



# Colchester Archaeological Group

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## ANNUAL BULLETIN VOL. 2 1959

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PART 1 MARCH 1959

With the coming of lighter evenings we look forward to the forthcoming season of field-work and excavation. The first dig will be at Easter on a site near the Public Swimming Bath on the Colchester bye-pass. Details from the Castle Museum. Accordingly the evening meeting at the Castle on Monday, 16th March will close the present series.

This issue includes some interesting drawings and notes by Mr F.H. Erith; a further article by Mr L.H. Gant on clay pipe makers; an account by Mr Blake of the excavations at West Stockwell Street; some additions to the Iron Age Distribution Map of Essex which was included in our last Bulletin.

Our Bulletins have brought us much interesting correspondence. Recently we had a letter from Mr H.C. Ainsworth of Bradford, telling us of a Roman villa at Bridlington; a handbook and photographs of which may be obtained from Mr Henry Robson, Rudston, Driffild, Yorks. Mr Ainsworth also described a large monolith in Rudston churchyard and many other ancient sites in the district.

On the 11th March members of the Group were invited by the Essex Archaeological Society to attend a lecture on "Essex in the Bronze Age" by Mr Ian H. Longworth of Cambridge University. The Group was well represented and we were most grateful for the opportunity to enjoy such a delightful and informative evening.

Contributions to the Bulletin, correspondence and enquiries are welcome and may be sent to Mrs K. de Brisay, Hon., Secretary, 89, Maldon Road, Colchester, Essex.

ADDITIONS TO THE IRON AGE DISTRIBUTION MAP OF ESSEX.

(This map was included in our Bulletin Vol. 1, No 4)

From:- Mr.Helliwell of the Central Library, Southend on Sea.

Iron Age material from the Rochford Hundred - Finds not marked on the map.

<u>Coins</u>	Gold Stater Bellovacian - from TR927853 1 coin c. 75-50 B.C. Mark No 12 Evans H. 1 ) Gt Waking.. 2 coins of Cunobeline. Mark 248 Evans XIII 6) Gold coin of Dubnovellaunus ) Rayleigh. Silver coin of Mommia, 34. B.C. )
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<u>Pottery</u>	Iron Age B from Barling, Canevvdon, Great Waking. Iron Age A settlement at North Shoebury. Iron Age A at Rochford, Great Stambridge, Hullbridge, Barling and Prittlewell Additional Belgic Settlement at Shoebury.
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Other Comments

Prittlewell not proved to be a camp, nor definitely of Belgic date.

No records for settlements at Hockley - pottery does exist.

No finds at Leigh to suggest a settlement or pottery. The Red Hill on Foulness should be marked at the West and as the East end is still being built out of the sea.

Southchurch causeway probably not A or B, but C.  
Loom weight -source is not reliable but if Southend is marked in wrong position.

From Mr F.H. Erith of Ardleigh.

ADD to Ardleigh -	Iron Age A - Spindle whorl. Loom weights. Pottery.  Iron Age C - Settlement. Coins. Cemetery.
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CLAY TOBACCO PIPE MAKERS – COLCHESTER CHRONOLOGY  
by Leonard H. Gant.

Since my article on clay pipes found in Colchester appeared (Group Bulletin Vol. I. No 3, Sept. 1958) I have received many local specimens and have made some research into local records which has enabled me to compile a list of Colchester pipe makers.

In a wider field I have been privileged to examine the wonderful collection of pipes at the Guildhall Museum, London, through the kindness of the Keeper, Mr Norman Cook, who granted me every facility for examination of the reserve store and the very fine display mounted temporarily in the Royal Exchange. He also gave me many duplicate specimens.

Correspondence with, and specimens from the curators of the City of Bradford Cartwright Memorial Hall museum and the Great Yarmouth museum have added interest and knowledge of the northern types of clay pipes, and, in the latter case, a remarkable souvenir pipe bearing the arms of Great Yarmouth, made for a public feast of rejoicing at the return of the French Monarchy.

Mr Felix H. Erith has brought in a great quantity of material. His farm at Ardleigh, to quote Mr M.R. Hull, "needs only a Saxon burial and then it has the lot!" Mr Erith has given me many fragments of Colchester made pipes and in the short period of three months has almost completed my collection.

I must also acknowledge the great assistance given me by Mr H.W. Poulter and the Museum staff, which included a demonstration of pipe-making tools and the examination of Pettitt's stone kneading trough which was recovered from the kiln site in East Street during the War and is now housed in the Castle prisons! I was told that this has been pointed out to visitors as the trough in which the prisoners washed, but this tale, like the double-drained trough, would hardly hold water!

Makers' names, initials or trade symbols rarely appear on clay pipes made before 1650 and we were therefore fortunate in recovering one specimen from Stockwell Street of a type dated by Adrian Oswald to the middle of the 17th century. The stamp on the foot gives the initials "VJK" but the maker cannot be identified, for there are many Dutchmen listed at that time who bear those initials.

The next marked pipe dates from 1680 - 1720 and is stamped "N .S." The Book of Assemblies of the Borough (so often referred to by Morant, the County historian) gives a Nathaniel Spurgin, who was admitted a Burgess in 1700. Although there is no specific reference to him as a pipe maker, it is certain that his admission as a Burgess depended upon two facts, namely, his residence in the town and his standing in the community as a tradesman.

There are two 18th century pipe makers recorded, John Randall, working in 1759 and Stephen Chamberlain – 1728 -1808. Both these pipe makers are described as of George Lane (now George Street) and continuity of manufacture at the premises now numbered 21 and 22 George Street can be established. Stephen Chamberlain was the only pipe maker listed in 1801 but three are named in 1839, Stephen Rand, George Lane, James Pettitt, 38 East Street and Elizabeth Lowthorp, Hythe Street (now Hythe Hill), By 1840 Thomas Blomfield had succeeded Elizabeth Lowthorp at Hythe Street and in 1863 Joseph Jennings had taken over the premises in George Street and James William Pettitt had followed As father in East Street, with a new kiln and maker listed as J. Bush, Priory Street.

The introduction of the briar pipe and cigarettes sounded the death knell of the clay pipe industry and only Jennings survived the turn of the century, but his business, too, had gone by 1910.

I have interviewed three elderly gentlemen who remember Jennings, who, to quote one, "sold a handful of clays for a ha'penny" but of the others I fear there is now no living memory.

May I be allowed to conclude with a true story. Upon enquiring at a well known local tobacconists if they had any clay pipes, the assistant said, "Oh, no" rather haughtily and added, "Have you tried Woolworth's?" "Madam", I replied, with dignity, "I do not wish to blow bubbles; I collect clay pipes!"

Fig 1. The Brantham Urn

I am indebted to Mr. Norman Smedley F.S.A of the Ipswich Museum for allowing me to make a drawing of this most interesting urn. It was excavated in 1925 at Brantham Hall along with other Late Bronze Age Urns. At the time of the excavation it was thought that it must have been an import from the Continent because it was so different from anything else of that period found in England. The Ardleigh Urnfield, however, had some urns which resemble this one in many ways and this fact may make us look at the origin of these urns again and a different conclusion may be reached for the Brantham Urn.

Fig. 1 Scale ¼

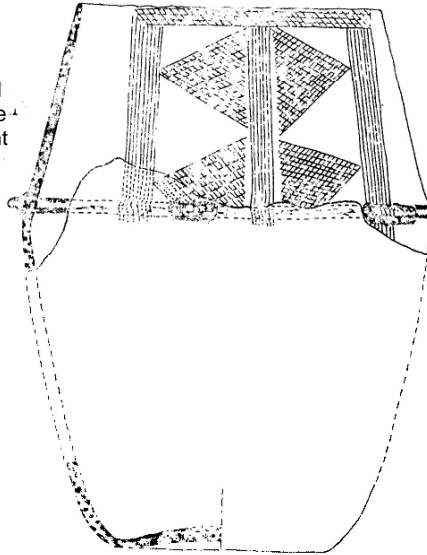


Fig. 2 Scale ¼

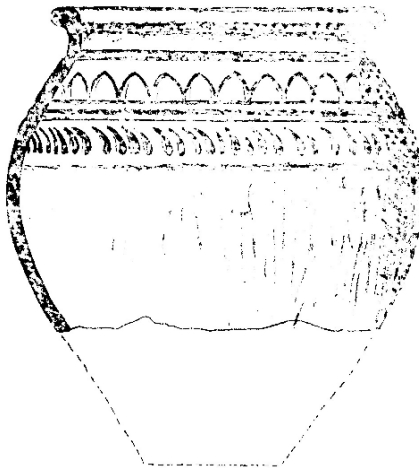


Fig. 2 Iron Age Stone Jar

This jar is in shape typical of the late Iron Age and early Roman ones, but it is distinguished by being decorated. It was found at Elm Park, adjoining Vincennes Farm, Ardleigh

Fig. 3 Scale ½

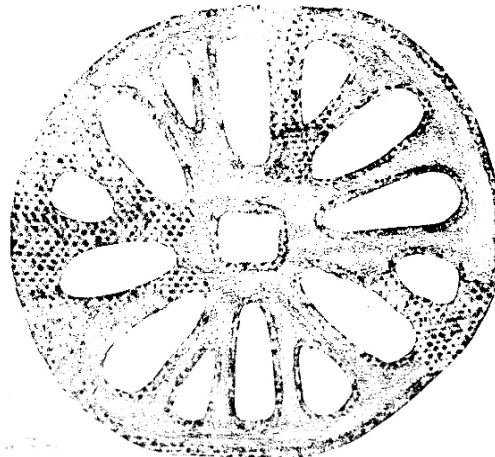


Fig. 3 Iron Age Pottery Grate

Three pieces of pottery were found in a rubbish pit beneath coarse Late Iron Age sherds. The drawing shows a possible reconstruction, based on the three pieces found, which are shown in black. Lt. Cmdr. R F Farrands and I excavated this pit in the Autumn of 1957 at Vincennes Farm, Ardleigh. A grate made of pottery has, I understand, been found recently on a Roman site, but I do not think one has previously been found on an Iron Age site.

EXCAVATIONS IN STOCKWELL, COLCHESTER  
August and September 1958  
By Brian Blake

The excavations at Stockwell, in the Dutch Quarter of Colchester, were planned to test a theory that the street plan of the modern town was indicative of the site of a Roman theatre or amphitheatre. We have a literary reference by Tacitus, of a theatre in Colchester at the time of the Boudiccan revolt. There are no certain finds of the Roman period from those parts of the insulae in which the area in question is situated. A heavy wall is noted, on the Museum 6" O.S. maps, within the playground of the school which covers much of the site. The position of the wall is not accurate and its date uncertain, but as shown it would fit in well as the arena wall of an amphitheatre.

The shape of the streets is that of a "D" of which Northgate Street is the upright. A theatre would thus fit exactly into the shape described, with its facade, approximately 350' long, lying E-W along the above named street. The stage and auditorium with its entrances would therefore be to south bounded by West Stockwell Street, Stockwell and Bull Lane.

Activity in the area described, in the shape of the demolition of old properties by Colchester Corporation, gave rise to the fear that the building which will presumably follow in time would discover a structure when investigation would be impossible. The opportunity was therefore taken to excavate, especially as there was, at this time a cry from some members for an excavation near Colchester. As the Museum was at the time in the middle of a fairly large excavation at Dedham, the moment was not so opportune and the subsequent deployment of labour, tools and equipment proved barely possible. The decision was, however taken and the excavation commenced.

