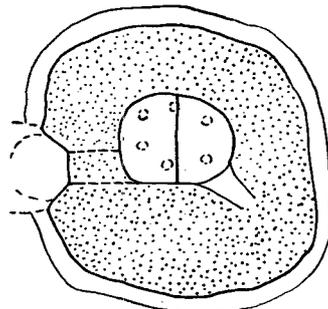
VI HOLT, DENB.



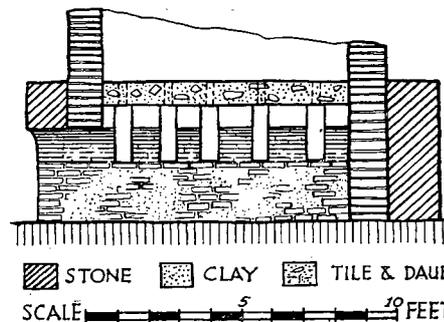
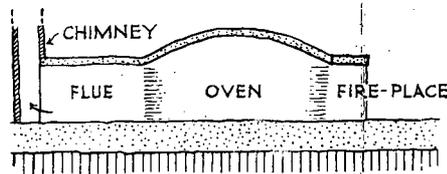
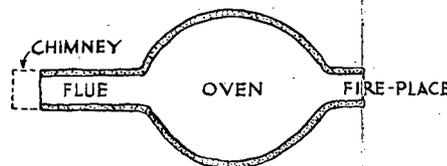
IV. CASTLE HOWARD, YORKS.



V. NEW FOREST, HANTS.



VII. FARNHAM, SURREY



STONE CLAY TILE & DAUB  
SCALE 5 10 FEET

TYPES I-VI ARE UPDRAUGHT KILNS, VII HORIZONTAL DRAUGHT. AUTHORITIES: FOR I, V.C.H. HERTS, I, 161; II A, DUROBRIVAE; II B, ESSEX A.S. TRANS. VI, 13; III, V, NEW FOREST POTTERY SITES; IV, THE ROMAN POTTERY OF CRAMBECK; VII, ANTIQ. JOURN. VIII, 48.

Fig. 3. From the paper by W. F. Grimes, M.A., on Holt, the Works Depot of the Twentieth Legion at Castle Lyons. Y Cymmrodor. Vol. XLI, 1930. Fig. 31. By permission of the author and the Council of the Hon. Society of Cymmrodion.

kilns like the present one to have temporary domes of this character ; and at Horningsea, Cambs., where a somewhat similar range of kilns was discovered (Cambridge Ant. Soc. Proc., XVII, 14, 70) many of the clay plates which had probably formed part of the domes were found.

In other respects also the site is normal. Kilns were usually built in pits to obtain a solid casing for the structure, in which clay played the biggest part. Large quantities of wasters are also a common accompaniment of Romano-British kiln-sites. This has probably to do with the design of the kilns, in which it must have been difficult to obtain uniform distribution of the heat. Examination of the plan will show that a very large part of the area of the oven was taken up with the central support, and pots immediately above this might well tend to be underfired because of the absence of vent-holes to convey direct heat. On the other hand, the outer part of the floor, which would have contained all the vent holes, would have been exposed to the danger of great heat and pots in this part would have tended therefore to be overfired. The Romano-British potters working on sites like the present seem never to have been able satisfactorily to overcome this difficulty.

Finally, exactly similar types of kiln have been found in the East Anglian area at Colchester, Essex (Essex Arch. Soc. Trans. N.S., I, 192) ; South Shoebury (ibid. N.S., IV, 202) ; and Weybourne, Norfolk (Norfolk Arch., V, 254). The type is also not uncommon elsewhere ; it lasted in use throughout the Roman period side by side with other forms, none of which can be dated apart from their associations.

W.F.G.

#### V. THE POTTERY.

By IVAN E. MOORE.

The pottery now to be examined came from the immediate vicinity of the kiln and from two trenches that were discovered, one parallel to the kiln and another at right angles to it about 26 yards away. These trenches appear to have been rubbish dumps, since the pottery in them was either very much broken or badly fired. In most instances it had not the finish that is to be seen in the best examples of the work of these potteries.

