# REPORT ON THE REMOVAL OF A TUMULUS ON MARTLESHAM HEATH, SUFFOLK.

## MAY-JUNE, 1942.

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Following upon inquiries by Mr. B. H. St. J. O'Neil of the Ministry of Works, the Committee of the Ipswich Museum agreed to the Curator, and Mr. H. E. P. Spencer of the Museum Staff devoting such time as was necessary to the supervision of the removal of one of the burial mounds on Martlesham Heath, in order that any archæological evidence revealed should be recorded, and such antiquities as might be discovered secured for preservation.

On May 7th contact was made with the authorities concerned and the necessary facilities arranged. On the 8th work was commenced. Both of the Museum's representatives were present on the site during the greater part of the working periods, taking an active part in the actual excavation and directing the operations of the Ministry's workmen on a plan drawn up after a preliminary survey of the mound.

#### SITE AND DETAILS OF THE MOUND.

The Tumulus was one of several situated to the south and south-east of the main Ipswich-Woodbridge, Gt. Yarmouth Road, and about three miles south-west of Woodbridge and five from the centre of Ipswich. They are marked on the 1 in. O.S. Suffolk (East) Sheet lxxvi, N.W. Second edition 1905.

The area in which they lay is a broad and generally level tract just over 100 feet above Ordnance datum. The surface deposit is glacial sand, which has for the most part, in the past, been merely bracken covered 'warren.' This particular site is at least a mile from any running water, it being that distance from the springs which discharge into the Martlesham Creek, which flows into the River Deben tidal estuary about three miles to the east.

A trial hole sunk into the surface of the heath 25 feet outside the perimeter of the mound showed the following :

Turf layer.

flints.

Brown sand	••	· • •	••		••	6 ine	ches.	•
Black Peaty	sand	••	••	••	•••	2 in	ches.	
Brown subso	oil passing	into	yellow	sand with	occasio	onal	pebbles	and

The barrow was of the low bowl shaped form, approximately circular and rather less than 100 feet in diameter. In height it may originally been about 5 feet.

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Fig. 1.—Plan of mound at commencement of operations and before removal of tree stumps. Diameter approx. 100 feet.



FIG. 5.—Cremated human bones resting in hollows without trace of urns or other containers. Grid reference squares i.5. and i.6. Fig. 15.

CONDITION.

Occupation of the mound for military purposes in recent times had resulted in considerable modification of both contour and actual height. A wooden hut, recently demolished, had stood on concrete footings on the summit and slightly to the west of the central point. These footings which had enclosed an area of some 20 square feet, had been removed leaving open trenches dug into the top of the mound. An "L" shaped shelter trench had also been dug into and nearly down to the original ground level around the N.E. angle of the hut. Other serious disturbances had resulted from the planting and subsequent removal of over thirty well-grown Scotch Firs, the stumps of which were hauled out by tractors leaving a double row of large craters so closely placed as to destroy nearly the whole of the marginal parts of the barrow. FIG. 1.

In addition pits had been dug to take rain water from the roof of the hut, and sand from these excavations together with a large quantity from another digging outside the mound, had been spread over the southern half of the upper slope in order to provide a level space before the hut.

Trenches were cut to try to determine whether the mound had an outer delimiting ditch, but if this was the case it must have been of a very shallow nature, and in view of the possibility of the lowering of the surface of the heath by turf lifting, it may have been destroyed. No clear evidence of its existence was observed.

In addition to the recent disturbances, the mound was riddled with rabbit burrows, some reaching to below ground level, with the usual result that objects of recent date were found at all levels.

Evidence was also seen of earlier excavations which were of two, or possibly three periods. It was subsequently ascertained that this was one of the tumuli opened in past years by the Ipswich Scientific Society, when it was found devoid of any central interment.

#### EXCAVATION.

The work had to be carried out with considerable rapidity, and at one stage three separate gangs of men were engaged, the material being carted away immediately. The interest of the men was enlisted in the purpose in view however, and it is not probable that any important evidence was missed during the operations. The central area was cleared by the writers personally.

At the beginning of operations there already existed a gap in the ring of tree-stump craters on the eastern side, where the material had been carted away on a front of about 25 feet and 15 feet toward the centre of the mound. Whether any deposits were removed in the course of this earlier work it is not possible to say.