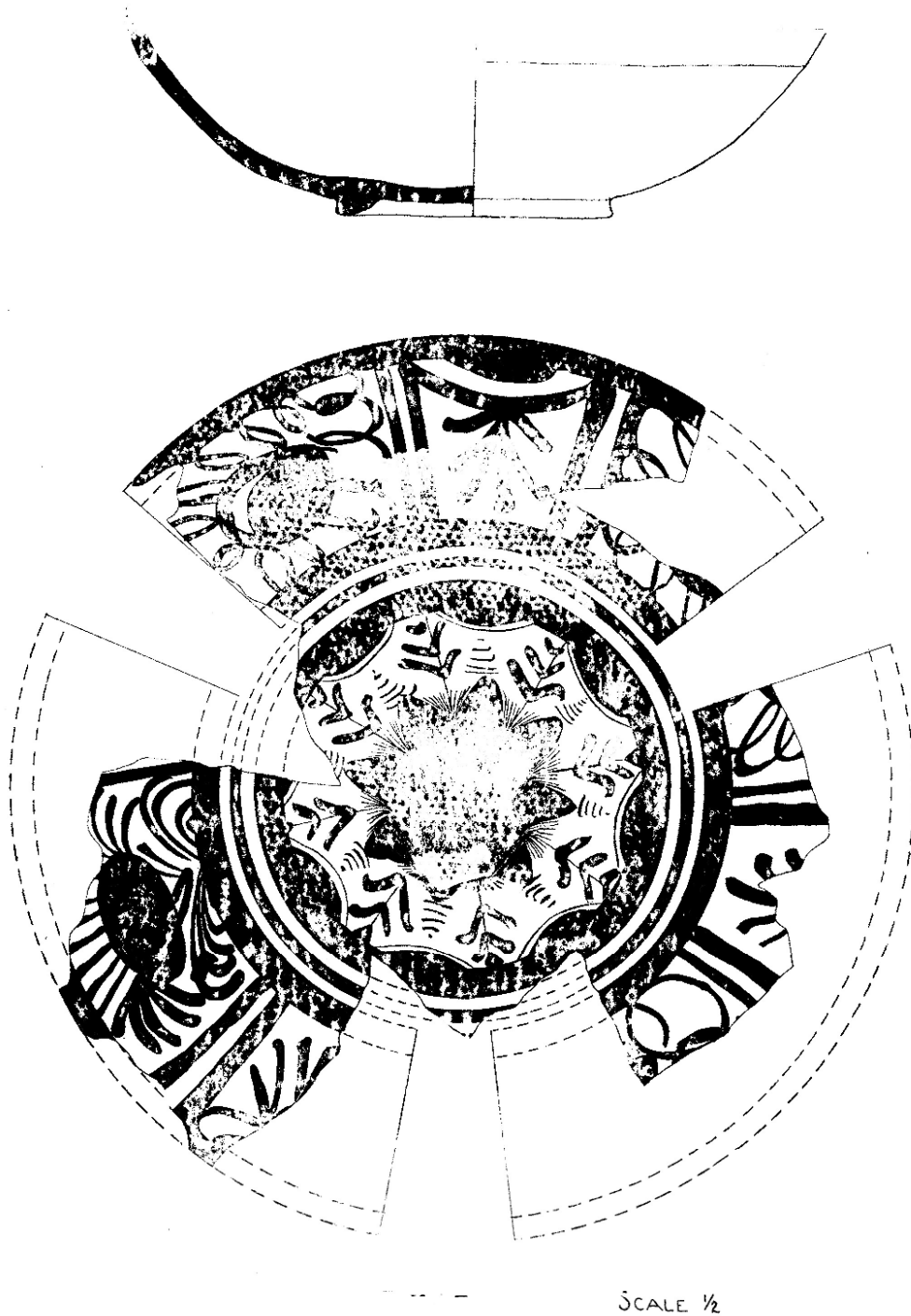
The part of the site chosen was that covered by the disused school garden and, with the permission of the Regional Education Authority, to whom grateful thanks are due, a trench 85' long was laid out parallel and 5' from the eastern fence of the garden. The trench was 5' wide and alternate 10' lengths were opened initially; provision being made in the alternate unexcavated portions for 2' baulks. The excavated trenches, lettered from the south A, C, E, and G, thus alternated with unexcavated 14' lengths. Eventually trenches were quickly dug in portions B and D at the end of the excavation to ensure that no structures of consequence had been missed.

The top layers over the site associated with the garden topsoil, a rich black loam, excepting an area in B and C where a far inferior soil had been imported in which children could grow their vegetables. Under this, evidence was found of the structure and demolition of a building shown on the 1876 plan of Colchester. Most of the layers, apart from those associated with the construction or demolition of the building, consisted of this same black topsoil which, in trench G, carried down from the surface right to the Roman levels, apparently with no change at all. Below the 1876 house, which one may perhaps assume to be associated with the Dutch settlement here, there was a deep layer with pits cut into it. Both pits and layers are composed of rubbish dumped when it was waste land. The material ranges from 14th century to 17th centuries and proves the most important find of the excavation and will constitute the main body of the final report.

The Roman level was eventually located at a great depth in most of the trenches. It proved to consist of a few inches of black soil in which there were some very abraded sherds, bones and tile fragments. This was on a layer of cobbles and stone bound in clay and formed a very solid surface indeed. In all the trenches this had been much cut into and removed by pits and holes. No structures were associated with the cobbles and it is assumed that they form a road or at least a solid path. As a known Roman town street, when projected, is exactly aligned on this it is most probably a street level or rather a succession levels because different layers of 'make-up' were seen within it. It is just possible, however, that the trench had been laid down in the entrance to the amphitheatre in which case, with appalling luck, the result might be expected to be much as was discovered.

One of the most interesting of the vessels found was discovered by the men engaged in digging the trenches B and D. The find was completely unstratified but still has interest as a Dutch Delft dish of the first half of the 17th century.

The dish is illustrated below.



PART 2 JUNE 1959

This issue includes an interesting, and perhaps controversial, contribution on Roman Burn-Bake Cremation by A F Hall. There is also an account by Lt. Commander Farrands of his study of Red Hills and some notes on the Morant Club which may be of particular interest to our younger Group members as it could be said that we are following in the footsteps of these distinguished men. An account of our Whitsun excavation of a medieval kiln and some additional notes on earlier articles complete this Bulletin. Some members of the Group helped with the excavation of the Roman temple site near the by-pass in April and May and an article on this will appear in our September issue.

Colchester Castle Museum has arranged an excavation in the Sheepen area. The site is a Roman pottery kiln and adjoining buildings. Work will begin on the 6th of July. The excavation has been advertised in the C.B.A. Calendar of Excavations and full-time volunteers from all over the country have already applied. These volunteers will constitute the main source of labour but the ultimate success of the excavation will depend on local support. It is proposed that work will continue in the evenings and at weekends so that members will have every chance of availing themselves of this wonderful opportunity. The Museum authorities are counting on us to help and will supply all details on request; please get in touch with them and let them know if you are able to help in any way.

In response to many requests we have arranged to re-issue our first Bulletin which appeared in March 1958. Copies may be obtained for 1/3 post free or from the Museum.

Comments and contributions are welcome and these with all other enquiries may be sent to Mrs K, de Brisay; 89, Maldon Road, Colchester.

CLAY TOBACCO PIPES

In the course of further research into the tobacco pipe industry in Colchester Mr. L. H. Gant has discovered the following interesting advertisement in the Ipswich Journal dated 17th March, 1759.

"TO BE LETT and entered upon at Lady Day next.  
A Messuage with convenient outhouse formerly occupied by  
Edward Bland and now by John Randall, Tobacco Pipe  
Maker, situate in George Lane near the Market Place in  
Colchester and at the same time will be sold the Moulds,  
Screws and other Utensils in the Business. "

Pipes of both John Randall and Edward Bland are among the numerous stamped 18th century specimens in Mr. Gant's collection and the identification of Edward Bland almost completes the Colchester Chronology of Tobacco Pipe over the last 250 years.

DRAIN IN THE ROMAN WALL

In our first Bulletin which appeared in March 1958 there was an article on a "Supposed Drain in Vineyard Street" which gave an account of the clearing out of this opening in the Roman Wall to a depth of ten feet. At that time there were two condemned houses in front. These have now been demolished and the area cleared and made into a car park. The Colchester Corporation under the direction of the Ministry of Works and working to a design of the Ministry's Architect have restored the framework of the archway leading to this drain and have inserted a metal grille -- a deterrent to children but not, apparently, to "litter bugs"! The drain can, however, now be seen by anyone interested.



ROMAN BURN-BAKE CREMATION.

By A.F.Hall.

(The original notes on the sites mentioned are at The Royal Grammar School. On problems involving high temperatures guidance has been most generously given by Mr. J. Collier from his Marks Tey Brickworks.)

BURN-BAKE (Oxf .Dict.: 'burn-beat, -bait, 1669' ) was a process for enriching land ("The Complete Farmer", publ. Cooke & Hookham, 1767). Dried turves were built up into domes having a hole at the top and another at the base, and these were ignited by firing brushwood within. They burned for several days, often so fiercely that men had always to be on hand to control the draught; and the siting of the domes showed later in crop-marks. The relevance of this to Roman cremation is, first, that the domes are 'pyres'--pyres designed to create their own draught; and, secondly, that six burning-sites are known at The Royal Grammar School, in a Roman cemetery, where the evidence insists that if 'they were pyres they must have been closed pyres of burn-bake type, and not open pyres (bonfires).

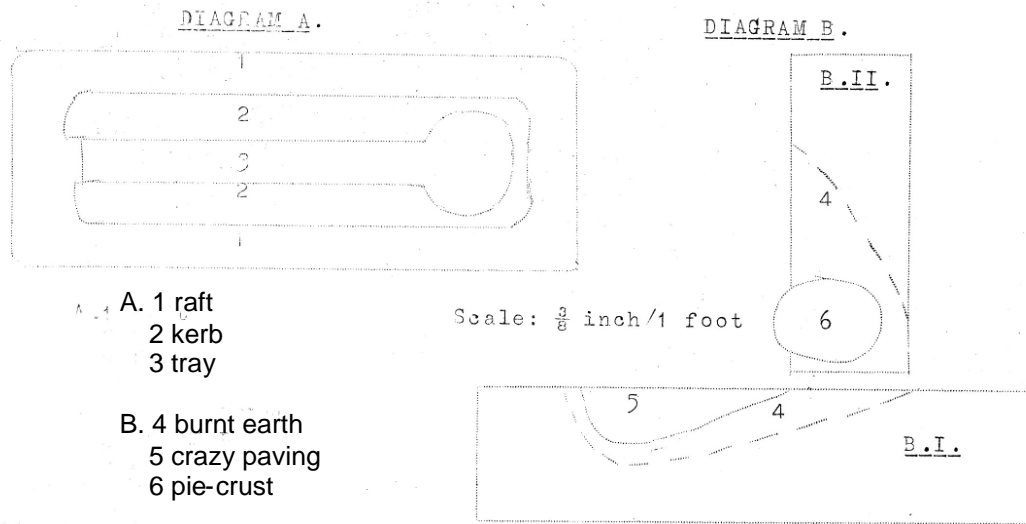
SITES 1-3. A plan of this group is given at p.258 of Mr. Hull's "Roman Colchester", where he mentions two theories in explanation: that they were metallurgic furnaces, or cremation sites. The tiles of their floors have been excessively heated (Collier) in a strong draught; but while these tiles survive not one remains to indicate a (roofed) furnace. Instead, there is a copious spread of burnt earth, as from a superstructure of turf. The composite diagram (below) shows the general principle of the floor-design, and that of a turf superstructure is easily conjectured. All six sites had been set below ground-level, - the five that were tiled being on floors cut in the subsoil which here separates topsoil from 'rock' (sand). Further, every tiled floor that could be examined had been swept clean, and the only residue found, bone-ash, was in a crevice of a kerb.