#### SECTION AT WATTISFIELD (I.E.M.).

27"	1. Natural Top Soil.	13"
	2. Black earth containing pottery and charcoal.	10"
	3. Yellow clay containing pottery.	4"

We may note here the comparative levels in which the different classes of pottery hereafter to be described, occurred. The Red ware appeared higher in the section than the Black or Grey ware, but no

further evidence of stratification was forthcoming. The soil material of the lowermost level (deposit No. 3) could scarcely be distinguished from the sub-soil beneath, yellow clay and sand, apart from the presence of pottery. The theory that these trenches were dumps is consistent with this lack of definition between the lowermost level and the sub-soil, since the first deposit (deposit No. 3) would be mixed with the sub-soil.

The yellow sand and clay being plentiful and easy of access, appear to be the material that the potters working here, used. A striking quality of the clay and sand at Wattisfield is the presence within it of mica in abundance. The occurrence of mica was also detected in all pottery coming from this site, so that a consideration of the application of this mineral in the manufacture of Roman pottery is of immediate importance.

Mica-dusting has been a term used in describing this occurrence of mica in Roman pottery. But it is necessary here to subject the term to a closer scrutiny, owing to the natural deposit of mica within the texture of the clay and sand on this site, and its appearance subsequently in the pottery produced. Ware, in which traces of mica occur, may be divided into two classes.

1. Mica coated ware (mica-dusted proper). This has the appearance of a gilt coating. Examples of it can be found among the Celtic and Roman ware of the First Century, at Colchester. Recently a fragment has come from Stanton, a site within a few miles of Wattisfield.
2. Mica content in ware. In this case mica is not applied but is contained within the texture of the clay. Specks of mica, silvery in appearance, appear scattered over the surface of such ware. Polishing seems to have made it more prominent on the surface. At Wattisfield the presence of mica in the pottery seems to have been inevitable.

At the close of the investigation of the trenches, and kiln, several cwts. of pottery fragments had accumulated. Most of this beyond doubt was of local manufacture, and peculiar to the site. There were, however, a number of fragments of Samian and Castor ware. Among the local pottery there were also discovered forms familiar elsewhere. Since the chief significance of these fragments lies in their chronological value, a discussion on them will be deferred till the local ware has been considered.

Out of the fragments it was possible to reconstruct twenty pots and to secure a characteristic series of rims. The presence of mica was constant. The pottery may be divided into the following classes:—

1. Red ware in the best examples had polished surfaces. Only one reconstruction was possible (Plate II, No. XV). The interior of this particular bowl had been treated with a paste although it was fired red throughout.

