## Notes on a Roman Kiln and Arns,

FOUND AT HEDENHAM, NEAR BUNGAY.

COMMUNICATED BY

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ABUNDANT as are the various relics constantly brought to light, of fictile ware of Celtic, Roman, or Anglo-Saxon make, especially in the ancient cemeteries of their several periods, yet discoveries of the actual places in which they were manufactured are, as might naturally be expected, of much rarer occurrence. As, moreover, each example serves to throw light on the methods and appliances of their manufacture, and to give us fresh insight into the habits and customs of our predecessors during those earliest and dimly known periods of our history, a special interest attaches to such a discovery as that of the Roman kiln and adjacent cinerary urns, which are the subject of the following notes.

The remains were found in the winter of 1858, at Hedenham, near Bungay, on the estate of F. W. Irby, Esq. of Boyland Hall. The site adjoins an extensive brick-yard in the occupation of Mr. Murrell, the brick-earth of which furnishes excellent material for red and white tiles, drain-pipes, vases, and other ware. The supply becoming exhausted in the old brick-fields, excavations were commenced just across the



Bungay road, in what was believed to be undisturbed ground. But about ten or twelve yards from the gate in the corner of the enclosure, the workmen came on an urn containing calcined bones, and subsequently on broken fragments of others. These, as was not unusual in Roman sepultures, were not more than a foot below the surface, and without any tumulus, lying along a depressed line or furrow: but as the excavations were continued further into the field, it suddenly became evident that the ground had been disturbed to a considerable depth, the brick-earth removed, and the space filled in again with made soil.

At length about twenty-five yards from the position of the urns, and at the depth of a yard from the surface, what seemed at first sight like the shaft of a well, lined with rude courses of brick or tile, was opened out. The practised eyes of the brickmakers, however, soon saw that it was not a well but a kiln, which under Mr. Murrell's judicious directions was carefully excavated. Receiving early information of the discovery, I was fortunately enabled to examine and sketch it before it was defaced and ruined by rain and frosts, as speedily happened.

When I first saw the kiln it presented the appearance shewn in the annexed sketch. At the mouth it was  $7\frac{1}{2}$  feet across, but, at 3 feet below the top, contracted suddenly to 5 feet, forming, round the interior, a flat shelf 13 inches wide, on which the ware was placed for burning. At a depth of 4 feet below this shelf the floor was reached, distinguishable by its hard burnt condition, and covered with a stratum of wood ashes and charcoal, apparently of oak.

On the west side a rudely arched "stoke hole" opened from without into the lower part of the kiln, being clearly such, not only from its position, but also from the evident effects of fierce fire on its reddened and smoked sides. This furnace hole was flanked on either side by five rude steps cut in the solid clay, which, though not showing superficial signs of fire, must have been baked to a considerable extent, otherwise they could not have preserved their original form so perfectly as was the case when first exposed.

The interior, from top to bottom, shewed the action of intense firing on the native clay, out of which the kiln was scooped and which formed the sides. What seemed on a first glance to be rude courses of brick, were only the varying beds of stratified brick-earth, which had, in burning, taken different shades of colour, red or white, as the thin beds were more or less sandy or clayey. At the top was a flue-like aperture, on the south side, much smoked and charred.

It is singular that no fragments even of pottery of any kind were found in or round the kiln, or in any part of the field, excepting the cinerary urns before mentioned. Another peculiar circumstance was that into the bottom of the kiln there had been thrown, before it was filled up, a large quantity of lumps of hard chalk of that quality which is burnt for lime, in the absence of limestone in the Eastern Counties. It must have been brought to Hedenham for that special purpose, and from a distance, as I do not know of any exposure of the upper chalk formation which yields the same quality nearer than Stoke Holy Cross, some ten miles distant. and near Caistor Camp. Chalk does occur under the Norwich crag in my own parish, Saxlingham, about three miles nearer, but it is unfit for burning. The Norwich crag has also been found at Ditchingham, near Bungay, at the foot of the Bath Hills, on the edge of the alluvial bed of the Waveney Valley, but the subjacent chalk is not known to have been quarried or exposed. It is therefore evident that the chalk was not there accidentally, but that the kiln had been used for burning lime as well as pottery.