CLOSED-PYRE CREMATION would presumably be as follows. On its subsoil bed a raft is laid of large stones, here gravel pan, made smooth with soil (almost certainly subsoil, to judge by experiment in Mr Collier's kiln). On this tiles are laid to form a floor of tadpole shape, the head 2ft. in diameter and the tail 1ft. wide, this shape being emphasized by a kerb of broken tile, stones and soil. (The tiles, it is suggested, were to serve as a tray to catch the bones, so facilitating their collection (*ossilegium*), while the thickened base was for storing heat as in a baker's oven). A wall of turves is next raised on the line of the kerb, and at a certain height the structure is roofed with logs, on which the bier is so laid that head, chest, and folded arms of the corpse lie above the head of the tray. The tail is now roofed with turves and the head is carried up as a circular chimney. The first stage of cremation would be by faggots continuously fed in until the logs burned through, and thereafter the bones lying on their tray would be burnt and baked in a glowing heap of charcoal and turf. For important folk there was an interval of 7 or 8 days between death and funeral; thus if we allow from 24 to 48 hours for cremation we may find an explanation of the curious phrase, *cineres novendiales*.

SITE 4 was exposed in sinking an air-raid shelter in 1939. On account of a gradient the subsoil had been terraced to obtain a level bed; and on this terrace an angle of crude tile-work was encountered alongside a spread of burnt earth extending for 20ft along the trench. At the outer edge of this spread were three cinerary urns at a considerably higher level. (Arch. Journ., CI (1946), P. 87)

SITE 5 was of a different type. Here no tile-work was found, but instead a trough, 3ft wide and more than 1ft deep, the associated spread of burnt earth overlying the fill of an earlier pit at sand-top level. The trough itself was cut in the sand alongside. It is not known whether the site was specially set at so low a level, or whether the sand-top had already been bared, in which case it may have been chosen deliberately. The walls of the trough were burnt to pink and saffron, and it was almost filled with burnt earth and fine charcoal, in which no bones were found although it was sieved. Only the south end of the trough was accessible, and this is probably the stoking end since, where there is evidence, these sites seem to have been stoked from points between west and south.

SITE 6 is especially interesting in that it appears to be a poor relation of the tiled sites. It was encountered as we were tracing a surface in the subsoil along Trench I (Diag. B). The 'tail' of the site consisted of a miniature crazy-paving formed of fragments from the middle parts of large vessels. Trench B.II revealed, in addition to burnt earth, what looked like a circular tile, just over 2ft in diameter, but which was in fact poor clay (Collier) which, laid as such, had burned to 'tile' in situ. It is to be pictured as a 'pie-crust' for it capped a basin 7 inches deep which was filled with 22 fragments from the top of two amphorae (hence their absence from Trench I), chunks of mortarium, etc, and stones. Where the burnt earth fans out from the 'tadpole' it is probably a thin spread rather than the subsoil bed itself burnt red, as at the two ends. No copious spread was found, but only the areas to east and south were excavated. Here surely we can detect, in simpler the same intentions as were in the minds of those who built Sites 1-3, in a structure lacking such features as a kerb that might suggest the metallurgist's furnace.



What looks like a parallel to our tiled sites was recorded in 1923 at West Mersea, about 30ft from the well-known wheel-tomb. Alongside a cinerary urn workmen cut through a spread of burnt earth and, at one point, a layer 6 inches thick of broken Roman tiles bedded on an inch-thick layer of burnt earth. (P. G. Laver Diaries: 10/11 /1923.)

THE LITERARY EVIDENCE concerning classical customs is served up to the G.R. ("general reader" in manuals compiled for his benefit by scholars. How valuable these may be can be seen in perhaps the earliest of them, Adam's "Roman Antiquities" (first publ. 1791), where the section on Funerals is supported by some 730 source-references. Information about Cremation, however, is uniformly sparse in the Manuals, and based largely on the same three sources:-

Iliad 23 (Patroclus); Aeneid 6 (Misenus); and Festus on *bustum, ustrina*. All assume that fires were bonfires, and presumably it is the same in archaeology, though here the G.R. is without his Manual, unless it be "Survey and Policy of Field Research etc." (Council for Brit Arch., 1948).

Nevertheless, let us assume, for the sake of argument, that the Archaeological evidence demanded two types of pyre, open and closed; how would this accord with the Manuals?

On the all bonfire theory archaeological evidence will surely be nil, as the ephemeral remains must inevitably have been dissipated by ploughing etc. or by just being kicked about; while the tiles of our closed pyres will be assigned to the annealing of swords, drying of grain, etc., etc, even in the middle of a cemetery. On the alternative theory, where tiles are ascribed to cremation, one must consider why this type of (closed) pyre escapes notice in the Manuals.

Roman funerals were Public or Private, the Manuals tell us; but a third class must be added – the Heroic (e.g. Patroclus). A guess at the relative literary strength of passages describing the three classes might be : - Heroic, 95-100%; Public, 0.5%; Private, Nil. The same ratio may

apply to vase paintings, where pyres are shown as neat affairs of 8 or 10 courses of logs, header and stretcher alternately. I know of only three: Patroclus, Hercules, Alcmena: but others are likely too to be Heroic. Since public funerals would demand a traditional pyre, and the Heroic even an archaic type it is understandable why, on the score of description. the Manuals are silent about closed pyres.

However, though the closed pyre may not be described, it must have been mentioned (if it existed), and thus we now turn from description to the vocabulary, to find, with or without surprise that the words relating to pyres: *pyra*, *rogus* and *bustum*, *ustrina*. How these words were initially used I do not know, apart from one sentence of Vergil quoted by Dacier (1700, Editor of Festus, and Tutor at Court of Louis 14). Here the *pyra* is under construction and the *rogus* alight. "*Pyra, lignorum congeries (says Dacier), rogus est cum jam ardere coepit.*" This may be called the phase-theory: the words are not synonyms yet the theory of a single type of (open) pyre is preserved.

We next look to contemporary to contribute to our enlightenment (or confusion). Festus (150 A.D.; defines only *bustum* and *ustrina*, but Servius (4th c .A.D.) all four words:- "extructio lignorum, rogus; subjectio ignis, pyra; cremation cadaveris, bustum; locus, ustrina." *Rogus* must surely be the log pyre of the vase-paintings, and so *pyra* and *bustum* something different, and not merely different in phase, since Dacier's .sequence and Virgil's usage are both reversed; while *pyra* surely was something more than a brief incident in the life of a bonfire. When, further, we consider that to Lewis & Short not only *pyra*, *rogus*, but also *rogus*, *bustum*, are synonyms, the situation appears desperate. Yet it is possible, if we are prepared to ignore Dacier, to bring the others into agreement. But first Festus' oft-cited definition of *bustum*, *ustrina* must be examined. ".BUSTUM proprie dicitur locus in quo mortuus est combustus, et sepultus. Diciturque bustum quasi bene ustum. Ubi vero combustus quis tantum modo, alibi vero est sepultus in locus ab urendo USTRINA vocatur. Sed modo bustum, eo, quod sepulcra vocamus." (Dacier; but cf. L.&S.) Both words refer to burning-places; it is a matter of here or there, near the tomb (and *bustum* could also mean the tomb itself) or elsewhere (*ustrina*). One may perhaps wonder what was done elsewhere was not also done otherwise, and whether *ustrina* was not a crematorium where private citizens were cremated, not on a flaming *rogus* of logs but in some meaner and more efficient contraption such as a closed pyre, into which fuel was fed below the corpse (*subjectio ignis*); though this translation is too literal to carry conviction. Indeed, if we are to reconcile Vergil, Festus, Servius, and L & S, a much wider interpretation is essential as follows:-

PYRA	generic term for pyre, including the species <i>rogus</i> ;
ROGUS	specifically the bonfire type of pyre;
BUSTUM	expiring or expired stage of a <i>rogus</i> , when the bones are burnt, or even actually inurned;
USTRINA	crematorium.

Thus *pyra* would indeed be the correct term to use for a closed pyre, supposing such a thing to have existed, and not to have had a name of its own.

It is to be observed that the literary difficulties would in no be lessened by writing off the burning-site at the Grammar School as furnaces and not pyres; and so arrive at the answer to the question which led to this parade of pedantry. T is that what is in the Manuals, at least those that were consulted, is not inconsistent with a theory that Roman cremation was on (or in) two types of pyre, the open and the closed. Indeed, a case might even be made out for the following classification :

PUB LICUM: rogus, bustum, Open pyre;  
PRIVATUM: pyra, ustrina, Closed pyre.

### KILN AT ROMAN RIVER

During the 1959 Whitsun holiday some members of the Group carried out an excavation on a kiln site near the right bank of Roman River to the south of Oliver's Farm. (TL. 968209.)

The field in which the kiln is situated belongs to Mr John Howard of Lone Oak, Layer de la Haye, and we are grateful to him for his help and interest and also for the loan of a lock up shed in which to store our equipment.

The land here is of very heavy clay and, although a scatter of tile had been noticed during cultivation for some years, it was not until a heavier plough was used that it was realised that some structure lay just below the surface. The field slopes at quite a steep angle from south to north towards Roman River. Digging conditions were particularly difficult as the surface was baked hard while underneath there was wet, sticky clay.

The outline of the kiln was soon determined set into the slope with the fire arch at the lower northern end. It consists of red bricks ( $9\frac{1}{2}$ " - 10" X 10" X  $4\frac{1}{2}$ " X 2") shown unshaded on the plan page 13; drawing of the section appears on page 12. The shaded area on the plan indicates a lower course of bricks excavated subsequently. The entire centre was buried beneath brick and tile rubble mixed with clay and, when this was removed, the fire bars emerged. These consist of bricks laid side by side and numbered 1 - 10 on the plan. When the fire arch and stoke hole were cleared it was possible to remove some of the clay and rubble from underneath bars 1 and 2. It was then seen that those across the centre arch were 12" thick and about 12" - 13" from the side column to the centre of the arch. The bricks had been subjected to such intense heat that they had become covered with a hard glaze, green in colour. The fire arch has two decorative bricks still in position on the top. These have 2" rounded ends springing from a  $\frac{3}{4}$ " shoulder  $7\frac{1}{2}$ " from the flat end; from this coping to the facing of the stoke hole is 13"; the depth of the arch at its apex is 9" and the width at its base 18". The stoke hole was not dug out to its full extent but traces of a brick floor were found about two feet down, the sides consisting of twelve courses of bricks. The fire bars and the end wall have all sagged towards the fire arch, which, being of a more solid construction, appears to be unmoved. No doubt this sagging is due to a downward movement of the slope towards the river. The placing of the fire arch at the downhill northern end was probably to ensure the necessary draught and to make for easier working. Below bars 8, 9 and 10 - the last of these being only partially in position - a considerable cavity was found lined with very wet clay, the silted surface of which seems to show that the remains of this kiln had become an unofficial land drain.

No traces of pottery were found but from the innumerable fragments of tile it would seem that this kiln was used solely for the manufacture of tiles. The size of the tile is  $9\frac{3}{4}$ " x  $6\frac{3}{4}$ ". There are two holes placed 1" -  $1\frac{1}{4}$ " from the top edge and  $2\frac{1}{4}$ " - 3" apart; these appear to have been made with an implement such as a pointed stick.

Unfortunately there was not time to excavate the site completely and no definitely dateable material was found; nor could we discover any evidence as to the type of fuel used. From the size and substance of the bricks in the walls and fire arch, however, it would seem that the kiln was constructed during or immediately after Tudor times. The Tithe map dated 1838 gives the name of this field as "Kiln Grove Field."