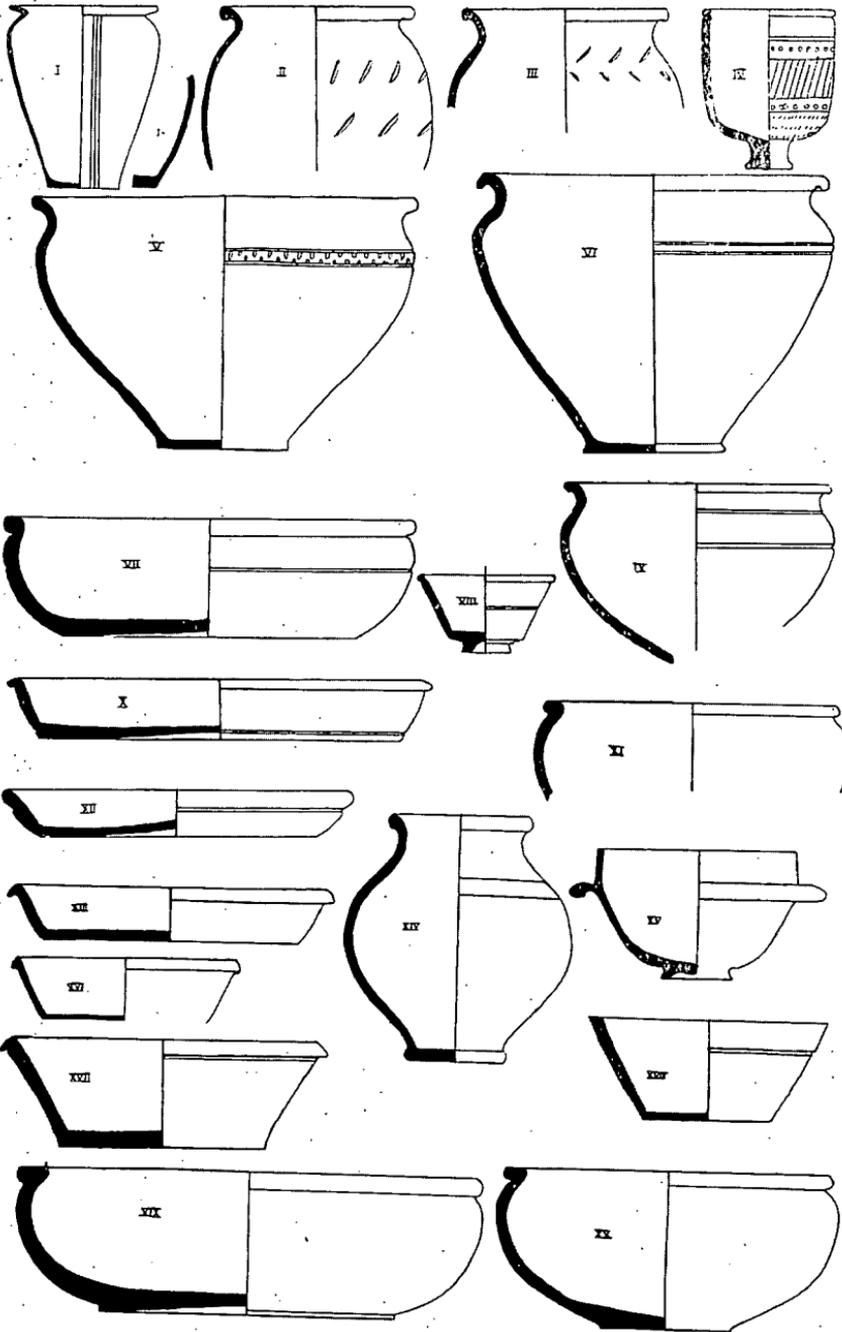


PLATE II.  
 Wattisfield Pottery Forms.

2. Stone ware varied from a bright yellow to a "dirty sandy" colour. In under-fired specimens sand rubbed off in the hand.
3. Grey ware existed in different shades. At one extreme there was a light grey with a highly polished surface and at the other extreme a dark grey, almost "fumed." Other variations may have been due to uneven firing, but these two examples repeat sufficiently to suggest this conclusion.
4. Black ware had a polished black surface with a grey-white interior. The marked resemblance to Belgic Terra Nigra in texture (form to be discussed later) is at once seen. A stray fragment fired half grey and half black indicated how this result had been obtained. Some special treatment of the kiln had been employed after the normal grey colour had been attained. The polishing took place doubtless after firing, since most fragments in the dump lacked it.

#### PLATE II.

A full description of the pots together with any relevant references, and the assigning of an appropriate date where possible, may now be attempted. Without exception the twenty reconstructed pots were all wheel-made.

*No. I Beaker.* Stone ware, rounded shoulder with oblique lip. Incised vertical lines in zones. Smooth base. Also stone and black ware examples. There is a tendency on some beakers of this type for the sides to swell into an oval as No. 1a. Another example of this type comes from Pakenham<sup>(1)</sup> (Ixworth).

Variations in the rim are illustrated in Fig. 4, Nos. 8 and 9.

*No. II.* Rustic ware. Coarse black ware. Moulded rim. Decorated with two parallel rows of gashes on surface.<sup>(2)</sup>

*No. III.* Rustic ware, finer grey ware with almost white interior. Decorated with gashes arranged in a herring-bone design.