The brick-fields of Hedenham are of importance in the district, the only others, for many miles round, being one at Broome, and a smaller one at Kirby Cane, four miles distant, on "Pewter Hill," a corruption of Potter's Hill. At the latter place numerous Roman relics have been found, as detailed by the Rev. G. C. Chester,<sup>1</sup> including spear-heads, a jewelled fibula, swords, and a mass of human bones, pieces of blue, brown, and black Roman pottery, and an oven or kiln of Roman tiles unfortunately broken up before Mr. Chester saw it.

At Wainford Bridge, near Bungay, large quantities of Roman pottery were discovered in 1856-7, in erecting a malt-kiln there, and Mr. Baker, of Bungay, informs me that himself and Mr. B. B. Woodward, Librarian to Her Majesty, took out a great number of them, but they were in a black mire, and so sodden and rotten as to fall to pieces on the slightest touch; they contained burnt bones and blackish earth, and were dispersed over a wide space, which must have been an important cemetery in the Roman period.

I have examined a number of these fragments in Mr. Baker's possession, and find them very similar in texture and manufacture to the Hedenham ware. Two only were ornamented, one with an effective mammillated pattern, the other with perpendicular lines drawn to one round the base. A small lipped mouth might have been part of the neck of an unguent bottle or so-called "lachrymatory." With the blackish unglazed fragments were many of red Samian ware, ornamented with patterns and figures, such as the favourite dolphin, &c. In the bottoms of the urns were calcined bones, ashes, and lumps of vitrified slag.

Other remains of Roman pottery were dug up by Mr. A. Hughes, in a field south-west of Stowe Park near Bungay, in 1857, some three or four feet below the surface, and exactly similar fragments were exhumed the same year on Greshaw Green. In these fragments the inner part of the ware, about one-third of the thickness, is dark, the outer surfaces being light grey.

<sup>1</sup> Norf. and Norw. Arch. Trans., vol. iv. p. 313.

Lastly, Mr. Baker has in his possession a selected series of two hundred diminutive coins of the Lower Empire, taken from an urn found, as Mr. Chester has recorded,<sup>2</sup> on the borders of Broome Heath close to Bungay, and filled with an immense number of these minute pieces which are very much smaller than the die with which they were struck, and could hardly have been intended for current coin.

All the Roman remains above-mentioned are doubtless connected with an important Roman Station which existed at Bungay, on the mounds called the Castle Hills,<sup>3</sup> and was connected with the camp at Caistor by the road which in Mr. S. Woodward's map is named Stone Street; passing through Hedenham, Brooke, and Poringland, and joined at Woodton, near Hedenham, by the branch road connecting it with the camp at Tasburgh on the ancient British and Roman way from Norwich to Ipswich. Bungay, like Tasburgh, was probably a military camp formed on the first occupation of Icenia by the Roman legions, and its simple earth-works much earlier than the deliberately planned camp of Caistor, with its solid facings and corner towers of flint and brick-work.

Close to Earsham church near Bungay, and on the opposite side of the Waveney, was a remarkable system of earthworks with several adjacent tumuli, which Blomefield says, "by its oval form seems to have been a work of the Danes or Saxons;" and he also states that "Hersham as spelt in Domesday, seems to signify the station of the army." It has furnished numerous Roman coins, and during the levelling of the earth-works locally called the "Church

<sup>2</sup> Norf. and Norw. Arch. Trans., vol. v., p. 362.

<sup>3</sup> A fosse still exists on the west side of the town, parallel to the railway cutting now in progress, and insulating the common land called the "Hards," a promontory which projects into and has caused the remarkable loop of the Waveney, which here in the Roman day, according to Mr. S. Woodward's map, was a broad estuarian river. Mr. B. B. Woodward, however, considers this fosse to be British.

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Hills" portions of urns were found, and one entire, which the Rev. Greville Chester believed to be Roman, and says<sup>4</sup> that "its discovery militates against the opinion of the great Norfolk historian." This urn, however, I found in the possession of Capt. Meade, of Earsham Hall, who kindly placed it in my hands, and it is indisputably Anglo-Saxon, made by the hand, and stamped with the characteristic circular pattern, common on Saxon urns both in this country and on the continent. The difference between the two will at once be seen on comparing the accompanying figure of it with that (given on page 156) of the lathe-turned, though very simple, Roman urn from Hedenham.<sup>5</sup>



ANGLO-SAXON URN FROM EARSHAM.