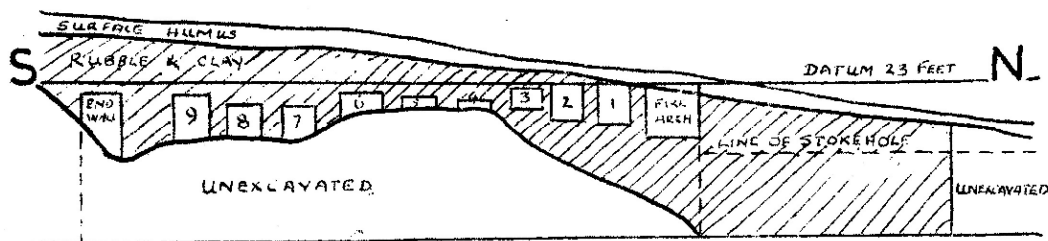
The adjoining field to the west is shown on the same Tithe Map as 'cottage and garden'. In this field there is a considerable concentration of broken tile and tile dust in an area 50 x 20 yards suggesting that this might have been the place where the tiles were stacked ready for dispatch to Colchester by the road which used to follow the line of the present footpath to Layer de la Haye which joins Oliver's Lane. Nearby are several smaller concentrations of broken tiles and one, some ten yards to the north east of the main concentration produced pottery and clay tobacco pipes of the early 17th. century. The origin of the pipes was identified by Mr L.H. Gant as Broseley, Shropshire, the first centre of pipe-making 1650-1680. The pipes are characterised by the heart shaped feet.

Perhaps this was the store-keeper's house when the tile kiln was in operation and continued in occupation at least until 1838.

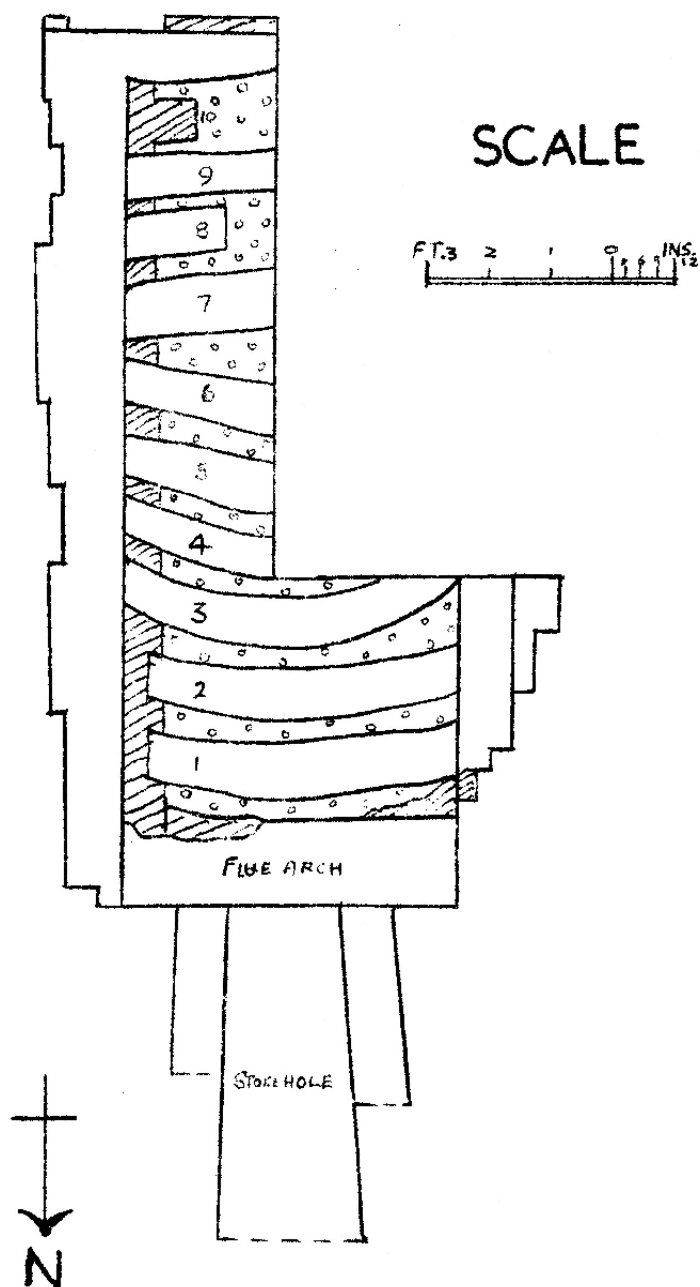
The presence of some pottery 'wasters' among the broken tile, together with some brick on them similar to those making up the fire bars in the excavated kiln in the other field seem to suggest that there had been at least one other kiln operating in 'this field also. Unfortunately there was only time for one small trial trench and this revealed no definite structure.

Local records have been examined for any reference to activity in this area. Wright's Essex (1836) quoting Young, says "this loam would make good tiles. It is very wet but land draining has no effect." Application was made to the Essex County Record Office for any manorial information and we are grateful to them for the following extract from the Court Rolls:- "Rental 1638 (D/DR - M.26. ) in which one: DOR paid an annual quit rent of 9d for TILE KIL." From, this it would seem that the kiln was making tiles in 1638 but that it had disappeared by 1838.

## SECTION OF KILN AT ROMAN RIVER



## PLAN OF KILN AT ROMAN RIVER



### THE MORANT CLUB

This admirable society was formed in December 1909 for the purpose of doing practical archaeology. It was intended to assist the Essex Archaeological Society and the Essex Field Club and to report their findings in the journals of those bodies.

The membership was limited to forty men and the inaugural meeting was composed of such names as Henry Laver, Chairman; Miller Christie and Francis Reader, Joint Honorary Secretaries, with Gurney Benham, Frederick Chancellor, Wilson Marriage and Hazzledine Warren among the ordinary members.

The Club was very active up to the outbreak of the First World War and the following excavations were undertaken:-

1. The Benedictine Abbey of Barking:- a sketch of its history and an account of recent excavations on its site. By A W Clapham. Published in the E.A.S. Transactions VOL. XII.
2. On a Neolithic Floor in the bed of the Crouch River, near Rayleigh etc., by Hazzledine Warren F.G.S. and published in the Essex Naturalist VOL. XVI.
3. The excavation of Leaden Mount by Henry Laver and Francis Reader. Published in the Essex Transactions VOL. XII.
4. The Church of West Thurrock:- a sketch of its architectural history and an account of recent excavations on its site. By Alfred W. Clapham. Published in the E.A.S. Transactions VOL. XIII.
5. The- Opening of the Romano-British Barrow on Mersea Island. By Hazzledine Warren, Published in the E.A.S. Transactions VOL. XIII.
6. The Opening of Plumberow Mount in Hockley by E.B. Francis. (This appeared to be a construction of the Roman period). Published in the E.A.S. Transactions VOL. XIII.
7. The Opening of a mound at Chadwell St Mary by Miller Christie and Francis Reader. (Mediaeval period). Published in the E.A.S. Transactions VOL. XIII.
8. The Augustinian Priory Church of Little Dunmow by Alfred W. Clapham. Published in the E.A.S. Transactions VOL. XIII.
9. Botanical and Geological Observations made during the opening of the Romano-British Barrow on Mersea Island by Hazzledine Warren. Published in the Essex Naturalist VOL. XVII.
10. Excavation of a Mediaeval Pottery at Mill Green, Ingatestone by Miller Christie and Francis Reader. Published in the E.A.S. Transactions VOL. XIV.
11. The Balkerne Gate, Colchester. E.A.S. Transactions VOL. XV. This was started by Ernest Mason and finished by R.E.M. Wheeler
12. An Insula of Roman Colchester by R.E. Mortimer Wheeler. (This refers to a site in Castle Park), This was the first excavation after the First World War and it appears that in 1920 Sir Mortimer was Joint Hon. Secretary. Published in the E.A.S. Transactions VOL. XV I.
13. The Excavation of Foundations on the Castle Keep at Pleshey by Miller Christie. (Norman period). Published in E.A.S Transactions VOL. XVI . These excavations were done on the top of the mound. Sir Mortimer Wheeler, in his autobiography "Still Digging" says that he has arranged to dig at Pleshey for the Morant Club in August 1914 – but was prevented by the War. The site, however, was to have been a different one from that referred to above. An old man showed him the spot where, years previously, "he had ploughed into the buried walls".

The Pleshey dig was the last one undertaken by the Morant Club. Two other excavations seem to be connected with it and were advertised as "in preparation". These were (a) On Certain Groups of Mounds On the Essex Marshes (not Red Hills) by W.H. Dalton and Miller Christie. This was finally published under the title "Medieval Salt Pans" in the E.A.S. Transactions VOL. XVII. (b) On a Roman Pottery (or Landing Place) in the Bed of the Thames at West Tilbury, by Frank Lambert and Francis W. Reader.

What a wonderful achievement, really, when scientific excavation was in its infancy and what a well spaced distribution of sites in the County with varying periods of archaeology.

By reading through the reports one gathers that the Club was pretty exclusive and that the excavations were mostly done by paid labour. A fairly large sum of money would have had to be found by subscriptions; Club membership was £1/1/0 per annum. It is known that the Pleshey excavations were partly undertaken to relieve unemployment. The Club was finally wound up on the 19<sup>th</sup> March 1926. at that time the Joint Hon. Secretaries were, Philip Laver and G. Montague Benton and the Balance Sheet (showing a Credit of £82/15/8) was signed by S. Hazzledine Warren. Mention is made of "unfortunate difficulties" but we can only guess what these were.

There can be no doubt that the Club contained some very distinguished members and at least two were subsequently knighted. Possibly the most famous of all, even surpassing Sir Mortimer, will be found to be Mr Hazzledine Warren. In the second of the Club's excavations at Hullbridge he found some pottery of a new culture which would now be identified as Rinyo-Clactonian. Twenty five years later he published his famous article on the Clacton and Walton sites in the Pre-historic Society's Proceedings.

Let us hope the Morant Club will not be entirely forgotten and that someone who still remembers its members and activities will write down its story or at least tell us some anecdotes about it.

#### ESSEX RED HILLS IN THE HAMFORD WATER AREA R. H. FARRANDS

During the past four years an intermittent survey has been carried out of the alluvium and saltings area surrounding Hamford Water on the north east Essex coast, The most interesting result was the number of Red Hill sites found as only one had previously been recorded here.

Many of the Red Hills have been levelled as a result of erosion, continuous ploughing and farmers carting away the fertile red soil to use as a top dressing on the fields. Recently one farmer used the red earth as bedding for growing mushrooms until the 1953 floods washed the huts away. Of the twenty Red Hills found only four exist today as mounds, the remainder being areas of red coloured soil only visible after fresh ploughing but still containing the unmistakable briquetage. It is obvious that more sites must exist in areas under grass and in the saltings outside the sea wall where detection is difficult. Only one site, No. 14 has been found outside the present day sea wall. The level of this and its adjacent salting appear to be somewhat higher than the fields inside the sea wall which include site No. 15. It is suggested that the level of the two Red Hills would have been the same originally but, due to the construction of the sea Wall, the ground inside has dried out and shrunk.

The distribution shows one important fact and that is the number below Little Oakley. This shows a group around an original creek. It is suggested that this may support the theory that Red Hills were sited for making salt in that they were at the heads of small inlets enabling sea water to be lead off at High Water Springs, possibly into settling tanks. It seems almost certain that this group would have been operated by those living in the Iron Age and Romano-British settlement (Nat. Grid 222292) at Little Oakley. In fact one fire bar in fabric to the Red Hill briquetage was found in a level pre-dating the villa and containing Iron Age 'A' and 'C' and early Roman-British pottery.

It has always been difficult to account for the huge volume of red earth in the Red Hills. It has been suggested that it is a residue from the burning of turf to provide heat for boiling brine. In



"England and the Salt Trade in the Later Middle Ages" by A. R. Bridbury, 1955, he states that, in certain areas of the Low Countries, salt impregnated peat dug from the flats and banks off the coast was carried to the mainland, dried and burnt. Salt being non-inflammable, the peat ash was dissolved in salt water and the solution evaporated in small pans to produce fine white salt. The sites are marked by great mounds of residue in parts of Zeeland which were not later submerged in the sea.

One wonders whether the Red Hills were formed by a process used in the Low Countries at a much later date.