Rustic ware is distinguished by its decoration of applied Barbotine. On northern sites and at Wroxeter this decoration has been found on pots dating 80-120 A.D., but at Gayton Thorpe it appeared on cooking pots of the 2nd and 3rd century. It has been pointed out that this survival seems "confined to the Eastern Counties."<sup>(3)</sup> At Wattisfield we find Rustic ware belonging to the same type as that of Gayton Thorpe, but the method of decoration is different in technique. Fragments of pots with applied Barbotine decoration are found at Wattisfield but here the same effect has been produced on No. II and No. III by gashing the sides to represent Barbotine. Probably these Wattisfield imitations of Rustic ware are contemporary with those of Gayton Thorpe. This decoration also appears on jars having a roll-rim (Fig. 4, No. 7).

*No. IV.* Pedestal Cup. Dark grey. Moulded foot and bead rim. Decorated with incised circles and lines in parallel zones with rouletting between and below.

Several other fragments of this type or modified forms were noticed, one with a double row of circles and another in Hunt Cup form.

(N.B.—During subsequent reconstruction it was ascertained that the walls of No. IV were not so nearly vertical as represented, but sloped inwards slightly towards the top).

*No. V.* Bowl dark grey with polished surface, decorated by alternate stabbing between two parallel tooled grooves around girth of pot.

*No. VI.* Bowl lightish grey with polished surface. Lip of rim undercut, decorated by two parallel tooled grooves around girth.

No. V and VI differ by reason of their curve and in the lack of decoration on the latter. No. V exhibits only a slight shoulder and has a roll-rim, while in No. VI the shoulder has become more pronounced and its lip undercut. It would seem that No. V had an affinity with Iron Age forms, and No. VI indicates a yielding of this form to Romanization at this pottery.<sup>(4)</sup>

*No. VII.* Dish. Black ware with polished surface having stone coloured interior. Moulded rim. Central "kick" in base. Decorated with tooled girth groove.

While no parallel has been found to the dish, the curve of its side, its rim and central "kick" seem to suggest a Gallo-Belgic influence.<sup>(5)</sup> Again we may note a later development of the same form in No. XIX, where a foot ring appears.

*No. VIII.* Cup, light grey. Tooled girth line. Bead rim. Imitating Samian Form No. 33, cf. Richborough 1st Report No. 124 (Mid. 4th Century).

*No. IX.* Fragment of bowl. Stone ware. Slightly undercut lip. Tooled grooves around neck and girth line.

*No. XI.* Fragment of bowl. Black ware. Moulded rim.

Fragments of bowl forms were plentiful at Wattisfield but there were only sufficient number of fragments of one type to reconstruct No. IX and XI. A few fragments suggest the presence of the Iron Age Tazza Form. Others showed a marked relation to a cordoned bowl (having a mica content), from Castle Hill, Whitton.<sup>(6)</sup> By far the most numerous were the fragments manifestly belonging to forms No. IX and XI.

*No. X.* Dish. Black ware. Angular lip. Foot-ring formed by two deep tooled grooves on base, and on outside surface. Central "kick" with incised circle with vanes round interior centre. Another example had grooves incised-vertically on the side.

*No. XII.* Dish. Stone ware. Indented external side. Central "kick." In several sizes.

*No. XIII.* Dish. Stone ware. Slight undercutting of lip.

*No. XVI.* Dish. Black ware. Pie-dish rim cf. p. P.S.E.A., Vol. VII, pt. 2, p. 239, No. 13.

(This type is very common but since no complete specimen could be found an example from Ixworth<sup>(7)</sup> is used in illustration).

The Forms illustrated by No. X, XII, XIII and No. XVI occur in black, grey and stone ware. The presence of a central "kick" in Nos. X and XII again emphasises the Gallo-Belgic influence,<sup>(8)</sup> rapidly to give way to Romanization.

*No. XIV.* (This drawing is taken from a cast of a pot found in Cork Wood, Rickinghall, within one hundred and sixty yards of the site).