Of the few known instances of Roman kilns, two beside Hedenham have occurred in Norfolk. One was found at

<sup>4</sup> Norf. and Norw. Arch. Trans., vol. iv., 314.

<sup>6</sup> I did not see the earth-works at Earsham before they were removed; but Mr. B. B. Woodward, who examined them, considers them to have been a temple rather than a camp, and tells me that cinerary urns of the Roman period were found near the churchyard gate.

Caistor near Norwich in 1822, and figured and described by Mr. Layton (Archaeologia, vol. xxii., p. 412.) On a hill, a quarter of a mile north-west of the noble camp, many urns were discovered by Mr. Layton, but much broken by the plough; (so shallow was their position, as at Hedenham, while also they were disposed, as there, in quincunx order in regular rows.) On excavating the spot he came on a kiln formed in strong blue clay, reddened with fire heat: it was oyal, 6 feet 4 inches long by 4 feet 6 inches across, and had two furnace holes, filled with red burnt earth below and peat above. The spaces between and round these transverse flues were loaded with urns, packed in compartments made of blue clay, together with pitcher-shaped vases and other potteryware and glass. Two of the urns were filled with white sand, inverted, and one over the other. All the ware was of varied texture and colour, chiefly bluish-grey, unglazed, and no two alike in shape and decoration.

The other Norfolk example, discovered at Weybourne near Holt, and described by W. J. Bolding, Esq., (Norfolk and Norwich Arch. Trans., vol. v., p. 254) was again of a different construction. Within the circular walls of the kiln, which was five feet in diameter, a solid cylindrical table, two feet wide, had been left in the centre, on which the pottery was placed, as well as on the surrounding flue, which was fed by a lateral furnace hole. The ware, as also the kiln itself, was of a bluish colour; and only two out of numerous fragments had patterns on them.

Mr. Akerman has described some ancient Romano-British potteries found in the New Forest (*Archaeologia*, xxxv. p. 91.)

More recently, Mr. Binns has communicated to the Society of Antiquaries (vide *Proc.* 2nd series, vol. i., p. 148) a notice of the discovery at Worcester of a potter's kiln with a flue, a hearth, and an outer circular wall,—the flue fifteen feet long and two wide, and the whole much larger than any kiln he had read of. In connexion with it was found Roman pottery,—red, grey, black, and Samian,—and also a bronze armilla, and coins of Domitian.

The only other recorded discovery in England of Roman kilns with which I am acquainted, but by far the most important of all, was that made by Mr. Artis at and near Caster in Northamptonshire, the ancient Durobrivæ, comprising a series of potteries extending over a district of twenty miles along the banks of the Nen, and estimated to have employed some 2000 hands. Mr. Artis has figured them in a series of plates; and an abstract of his interesting communications made to the Archæological Association will be found in Wright's "Celt, Roman and Saxon" (pp. 212 et seq.) These Durobrivian kilns are again of a different construction to those above-mentioned, but the ware made in them was of a slaty-bluish grey, similar to that of the Norfolk pottery found at Caistor and Hedenham.

To return to the Hedenham urns. They were mostly in fragments, and were placed in quincunx order, about five feet apart. I did not see remains of more than five of them, and



ROMAN URN FOUND AT HEDENHAM.

of those the only one tolerably perfect was that figured. There were sufficient portions of another to shew that it had been of a different form—flatter, wider, and bowl-shaped, and originally some twelve inches in diameter, and half that in height.

The one figured, and now in the possession of Mr. Irby, of Boyland Hall, is nine inches in height, seven in the widest part, and about four across the neck. All contained calcined bones,-in some instances imbedded in adhesive earth, in others in carbonaceous matter. Notwithstanding their close proximity to the Roman kiln, it was the opinion of several antiquaries to whom the one described was shewn, that it was not only "unbaked, but also not related to the kiln in age or character, and most likely pre-Roman or early Saxon." However, on shewing it to Mr. M. H. Bloxam, of Rugby, whose experience on this and other antiquarian subjects is so well known,<sup>6</sup> he unhesitatingly confirmed my own belief that it was truly Roman, though not so neatly fashioned as Roman urns generally are. This opinion I have since fully verified, on a comparison of it with the undoubted Roman ware of Wainford and Stowe Park above-mentioned.