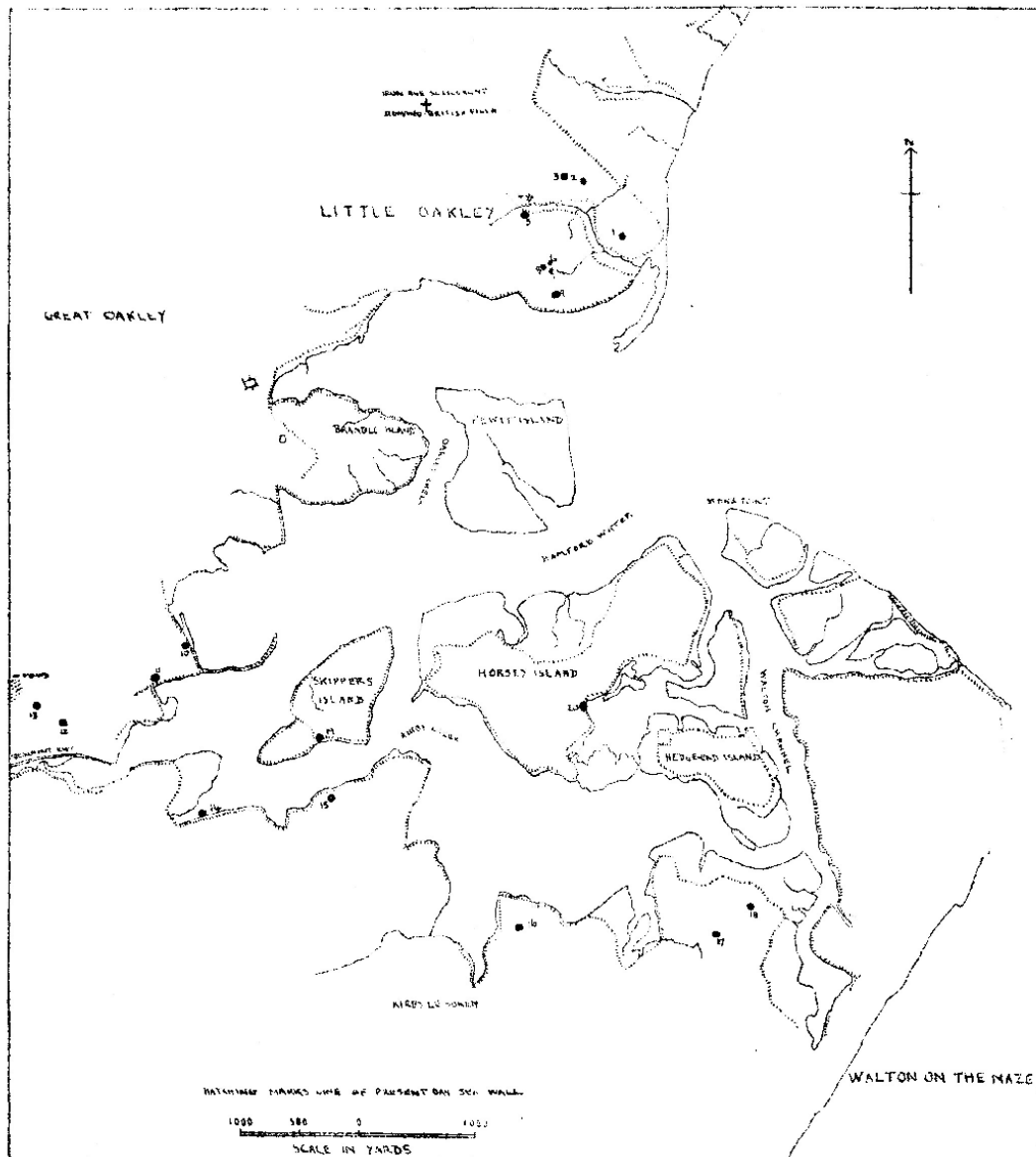
There are other sites in the Hamford Water area which produce burnt patches and crude brickwork in small quantities but entirely different in character to that of the Red Hills. The pottery from these sites ranges from Saxo-Norman to the 14th century in date and probably indicates the location of salt pans of Late Saxon and Mediaeval times. Domesday Book lists seven salt-pans in this area.

One of the sites is adjacent to Beaumont Quay and another is to the north west of Red Hill No.13 shown on the distribution map below. Adjacent to the latter is a mound similar to those found along the Blackwater where mounds are found in association with settling and evaporating tanks usually considered to be the site of Mediaeval salt-pans. Similar sites have been found on the north Kent coast and described by M. W. Thompson in "Group of Mounds on Seasalter Level near Whitstable", Archaeologia Cantiana 1956.

Position of Red Hills  
(see Distribution map page 17.)

<u>No.</u>	<u>National Grid.</u>	
1.	238281	Red area visible after ploughing.
2.	235285	" " " "
3.	234286	" " " "
4.	231284	" " " "
5.	231283	" " " "
6.	232271	" " " "
7.	232279	" " " "
8.	232279	" " " "
9.	233277	Mound .
10.	204250	Mound - cut by sea wall ditch.
11.	202248	Mound.
12.	195244	Red area visible after ploughing.
13.	193245	Red area revealed by rabbit activity,
14.	206236	Mound - cut by sea wall ditch.
15.	216238	Red area visible after ploughing.
16.	231228	" " " "
17.	246228	" " " "
18.	248229	" " " "
19.	215242	Red area cut by sea wall ditch.
20.	235245	" " " "

## DISTRIBUTION OF RED HILLS AROUND HAMFORD WATER



### PART 3 SEPTEMBER 1959

**WINTER PROGRAMME** The weekly evening meetings will begin on Monday October 19th at 7.p.m. at the Castle Museum. It has been suggested that we attempt a more ambitious and constructive programme this winter and it is hoped that all local members will attend the first meeting, or failing that, the second, to help arrange this. The idea is that a short talk should be given each Monday evening by a different person on a chosen subject in which he or she is particularly interested; this in itself will entail some study and research and the discussion to follow should lead to more; and possibly to some interesting field-work later.

This Bulletin contains an article by Mr Erith on "Circular Crop Marks in the Ardleigh District" and two contributions by Mr Gant; - a report on the site of Messrs Joy's shop which has recently been demolished and a delightful 'reprint' from the British Press of 1818. An account of the excavation of the Romano-Celtic Temple at Sheepen by Mr B.Blake is also included.

The W.E.A. have asked us to include the notice of a 24 week Sessional Course provided by the University of Cambridge Board of Extra Mural Studios on "The History of Colchester 1700

- 1960" by A.F.J. Brown B.A. - to be held weekly from Friday 25th September at Greyfriars School, North Hill, Colchester.

We now have copies available of all previous Bulletins. These can be obtained price 1/3 post free from Mrs K. de Brisay, 89, Maldon Road, Colchester; to whom all enquiries and contributions should be addressed.

DISCOVERIES AT JOY'S SITE, HIGH STFSET, COLCHESTER.

by L. H. Gant.

Demolition of the premises at 51, High Street, formerly occupied by Joys produced little worthy of note since the building was a 20th cent., monstrosity, but the digging for footings and excavations for stanchions gave one a fleeting chance to examine strata and at least view some of the objects found.

The most important structure was revealed at the High Street end of the tapering site where a square building, presumed to be Norman, having massive walls enclosing an area of some twenty feet square, was found at a depth of about three feet from the present ground level. The original walls were built of rubble and tile, not coursed, and these had been cut through in two places to provide access to a neighbouring cellar, and for the stairway to the cellar formed by the building. It was not possible during the building operations to examine the outer surface of the wall and indeed the cavity was eventually filled in with cement.

A section across the building was dug to a depth of twelve feet at which depth the natural sand appeared. Close to the wall at a distance of about twenty four feet from High Street a baluster jug was recovered almost intact, the handle only being missing and slight damage being done to the foot by one of the labourers. This was of gritty texture and was partially glazed. Other fragments of early pottery and Roman Building tile were found throughout the made up ground and pits for the disposal of rubbish cut into the natural sand occurred through the strata. In about, the centre of the building, that is, equidistant from High Street and Culver Street, a circular mediaeval well was found which had been arched over and sealed by brick at no recent date. The well was beautifully coursed in stone and it is regretted that rubbish from the site was put into it before its existence was known to us.

The scatter of pipe fragments throughout the upper layers of soil provided one of the earliest bowls yet found in Colchester which dates from 1600 -1620. The greatest number of pipes were of the much larger barrel type common in the mid 17th century round about the time of the Siege of Colchester. The presence of this type might be accounted for by the premises being used by the defending forces in that struggle, as was found higher up the street at No 24 when the Essex County Standard Press Room was built some eight or nine years ago.

A spur with a painted rowel was found and it was reported, although not seen by myself, that a Roman mosaic pavement was discovered some twenty five feet from High Street, at a depth of only three feet. Mr Calver saw this and said it consisted of the usual red tesserae. In view of the disturbed nature of the surrounding soil I cannot think this is "in situ" and therefore merely record the find.

CIRCULAR CROP-MARKS IN THE ARDLEIGH DISTRICT.

by F. H. Erith.

In other counties Barrows or Tumuli are commonplace; in Essex they are a rarity. In Yorkshire there were erected 20,000 and in Devonshire nearly 6,000, but in Essex there can have been barely a score marked on the Ordnance Survey maps. The best known is the Lexden Mount, and other landmarks are at Sturmer, on the road to Cambridge; Church Farm, Tending, Lawford Hall; Ford Farm, Mistley, and Manor Farm, Great Holland. All these are definitely recognizable as barrows as they still have most of their elevation intact, but many barrows have had their height reduced by ploughing so that there are perhaps only two or three feet left above ground level, and even more have been entirely levelled so that there is normally no trace left that they ever existed.

Generally speaking, the larger the mound, the more likely it is still visible, because the physical difficulty of levelling it is greater. The smaller mounds would be easy to level down and these have mostly disappeared.

In the Ardleigh district the only sites marked on the map are the ones at Lawford Hall and opposite Ford Farm, Mistley. The one at Lawford Hall was excavated about 1810 and two urns were recovered, but of what period is unknown. The Mistley site appears to have been excavated but it is not known what was found in it. Some time ago a Middle Bronze Age urn was found at California Road Mistley, presumably from a ploughed down and unrecognizable barrow. In 1913 a Middle Bronze Age urn was extracted while digging gravel at Dedham, almost certainly from a ploughed away barrow.

In 1922 Mr Laver reported a tumulus on the Ardleigh-Lawford boundary, opposite Foxash, but the records do not say why he believed this site to be a barrow.

During the late war, Mr F.A. Girling of Lt Bromley, suspected that a site on Tye Field, Lawford, might be a barrow and in January 1959 Mr Brian Blake and I confirmed that it was. A circle of sand and fragments of Neolithic pottery were visible on the surface after deep ploughing. In a drought in 1957 Mr F.A. Girling spotted the crop mark in sugar beet at Dedham which led to the excavation of a ploughed away barrow and the extraction of two Middle Bronze Age urns, which was done under the direction of Mr Brian Blake.

Such then was the position about midsummer 1959:- Dedham, one certain and one probable barrow; Lawford two certain and one probable; Mistley one certain and one probable.

In late June of this year, Mr R.H. Farrands hired an aeroplane for an hour's flight with the idea of examining his Roman site at Lt Oakley. There had been a considerable drought and it was possible that crop marks might shew up from the air which would not be visible from the ground. Actually no crop marks did show up so, in order to use up his time, he flew over to Ardleigh to see if anything would be visible there. Besides extensive linear and other marks over the Iron Age and Roman portion of Vince's Farm, were two ring marks, one at Vince's Farm and another near New Hall.

When he informed me about this I went to the field in which the one at Vince's Farm was, and indeed, not only was the one he had seen from the air plainly visible at ground level, but also five others as well. At this stage the main crop of barley had changed colour from dark to pale green, but the actual rings were still dark green and the corn three or four inches taller. At a later stage, in July, there was no difference in colour since both main crop and ring were white, but the difference in height remained sufficient for these rings to be discernible, though less obviously so.