Since no reconstruction could be made from the fragments manifestly of the same type, it is produced here for illustration.

(N.B.—Subsequent successful reconstruction of the Cork Wood specimen has shown that the sides were slightly less recurved towards the foot than in the drawing).

From a study of a quantity of rims of jars from Wattisfield it was clearly seen that a narrow neck and wide shoulder predominated, indicating again the Gallo-Belgic influence at work.<sup>(9)</sup> A number of bases and rims, however, indicated certain trends of development in the jars. The rims fell into a series which passed from an undercut lip to a well moulded rim which seem to have been produced by "folding in" (Fig. 4, 1-6). The better finished products exhibit this trait. One rim with an oblique lip was noticed.

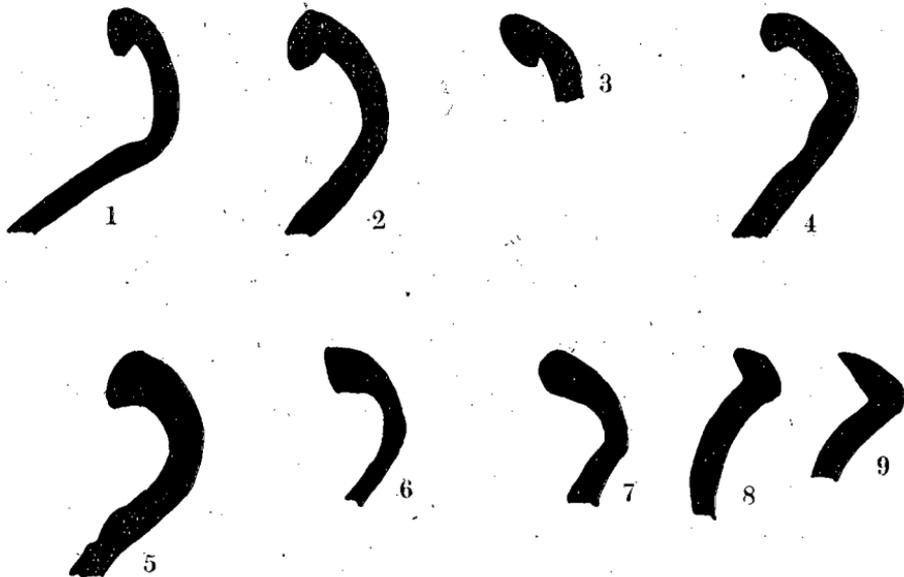


Fig. 4. Jar Rims. Wattisfield Pottery

All the bases retained the cord marks produced when they were cut off the wheel. In most the sides of the pot met the base directly, but in some the sides formed an angle with the base. There were a few with a moulded foot. A few jars were decorated with stabbing or a "scribble" design.

Some jars seemed to have approximated to the "Flower Pot Form" common in Beakers (cf. Plate II, No. 1), but they had a coarse marked base distinguishing them from the polished bases of the Beakers.

Several "frilled" or "pie-crust" rims were noted, a style which is attributed to the second and third century, A.D. On two bases graphiti (Fig. 6) were clearly marked.

Finally a fragment of a face-urn was found, Plate I (a).

*No. XV.* Bowl. Red ware with folded-in flange. Interior treated with red paste. Imitating Samian Form No. 38, cf. Richborough, 1st Report, No. III (date 3rd or 4th Century).

*No. XVII.* Dish. Grey ware with polished surface. "Pie-dish" rim.

*No. XVIII.* Dish. Black ware. Tooled groove.

*No. XIX.* Dish. Grey ware. Foot-ring base with central "kick." Moulded rim. See above No. VII.

*No. XX.* Bowl. Black ware. Moulded rim.

Besides these twenty pots there were found four fragments of Mortaria and four dishes with upright sides with moulding below the rim. Two of the Mortaria were of non-local clay, the one<sup>(10)</sup> belonging to the period 80-120 A.D., the other<sup>(11)</sup> to the later period of the Roman occupation. The other two fragments of Mortaria were of local manufacture, having an ample mica content. Fig. 5, No. II, was stone coloured and Fig. 5, No. III, was red with a grey core. In both stone chips had been used to imitate a Haematite wash. On the whole these two local examples seem later than the imported specimens.