With regard to the opinion that it had not been baked, or was only sun-dried: independently of other reasons, I could not credit its preservation in such shallow wet soil for so long a period, unless it had been fired to some extent, and on referring to Mr. Murrell's practical knowledge in the manufacture of ware from the same clay, he had no doubt that it had been well burnt. The bluish-grey earthy look, however, he attributed to its having been so long buried; but Mr. Artis, in his account of the Durobrivian potteries, alluded to above, gives an explanation of the process there adopted for the express purpose of giving to the Roman ware a similar

<sup>6</sup> It is to be hoped that Mr. Bloxam may ere long bring out his as yet unpublished work on the "Early Sepulchral Remains of Great Britain," for my obligations to a private copy of which I have to record my thanks. bluish or slatey colour, which was effected by what he calls "smother kilns," and his description is so instructive that I subjoin an extract from it.

He says—"During an examination of the pigments used by the Roman potters of this place, I was led to the conclusion that the blue and slate-coloured vessels met with here in such abundance, were coloured by suffocating the fire of the kiln, at the time when its contents had acquired a degree of heat sufficient to insure uniformity of colour. I had so firmly made up my mind upon the process of manufacturing and firing this peculiar kind of earthenware, that, for some time previous to the recent discovery, I had denominated the kilns in which it had been fired, *smother kilns*. \*

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mouth of the furnace and top of the kiln were no doubt stopped; thus we find every part of the kiln, from the inside wall to the earth on the outside, and every part of the clay wrappers of the dome penetrated with the colouring As further proof that the colour of the ware exhalation. was imparted by firing, I collected the clays of the neighbourhood, including specimens from the immediate vicinity of the smother kilns. In colour, some of these clays resembled the ware after firing, and some were darker. I submitted them to a process similar to that I have described. The clays, dug near the kilns, whitened in firing, probably from being bituminous. I also put some fragments of the blue pottery into the kiln; they came out precisely of the same colour as the clay fired with them, which had been taken from the site of the kilns. The experiment proved to me that the colour could not be attributed to any metallic oxide, either existing in the clay, or applied externally; and this conclusion is confirmed by the appearance of the clay wrappers of the dome of the kiln. It should be remarked, that this colour is so volatile, that it is expelled by a second firing in an open kiln."

He indeed here states that every part of the kiln was penetrated with the same colour; but that at Hedenham presented a totally different appearance. This fact, however, serves to confirm the conjecture that the last use the Hedenham kiln was put to was that of burning chalk, the unused lumps of which were thrown into it when it had served its purpose and was filled up.

The date of both kiln and urns may, without doubt, be assigned to a period anterior to the close of the fourth century; for though the Romans had not then abandoned East Anglia, if we rely on the Notitia Imperii of Honorius, which states that this district was then thoroughly fortified and garrisoned,7 yet the custom of cremation had by that time ceased to be practised among the Romans. For this we have the authority of Macrobius,8 who tells us that in the time of Constantine it fell into disuse, (doubtless under the influence of Christianity) and by the reign of Theodosius (A.D. 392) had been entirely abandoned. The pagan Anglo-Saxons, however, at a later period re-introduced the practice, which, in common with the early aboriginal Celts, the later Gallo-Belgic settlers, and the Roman conquerors of both, they had derived from the same far remote Indo-European progenitors. Yet, the distinctive characteristics of their cinerary urns enable us to distinguish clearly between the respective sepultures of the several successive races.

<sup>7</sup> It is a remarkable fact that while the Notitia Imperii gives such an account of the Roman defences of the eastern districts and coast in the beginning of the fifth century, yet that the coins of the late emperors found there should be so few in number and proportion. For instance, in the careful list given by Mr. Fitch of those found at Caistor, the latest emperor is Gratian (375-383); and while those of Constantine are known to be extremely abundant, coins from his time to Gratian are rare, and of few emperors. An investigation of such facts with reference to their bearing on the gradual withdrawal of the Romans from Britain would well repay the trouble of making out full proportionate lists of coins from different localities, and those most common and worthless to the numismatist might furnish valuable evidence to the historian. <sup>8</sup> Macrobius, Saturnalia, Lib. vii, c. 7. On the whole, then, we may fairly suppose that the Hedenham urns contained the ashes of the old Roman potters, who more than fourteen centuries ago wrought the same brick-earth which to-day supplies our ware, and who might seem to have been well content with their lot in life, when, in death, their own clay was laid to rest in that which had been the scene of their daily toils.