Subsequently I found a similar ring in a neighbouring field at Martell's Hall, Ardleigh, owned by Mr L.S. Palmer; and in July, while threshing some grass seed at Gt. Bromley Hall, I saw a ring from the top of the threshing drum.

In August, while combining wheat at Vince's, another mark became visible from the height of the combine harvester. This was only twenty yards away from the Late Bronze Age Urnfield and not much further from some of the rings in the barley field.

Later, the driver of the combine-harvester sent a message to say that he had cut through some ring marks at Grange Farm, Lawford, and he would be able to show me exactly where those were by the brightness of the stubble. But when I arrived he could not exactly locate the place as the stubble had, of course, been run over by various machines used in the harvest and was no different from the surrounding stubble. From his description it appears that these were circle marks as opposed to ring marks, and all the internal corn was taller as well as the ring circumference. This could mean that they were sites of pits of some sort and were probably not caused by barrow makers.

However, in a field of wheat which was next due for cutting, there appeared to be a mound somewhere in the centre and I asked this driver, (Michael Wright, of Manningtree) to let me know if there was a ring of higher corn and to mark the place if possible. I got a message to say that there was an enormous but quite recognizable 'halo' within the wheat and I got a rather grudging permission from the farm manager (Mr Strawson) to travel on the combine harvester as the site was being cut through. I was thus able to confirm that this was another ring mark. The mound still has about two or three feet of elevation and from one side this looks more as a depression adjoins the mound, as if the earth were taken from the one to make the other. The halo was about forty yards in circumference and six feet thick.

When the Tye Field, previously mentioned, was being cut, a ring eight feet wide and about forty yards in diameter was observed at the site of the barrow, thus showing two circular marks in one year. One of sand owing to deep ploughing and the other as a crop mark in barley, and both having the same centre. The combine driver (Mr Ron Groves) said that there were other circles nearby and he marked the most prominent with straw at the circumference and a stick at the centre, so that when I arrived a few minutes later I was able to get a survey of it.

The result of the drought in 1959 meant that an additional nine barrow sites had been found in Ardleigh as well as one in Great Bromley and two in Lawford.

It must be understood that as soon as the crops are harvested, visual evidence of these circles ceases and it may be several years before conditions are such that they would be seen again. Not only would there have to be a drought but also the crop would have to be a susceptible one. Most important of all, perhaps, is that they would have to be seen by someone who would recognize them and be aware of their significance. It is highly probable that many rings, especially in the middle of large fields or not visible from the road, are never detected at all.

What is the cause of these crop-marks? We know that in a drought corn will grow higher where the land has at one time been dug deeper, but the cause is not that the infilling contains humus, or even soil that has more plant food than the sterile undisturbed subsoil. If that were so then these crop marks would show up every year. In a drought the limiting factor to growth is moisture and it must be that this once-dug deeper soil is able to retain moisture and thus increase the growth of the crop above it. It follows then, that any increase in the height of a crop is a 'recollection' of disturbance inside the circle. This is strikingly brought out in the 'ring' at Gt Bromley, where two tufts of higher corn, each about five feet from the centre, 'reflect' what are probably two burials. The remaining interior crop, being similar in height to the exterior, implies that these two burials are the only features in the barrow.

In all the ploughed away barrows I have therefore made notes of the interior markings, both to help the excavator and also to see if this theory is correct, if any of these sites be excavated. Interior crop markings cannot apply in this way to barrows which still have some elevation left as the extra soil applied in making the barrow confuses the issue.

The crop which appears to be most sensitive is barley since it is comparatively shallow rooted and fills up the spaces between the drills better than other corn. As it is not a tall crop it can

more easily be seen from ground level than wheat which grows to chest height. Also, the thicker the crop, the more accurate the 'reflection'. A crop like sugar beet with only one plant per square foot must give a less accurate 'reflection' than, say, a thick crop of barley with continuous plants in seven inch apart rows.

What are the chances of any of these sites being excavated? Well, two of the farmers concerned would certainly never allow their land to be 'dug-up'; the family of one even implored me not to mention the existence of the site to him. The other had some reason to be apprehensive as the barrow was in the middle of a sixty acre field. It was only when I mentioned that it would be more difficult to persuade a qualified team of archaeologists to tackle the job than to persuade him to give permission for the work to be done that his mind was set at rest. The commitments already undertaken by the Colchester Museum authorities, the remoteness of most of the sites and the vast amount of earth to be shifted, preclude of any but the smallest being excavated during the next few years.

Finally, in the case of the ploughed away sites, the surveying of their exact positions may not be sufficiently accurate for them to be found again as landmarks which we may think are permanent enough have a habit of disappearing. For example, the four huge pylons at Gt. Bromley have been taken down in the last year. More hedges and trees are being bulldozed away every year and small fields are being made into big ones. It is difficult to find a reliable landmark from which to make survey.

<u>Location.</u>	<u>Crop.</u>	<u>Diameter</u> <u>feet.</u>	<u>Width of</u> <u>circumference.</u>	<u>Internal Markings.</u>
<u>ARDLEIGH.</u>				
Vince's Farm.	barley.	22	3 feet	Over the whole.
" "	"	21	3 "	"
" "	"	38	5 "	In centre & one
" "	"	67	3 "	quarter.
cen.,				In 2 quarters merging at
" "	"	66	2 "	About 1/3 of interior.
" "	"	31	3 "	In centre & one quarter.
" "	wheat.	25	2½ "	Not discernible.
Martells Hall.	barley.	33	2 "	On 2 sides & in centre.
Ardleigh Hill.	wheat.	75	6 "	In centre.
<u>GT BROMLEY</u> - Hall.	barley.	37	2 "	Two humps near centre.
<u>LAWFORD.</u>				
Tye Field	barley.	120	8 "	Barrow still elevated.
" "	"	16	2 "	Not Observed.
The Grange.	wheat.	120	6 "	Barrow still elevated
Foxash (Smallholding)	nil.	large.	-	" " "
<u>DEDHAM</u>	sugarbeat.	75 (?)	6	Horshoe mark near
centre.				

The site at Foxash is now occupied by Mrs Bodsworth, A smallholder, but in 1922, when Mr Laver reported it, the land was part of a large arable farm. Perhaps someone had seen a 'halo' in the drought of 1921 and told Mr Laver about it. The diameter could be 120 feet or more.

The size of the 'halo' at Grange Farm was judged by eye only.

Mr Girling has taken some excellent photographs of four rings at Vince's Farm and also of the one at Great Bromley.

EXTRACT FROM "THE BRITISH PRESS" SATURDAY, 5th SEPT., 1818.  
from L.H. Gant.

Colchester

On Thursday, 27th ultimo the first Admiralty Court for the jurisdiction of the Borough of Colchester with the Customary Court and Court of Conservancy for the fishery of the river Colne since the granting of the new charter to the Borough, was held, according to ancient custom, at a place called the Block-house, in East Mersea, in this County, and within the jurisdiction, before Edward Clay Esq., Mayor of the Borough.

After a charge of considerable length by Mr Sutton, the Town Clerk and Registrar of the Court, in the course of which he detailed to the Court and jury that so long back as the reign of Henry I the Burgesses of Colchester had the fishery of the river Colne from North Bridge to Westnesse, and (whoever might be the owners of the adjoining lands) had the customs of the waters and banks on both sides the river; and that these, and other great and important rights and privileges, were also granted and confirmed to the Burgesses by Richard I, Henry VI, Edward IV, and by divers other Kings and Queens of England.

The jury empanelled and sworn which consisted of the most respectable licensed dredgemen of the fishery of which Mr Benjamin Stacey of Wivenhoe, was the foreman, made several presentments of considerable importance to the rights and interests of the Mayor and commonalty; amongst others we collected the presentment of some London fishermen, for fishing in Pyefleet an arm of the river (in which the finest oysters are produced), with peter nets loaded with lead; several enclosures of land, over which the sea was accustomed to flow at high tide, and in which were, previous to such enclosures, many fleets and creeks into and from which the tide flowed, and situate in the parishes of East Mersea, Langenhoe and Fingringhoe; encroachments by the Lord of the Manor of St Osyth upon the admiralty of Colchester by engrossing of gravel and selling the beach below high water mark. The claims of several persons, to be licenced to dredge in the river wore also enquired into and determined.

Much other business, of importance to the interests of the Corporation and the licenced Dredgemen was transacted; and upon the Courts rising and the Mayor, Magistrates, Town Clerk and many other members of the Corporation, with a very respectable party of Gentlemen from Colchester and the neighbourhood with the Jury adjourned to a large marquee on the shore and partook of a cold collation, which had been prepared and laid out by Mr Lingwood of the Blue Posts in Colchester, in a style and manner which gave great satisfaction. An excellent band, provided by the Mayor, played during dinner and for a considerable time afterwards, on a convenient spot near the Mayors marquee, to which many of the company adjourned and joined in the cheerful dance, till the return of the tide rendered it necessary to leave the delightful spot. We do not recollect to have witnessed so large an assemblage of company on any former occasion; and we are happy to say, that the business and amusements of the day were conducted and concluded to the entire satisfaction of all.

There was a good sailing match in the afternoon between the Fox and Mary cutters, which terminated in favour of the former.

ROMANO - CELTIC TEMPLE , SHEEPEN, COLCHESTER.  
by B. Blake.

In a town such as Colchester where most people are aware of the past and too many are engaged in destroying it, to find a site as little disturbed as that excavated this Easter by the Colchester and Essex Museum is rather surprising. The site was first reported to the Museum by small boys who had dug into it and found fragments of Roman building material and a piece of tessellated pavement 'in situ'. This was also seen and reported by Mr and Mrs D. Merson of North Station Road, Colchester.

The site is on land farmed by Mr Cronin of Moat Farm and I am most Grateful for his co-operation and interest, and for permission to excavate the site which he readily gave. To you - those of the Colchester Archaeological Group who assisted at the site - I am also indebted. I relied upon your labour and hope that in exchange you gained some experience and knowledge, in addition to blisters and backache. Above all I am indebted to those three stalwarts Tessa Stratton, Douglas Merson and Peter Rose. Their constant attendance contributed much to the success of the excavation.

The Site.

The site appears as a low mound in the flood plain of the River Colne, within fifty feet of its south bank. It is situated within the angle formed by the Colchester by-pass and the river and is due west of Colchester North Station. Though only a foot or so in height the mound is quite conspicuous when once noticed. It is most evident when the field is flooded a foot or so deep as it then stands up above the water as an island. (I am indebted to Douglas Merson who showed me a photograph of this). From the mound approximately fifty feet in diameter, a narrow ridge runs to the south east. It continues on the south and west sides, though here it is barely discernible, showing as slightly drier ground when the field is waterlogged, or, in its present abnormal state as a distinct negative crop mark in the grass. The ridge is not perceptible on the north east as there higher land runs from the mound towards the river until cut by a low bluff about twenty feet from the water's edge. Between the mound and its encircling ridge was a low waterlogged area.

The presence of the pavement made it clear that a Roman building lay below the Mound. It was most likely to be a Roman-Celtic Temple. If it were so the ridge might well have been an enclosure wall surrounding a small temple precinct.

The situation of the building is very odd. It is always subject to flooding and is waterlogged for most of the year. It must be borne in mind though, that if the relative levels of the river and land changed so that the mound stood higher, the river gravel subsoil on which it stands would ensure it a firm dry bed.

The site is within the inner defensive ditch of Camulodunum and is very near the two Roman-Celtic temples excavated by Mr Hull in 1935. (Plan, Camulodunum Pl. CVI. Full report Roman Colchester pp. 224 ff.)

Excavation

The excavation lasted five weeks over the Easter holiday period. Preliminary surveying was done mainly by Dr R. Newholm and Geography students from the North East Essex Technical College and School of Art. I am most grateful to them for this and for their assistance during the excavation.

A Base Line was laid out almost east-west forming the centre line of a small grid of sixteen squares to cover the area of the mound. If time and labour should permit, trenches to explore the ridges would also be dug along this line.