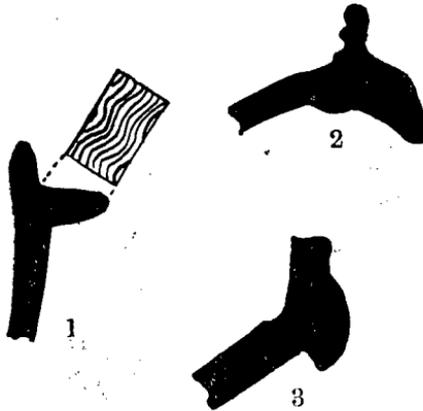


FIG. 5. Wattisfield Pottery. 1. Rim section of upright sided dish. 2 and 3. Mortaria Rims.



(a) Fragment of Grey Ware "Face Urn." Watisfield.



PLATE III.

(b) Fragment of Castor Ware Cup Watisfield.

The dishes with a moulding below the rim were in a form common in the 3rd or 4th century. (Fig. 5, No. I). The decoration of wavy lines on the moulding was unique, although another specimen has occurred at Richborough.<sup>(12)</sup>

Amongst the coarse ware at Wattisfield there were found twenty fragments of Samian ware. Forms 31 (Hadrian-Antonine), 33 (2nd Century), 38 and Ludovici S b (both Antonine) were represented. There were also fragments of a Castor ware beaker. Plate III (b).

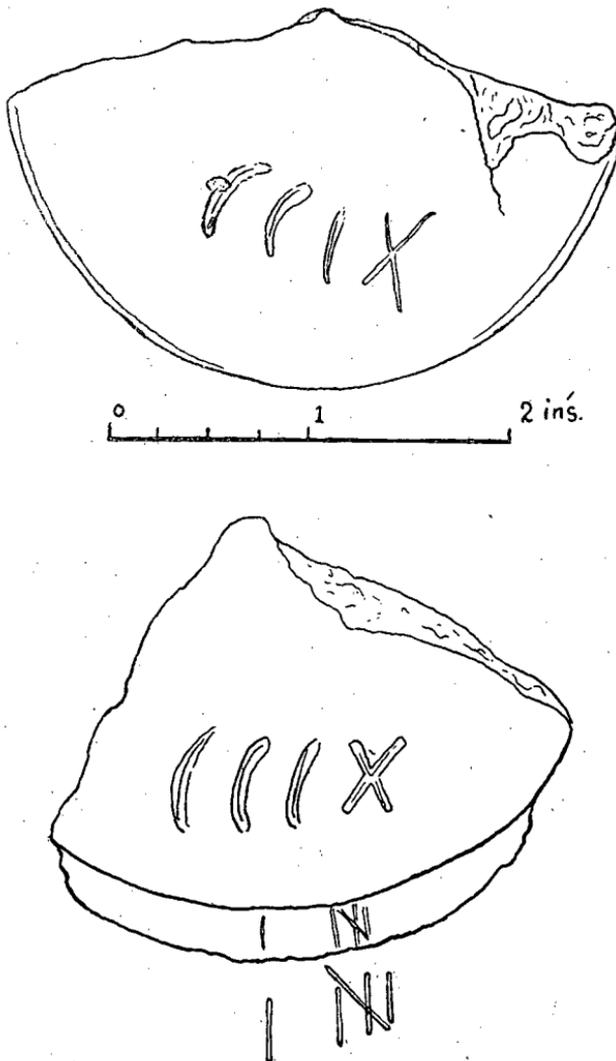


FIG. 6. Incised markings on Potsherds found in Kiln (No. 7), Wattisfield.

It is now possible to attempt a general estimate of the material discussed. The outstanding feature is the influence of Gallo-Belgic forms common in the last half of the first century and subsequently the distinct initiative of the potters themselves. The period of time over which their activities extended presents a problem. The evidence may be tabulated.

Samian Ware. Earliest Hadrian-Antonine but for the most part Antonine.

Castor Ware. C. 150 A.D.

Coarse Ware (a) Closing years of the first century and the first half of the second century.

(b) Third and fourth century types.

No importance can be attached to a section of the trench apart from the fact that the third and fourth century specimens were on the top.

From the period covered by those dates it would seem that the occupation extended from the close of the first to the middle of the fourth century. Judging from this the situation at Wattisfield appears somewhat similar to that at Runcton Holme which has already been pointed out. Such a conclusion, however, seems unlikely since the greater part of the pottery belongs to the first half of the second century, and the remainder from the third and fourth century is comparatively small. Mr. H. C. F. Hawkes has already shown that the great activity in Britain in Flavian times reached the region of the Icenii comparatively late, as development in this region had been retarded by the "61" rebellion. The presence of Antonine Samian and forms common to that period suggest that Wattisfield was of a piece in this movement. Activity probably commenced at Wattisfield during the first half of the second century.

The occupation does not appear however to have continued uninterrupted till the fourth century. Professor Atkinson noted at Gayton Thorpe that there had been two distinct occupations. It would seem that this also was the case at Wattisfield, and moreover the remains from this later period are so scarce that an occupation can have lasted only a short time. It should be noticed that it is impossible to point to a closing date for the first period on this site or to say much about the third and fourth century. Researches on Roman Sites in Suffolk have shown that the presence of an early and a late occupation with an interval of time in between is what is to be expected. When these researches are concluded, I hope to be able to illustrate and explain the situation more fully.

I cannot conclude this paper without extending my thanks to Mr. J. B. Watson and Mr. B. Brown for much information about the site and to Mr. Guy Maynard, Curator of the Ipswich Museum, for providing every facility for studying the pottery at the Museum and also for his constant encouragement. Mr. M. R. Hull, M.A., and Mr. H. C. F. Hawkes, M.A., F.S.A., have given me their opinions on various points for which I am grateful. Finally, I must thank Mr. F. M. Cullum (Ipswich Museum) for undertaking the photography.

I.E.M.

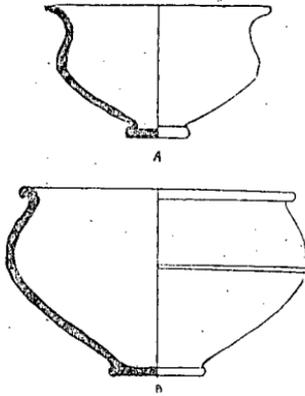


FIG. 7.

These two bowls—(A) from Rickingham, (B) from Scole (included by kind permission of Mr. Gale of Stuston Lodge)—have been discovered since the completion of this paper. As there was not a sufficient number of fragments from Wattisfield to reconstruct these forms, it is thought advisable to append these examples which clearly belong to the Wattisfield series. Both bowls have an ample Mica content.

A. Black Ware.

B. Black Ware. Tooled girth line. Slightly undercut lip.

## NOTES.

- (1) Ashmolean Museum, Oxford, 1907. R 212.
- (2) Gayton Thorpe, No. 23, Norfolk, *Archæology*, Vol. 23.
- (3) *Ibid*, p. 203.
- (4) Cf. *Proceedings of the Prehistoric Society of East Anglia*. Vol. VII, part II, p. 247 (hereinafter P.P.S.E.A.).
- (5) *Ibid*, p. 240.
- (6) *Proceedings of the Suffolk Institute of Archæology and Natural History*, Vol. XXI, part II, Fig. 8.
- (7) Moyes Hall, Bury St. Edmunds.
- (8) P.P.S.E.A., Vol. VII, part II, p. 240.
- (9) Cf. *Ibid*, p. 247.
- (10) *Wroxeter*, part I, p. 77, No. 22.
- (11) *Ibid*, No. 154.
- (12) *Richborough*, 2nd Report, p. 102, No. 158.