Squares of ten foot side were chosen as the unit of excavation. They were thought to be the most useful size to give an intelligible area of working and of sufficient width to allow deep



digging if it should prove necessary. Baulks 2ft. 6 ins. wide allowed pathways for barrows as the spoil had to be: dumped clear of the excavation area.

At an early stage in the proceedings the top of the water table was reached. Fortunately this declined as work continued but finally persisted at a level which made further digging impossible. A water pump was borrowed and used but the water would not drain across the site to a sump as the walls and floor levels formed impervious barriers. I am most grateful to the Borough Engineer and the Superintendent of Parks whose departments loaned pumping equipment. It worked well, allowing for the extremes of temperament displayed by all such machines but proved too large for the small amount of water. The sumps were emptied in one gulp and the machine had to idle too long while waiting for them to refill.

#### Conclusion.

The mound was caused by the silting of river alluvium and accumulation of humus over remains of a Roman-Celtic Temple. The building may be dated, at the earliest, to the second half of the first century A.D. Solidly built of septaria and tile, it had a podium of about two feet and an overall width of thirty six feet. The two square walls were concentric, the outer 4ft.4in. in width and the inner 2ft. This may indicate that the main thrust of the roof was taken by the outer wall and that the inner carried much less weight, possibly upon a colonnade. If this were so the 'cella' may have been open to the sky and the deity worshipped therein one having associations with nature. Both the walls have been robbed for stone down to the top of their footing levels and the coarse red tessellated corridor between them had cracked and slipped into the trenches left.

Below the building, which was faced with Purbeck Marble, lay a more modest affair. It was of timber with wattle and daub walls. Its date was Claudian-Neronian, upon the evidence of much pottery produced from its several occupation layers, These alternated, with four floors of yellow clay which were sealed by the destruction of the building by fire.. This most probably dates to the activity of Boudicca in A.D.61. As far as may be seen from the few points where it was investigated this building conforms in plan to that above.

#### PART 4 DECEMBER 1959

This Bulletin completes our second year and we apologise for our delay in bringing it out. It was held up to include an account of an excavation at Great Bromley. The site was first noticed by Mr. F.H. Erith as a very clear crop mark during last summer's drought and it was thought advisable to dig it before his marks were lost. Mr Erith described this and other crop marks in our September Bulletin.

Our weekly meetings during the autumn proved to be most rewarding and were much enjoyed by all who took part. An account is included on pp. 28-29. A further series is planned for 1960, the programme of which is given overleaf. This has had to be re-arranged in some respects but we think members will find at least some of the items interesting. Those members who wish to join the outings to Feering or Gestingthorpe and have no transport should get in touch with the Secretary. We also include in this issue an article by Mr L.H. Gant on discoveries at No. 70, High Street, Colchester and an unusual and interesting article by Maj. A.D. Mansfield on the Victorian Gas Stove.

All enquiries may be sent to the Hon., Secretary; Mrs K. de Brisay, 89, Maldon Road, Colchester. Telephone: Colchester 6207. (evenings only).

Just as we were going to press the sad news came through that Air Commodore J.S. Chick died in the Colchester hospital on January 21st. His death will be a great loss to the Group of which he has been an enthusiastic member from its inception. Air Commodore Chick was working on the pattern of Roman roads in the district and at every meeting he would produce new information on this and on a variety of other archaeological items of local interest. He will be sadly missed and we extend our sympathy to his widow.

PROGRAMME 1960

- January 4th. Illustrated lecture on Hilly Fields Kilns. Mr. B. Blake.
- January 11th. Hadrian's Wall. Mr. B. J. N. Edwards.
- January 18th. Roman Villas. Mr. H. J. Edwards.
- January 25th. Samian Ware. Mr. F.H. Erith.
- February 1st. The Mediaeval Period. Mr. L.H. Gant.
- February 8th. "A Thousand Years of Colchester Architecture" by Mr A.E. Horlock.  
Colchester This meeting will be held at Jacklin's Cafe by kind invitation of the  
Chapter of Architects. It will begin t 7.30 p.m.
- February 8th. Visit to Mr. Campen at "Drummonds" Feering, near Colchester. Meet  
outside the Castle at 7 p.m.
- February 15th Verulamium. Mr K.F. Sharpe.
- February 22nd. Lt. Commdr., Farrands on his excavation. OR Ancient British Coins. Mrs  
.K. de Brisay,
- February 29th. Mr. Jack Lindsay, the- well known author.
- March 7<sup>th</sup>. Mrs Mansfield and Mr. L.H. Gant on their respective clay tobacco pipe  
collections.
- March 14th. Visit to Mr. Cooper at Gestingthorpe. Meet outside the Castle at 7 p.m.
- March 21st. Annual General Meeting. This will be held in the Castle Bookshop,  
Museum Street by kind invitation of Mr. A. B. Doncaster.

All meetings, except when otherwise stated, will be held at 7.15 p.m. in the Mediaeval Room,  
at Colchester Castle Museum, by kind permission of Mr. M.R. Hull, M.A., F.S.A.

DISCOVERIES AT 70, HIGH STREET, COLCHESTER.  
BY LEONARD H. GANT.

Conversion of a former dwelling house, No. 70, High Street, Colchester, under Mr. Russell Walker, revealed a mediaeval wall in the cellar abutting on High Street (almost opposite Holly Trees Museum) - national grid reference TL99972523.

The construction of the well is of stone but the top had been closed by a dome of brick, apparently when the house was rebuilt in the 17th century. The cellar could not have been safely used, for the brick covering the well was only a few inches thick and the cavity was quickly discovered by the builder, who, being an opportunist, shovelled much of his rubble into the convenient hole!

Photographs of the well were taken by Mr John A. Gill ,of Messrs. Page, Ward and Dakin, who will shortly move into the premises and enlargements have been made from the negatives, so that a record may be preserved.

The house has suffered considerable alteration in the past, but two of the original walls, which were of lath and plaster on stud work, remain. Both have faces of decorated plaster and are preserved; the one on the western face ornamented with a combed design and the other, possibly older, on the north face, is incised with chevron patterns running horizontally. These two walls, which appear to have been the outside walls of the earliest house, forming an

angle in the courtyard, enclosed by 18th or early 19th century additions and thus have been preserved; the enclosing later walls to the south and east forming a "secret chamber".

Other objects discovered in the house, which dates mainly from the mid 18th century, with early 19th century additions at the rear, include blacking bottles, copies of the "Times" dated 1836 pasted on the walls as a foundation to wall paper, a tract entitled "Orphans in the East" published by the Religious Tracts Society in 1839, a green glass bottle with raised foot of 18th century pattern, a beautifully written vocabulary book which contains some interesting definitions of words which have now passed from common use, and in the main cellar, a mediaeval storage jar of red ware having internal brownish glaze. A fragment of a Delft fireplace tile was also found in this cellar, together with other fragments of later pottery.

It is intended to display the most interesting articles found in the building in a case when the conversion of the house to a suite of offices is completed.

#### EXCAVATION AT GREAT BROMLEY: JANUARY 1960.

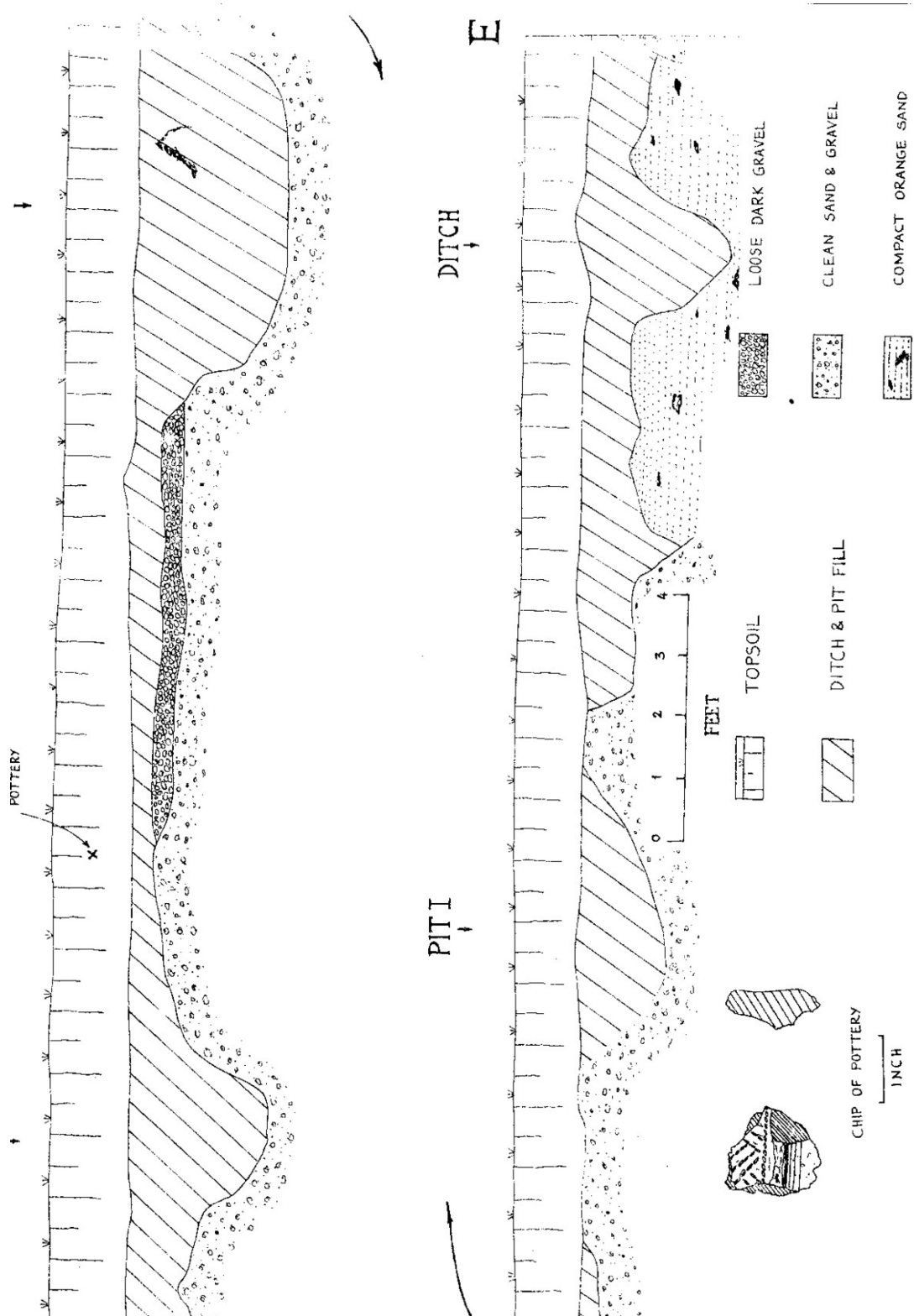
By B.J.N. Edwards.

The site excavated between the 5th and 6th January was about 200 yards south west of Great Bromley church, on land farmed by Mr. G. J. Pirie of Brook Farm. (G.R.802263). It was first noticed as a crop mark during the exceptionally dry summer of 1959 by Mr. F. H. Erith of Vince's Farm, Ardleigh. The crop mark was in the form of a ring about two feet wide and about thirty five feet in diameter, where the crop (barley) was darker in colour and about six inches higher than the rest of the field. In addition to the ring there were two circular areas about four feet in diameter either side of the centre.

When we came to excavate, the site had been marked in Mr Erith's usual fashion with pieces of broken asbestos sheet, location being no problem. A line was laid out across the diameter of the circle and bisecting the two darker areas near the centre. (This line was subsequently found to run due east-west). This formed the north side of a trench three feet wide. The trench was taken down to three feet throughout its length, at which depth natural gravel was reached everywhere except where the ring crossed it at each end and where the deeper of the two pits, which had caused the crop marks, was still showing in plan. These three areas were subsequently deepened the few inches necessary to reach the gravel, and a section of the diameter drawn, (See page 27). The ditch at the eastern end of the trench was dug in different material from that at the western end. Instead of clean sand and gravel, there was a band of dark orange compact sand with patches of grey and yellow clay and a few pieces of the dark brown indurated gravel of which the nearby church tower is built. The bottom of this was not found, but it was still continuing at least eighteen inches below the bottom of the ditch, and was considered to be a natural vein in the gravel. At only two points did the natural gravel reach as high as the bottom of the topsoil. Elsewhere there was a layer of pale brown, almost stone free earth, which retained water very well, and which filled the ditch at both ends of the trench and the two pits. Apart from chips of modern tile, the only finds were three chips of pottery in the topsoil. One of these (illustrated on page 27) was identifiable as a piece of a late Bronze Age collared urn and was found about three foot inside the ditch at the west end of the trench. The other two pieces were probably Bronze Age from their texture, but had no distinguishing features. There was a small irregular patch of black material suggesting burning in the larger pit.

Later the trench was widened in the area of the two pits and the filling of each completely removed, but they yielded no further finds.

Our thanks are due to the following. To Mr. Erith; who discovered and marked the site and put us in touch with Mr. Pirie. Mr. Erith also arranged for the mechanical filling. To Mr. Pirie, who allowed us to dig and supplied us with tools, a wheelbarrow and storage space. And to Mr. Cole, a sprightly 75-year-old, who moved spoil in a way which might make many younger people think.



WEEKLY MEETINGS. AUTUMN 1959.

The first half of the winter sessions has ended and, reviewing the series of talks and discussions one feels that much useful work has been done.

Thanks are due to all members who gladly took on the work of preparing talks and so created a wider interest in archaeology and its associated subjects.

The session had a fine start on the 26th October when Major A.D. Mansfield gave a talk on "Surveying", and set a very high standard for the Series, using blackboard diagrams to good effect. Dealing mainly with map, measuring tape and compass, the method of fixing points on the ground and putting them on the map and vice versa, were explained, and at the conclusion the universal declaration was "Let us go out and fix something!"

Mr K. F. Sharpe, a newcomer to our ancient town, which is very "Roman Conscious", acquitted himself well in his talk on "The Roman Army" and provoked some lively discussion.

The first talk in the chronological section was delivered by Mr. Felix Erith, whose production of basketfuls of flints and a hammer, with a challenge to members to "knap" flints, was as serious as his introduction. Palaeolithic and Mesolithic flints are difficult to appreciate, but the range of Neolithic artifacts made the talk very interesting, particularly as the material in the museum, which was examined under the guidance of Mr. Erith and Mr. Brian Blake, is so comprehensive.

The next talk was really an expansion of the Neolithic references and a display of some of the finest flints in the collection of Mr. Brian C. Benham, who gave a most interesting account of his particular studies and site at Walton on the Naze. His collection, to quote himself, " was in some sections the envy of the British Museum" and the fact that his collection of "battered backs" numbers about 20,000 specimens (some of which were distributed to members) was astounding. The site, on the Naze, was no doubt a flint workshop and over the past forty years it has produced flint arrow heads of many kinds, scrapers, razors and one axe head.

The beginning of pottery in the Neolithic period is the special study of Mr. Felix Erith, who again not only "painted the background" but "filled in the detail" of a difficult picture and made good use of illustrations. Colchester is not strong in this period but Mr. Erith's studies covered a wide range and contributed a well constructed and informative talk.

Still in the pre-historical periods, the following meeting listened with interest to Mr. H. Palmer who confined his talk to Bronze Age bronzes. The Colchester Museum has a fine collection of bronze axe heads and display the complete series of types. Mr. Palmer spoke of the: methods of casting and finishing and the development of the various types.

A change of meeting place was arranged for a talk on "Archaeologists of the Past and Their Published Works." This was held in the Holly Trees Museum room which houses part of the library of the Essex Archaeological Society. Mr. A. B. Doncaster gave a delightful account of famous archaeologists commencing with Leyland who was described as "antiquary to King Henry VIII" and travelled about the country making copious notes which he never published. Camden, Stukely and many others were described, leading on to the establishment of archaeological societies and their publications. The resources of the library were demonstrated and copies of modern issues examined and discussed. To conclude the meeting Mr. L.H. Gant gave a most comprehensive account of the printing and publishing of archaeological reports. He described the preparation of "copy", printer's proofs, illustrations and letterpress and passed round "samples". It was an enthralling glimpse into the intricacies of this very important aspect of archaeological presentation.

The final meeting of the session was devoted to the Iron Age, the talk being given by the honorary secretary, Mrs K. de Brisay, who had carefully prepared an introduction to a study of this very complex period and produced a good range of illustrations. Professor Christopher Hawkes is the acknowledged supreme authority on this period in Britain and reference to his work in the field and his most recent publication in "Antiquity" were of great interest, for

Colchester is an important study area. The discussion during Mrs de Brisay's talk and following it was tempered with humour, no doubt resulting from the nearness of the festive season, but one member's facetious remark that an Iron Age hill fort's three phase defence might mean triple electric fences round the hill top encampment is worth recording! The Iron Age periods 1 and 2 are not well represented in Colchester, but Hawkes includes the town under one of his sub-divisions of Period 1. The Period 3, which carried on down into the Roman occupation is well illustrated in the Colchester Museum.

To conclude, the Group is most grateful to Mr. M.R. Hull, the Chairman, for allowing the use of the Castle Museum for the lectures and his energetic assistant, Mr. Brian Blake, under whose Guidance the displays of antiquities have been examined, and the gates and doors unlocked.

We look forward to the coming session which has been planned to include more well known speakers and authors.

### THE MID VICTORIAN GAS STOVE BY A.D. MANSFIELD

Today's housewife inserting her Christmas turkey into the gleaming apparatus of enamel and chrome, consulting her chart, setting thermostat, variostat, rheostat, alarm clock and barometer, and then putting her feet up in the drawing room, having ensured the rest of the family has gone to church, in full confidence that, at the right time, her cooker will turn off, switch off, whistle and wave a flag to announce the bird is ready for carving and eating, probably gives little thought to the problems of her great grandmother and the Gas Stove.

The advent of the gas stove spelt the doom of the open fire and enclosed kitchen range alike, although the latter did not succumb without a struggle, and, indeed, lingered on in various forms, staging a come-back in recent years as the "solid fuel, slow burning cooking device", almost as enamelled and bechromed as her gas and electric descendents.

The first feeble flicker of the new fangled flame would appear to have been applied to the purpose of cooking by William Murdock in 1792, the year he first used it as a means of illumination. He successfully, it is claimed, boiled and fried meat. In 1824 a gas burner was made by the Etna Iron-Works, Liverpool, who used it to cook in their factory, where enlightened ideas of industrial welfare seem to have been ahead of their time.

Little appears to have been recorded until 1841 when Seyer introduced gas cooking, to the Reform Club. In 1842 it was stated that gas was the most economical mode of cooking and that meat roasted by gas did not imbibe the slightest smell providing the flame of the gas be kept exceedingly low. However, a note of warning is struck, and all persons who use gas are advised to test it themselves, which involved scientific juggling with nitrate of silver, writing paper and a mysterious commodity known as "Journesol paper."

Meanwhile in Germany, Robert Bunsen was preparing himself to invent his burner - that delightful machine which made one's childhood studios in chemistry offer unlimited opportunity of blowing oneself up. The effect of Bunsen's invention was to enable the heating power of gas to be increased and a cleaner flame to be produced which opened the way for great improvements in the construction of gas cooking apparatus.

Sometime in the 1850's one Alfred King of Liverpool designed a cooker which was manufactured by several firms. There is a "King Cooker" in the Science Museum, South Kensington. The Great Exhibition of 1851 displayed a variety of cookers to suit all tastes. (See Fig I on Page 31).

Throughout the 1850's gas cooking comes more into prominence. In 1856 the "Manual of Domestic Economy suited to families spending from £100 to £1000 a year" lists and illustrates several sizes and designs of cookers, although little is said about them and their economy in operation is doubted. (See Figs II & III on page 31)

The material used in the construction of gas stoves at this period was cast iron, generally, with wrought iron or tin piping to supply the service. The combustible qualities of gas extracted and supplied by the numerous gas companies operating by this time varied within a wide range and this, no doubt, accounts to a large degree for the conflicting views of contemporary writers as to the efficiency and economy of coal gas as a cooking fuel. A writer of 1861 states of "Roasting by gas may be perfectly accomplished by an apparatus similar to that shown in the accompanying illustration" (see Fig IV on Page 31) "Which", says the Dictionary of Daily Wants, "is both clean and elegant, and might be employed in an ordinary sitting room." As can be seen from the drawing, this apparatus differs considerably from those of 1856 and seems, in fact, to be of the type referred to in the quotation of 1842 above. Construction appears to have been sheet, not cast metal, and it seems to have had the disadvantage of catering for one size of joint only. Contrasted with this is the statement published three years previously that gas is useful in cases of boiling or stewing but doubtful whether gas stoves will come into general use for roasting, broiling, etc.,

#### PRICES IN 1856

Full size baking, boiling and steaming stove -	£28.
Smallest size - ditto -	£16.
Third Size - ditto -	£8.
Galvanized pipe ½"	per foot. 6d.
Pipe fittings ½"	each 8d. - 1/6
Gas meters, each From	£2. 2. 0. to £5.17.0

The above account gives only an outline of the development and application of coal gas to the cook's art and I have yet a lot of work to do to produce anything like a full story. However I hope I have aroused a little interest which might lead members of the Group to view their cooker in the light of its ancestry and perhaps discover, lurking; in the dark recesses of their mansions, other and older stoves which they might be good enough to tell me of.

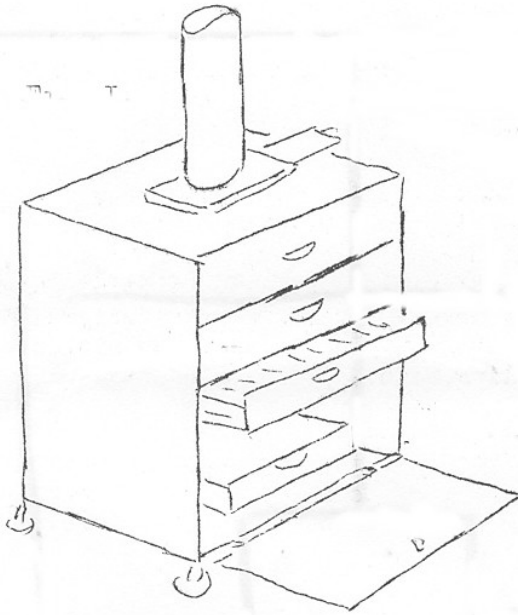
#### References:-

Everyman's Encyclopaedia  
 Merle's Domestic Dictionary - 1842.  
 Walsh's Domestic Economy - 1856.  
 Tegelmeier's Annual of Domestic Economy - 1858.  
 Dictionary of Daily Wants . 1861.  
 Catalogue of the Great Exhibition - 1851.  
 Science Museum, South Kensington,  
 Author's M.S. notes.

correspondence.

#### NOTE:-

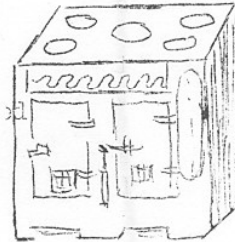
In no circumstances will the Author accept old gas stoves no longer required by their owners unless they are certified archaeological remains.



**Fig. I**  
Strode's Gas Broiler for  
chops, steaks, etc. Exhibited  
at the great exhibition, 1851

Note damper on flue and full-  
fronted oven door.

**Fig. II**  
Defrie's full  
sized stove.  
Cast iron.  
1856.



**Fig. III**  
Defrie's small  
stove. Possibly  
wrought iron.  
1856

**Fig. IV**  
"An elegant  
apparatus"