Advantage was taken of this gap to direct a trench 10 feet wide toward the centre of the tumulus on an east-to-west line. Work was also commenced from the western end of this line as soon as a gap in the crater ring was cleared.



FIG. 2.—Diagram of mound to illustrate method of removal between the Radials or control blocks.

The south side of this trench was aligned on the central point of the tumulus as established by tape measurements, with the object of securing a continuous section through the central area of the mound.

Other sections were also secured by selecting radiating lines where narrow ridges of material remained in situ between the tree craters. These face lines were preserved as the excavation proceeded, so that in later stages of the work it should be possible to compare details of construction in various parts of the mound. Eventually, by the process of removal of the material between these controls, the barrow was reduced to a series of radiating blocks a few feet wide. FIG. 2.

While it has to be stated that few features of archæological significance had survived the intense disturbance noted above, the method of excavation adopted would have enabled any ritual deposits, or constructional details to be acurately sited and recorded.

The work concluded on the 2nd of June when the last of the mound was levelled. Very careful examination was made of the whole area covered by the mound in order to detect burial pits, or other ancient excavations below the original surface, and the central area to a radius of several feet was removed to a depth of three feet. Neither here nor in any other part of the barrow could indications of such graves be found.

A careful watch was kept on the old markings on the surface of the sand under the mound as it was exposed, and before drying rendered it difficult to trace outlines. Nothing in the nature of the body silhouette seen in some Beaker period burials in Holland was present.

#### CONSTRUCTION OF THE MOUND.

When the approach trenches had reached the central area from both from east and west, also from other directions, so as to allow of easy disposal of the spoil, a rectangular pit was sunk by the Museum representatives to enable the centre of the mound to be carefully investigated. The pit measured 10 by 12 feet and was carried down to the original ground level, recognisable by the dark brown stainings occurring in the sand under the turf.

No trace of any burial remained, but evidence of the construction of the inner part of the barrow was seen in the slightly curved shadow lines in the sand, which appeared to indicate that had been built up with piled turves, taken presumably from the surrounding heathland. The markings extended outward about 12 feet from the centre. They were fairly horizontal in the central area but tended to curve downward and become irregular toward the circumference. The extreme degree of disturbance of the upper part prevented any accurate estimate of the original height of this inner core of turves, but it was observed up to three feet. The remainder of the mound appeared to have been constructed of loose sand piled over the turf core, this sand, when dry, varied from light grey to pale buff and was marked by lines of natural staining and the dirt filling old rabbit burrows. FIG. 3 & 4.



FIG. 3.—Section in central area of mound showing filled-in trenches of earlier excavators and the shadow lines of the original layers of turves.

Outside the zone of piled sand occurred a very marked accummulation of blackened sand with some suggestion of deliberate banking. It appeared probable that this was not due merely to the influence of the zone of trees, but was the result of the deposition of a different class of material, apparently sand containing a very much higher amount of vegetable and organic matter than that of which the rest of the mound was composed. Fig. 4.

From statements made by one of the workmen, who claimed long acquaintance with the mounds, having been employed for many years on the estate, and having dug for rabbits in them on various occasions, also from some observations of the old surface layer of the top of the mound where it had been preserved in places under later accumulations, it appears probable that the blackened sand, representing a thick turf covering was at one time continuous over the whole barrow.

It would appear therefore that the following stages may have occured in the making of the tumulus :

1. Deposition of the burial in some temporary structure or hut.

2. Formation of the inner mound of turves.

3. Heightening with sand banked in and covered with turf.

There is a possibility that the enclosing bank preceded the piling of the sand by some considerable period : in any case the sections seemed to show it was made before the sand was piled over the inner mound.

The burial may well have been laid in a shallow depression of the heath, the turves from which were used to cover the body or the shelter covering it; such a hollow, under the circumstances, would be very difficult to trace. The mound appears to have been dug into from the top by early grave robbers, and their digging was probably responsible for the disappearance of all trace of the interment. No bone, burnt or unburnt was found, the only object of antiquity found near or at the ground level in the central area was a small sherd of Bronze Age Pottery from the bottom of the excavators trench mentioned above. It by no means follows that this was connected with the original burial, which if, as appears likely, was of the Early Bronze Age, Beaker Period, would have taken place soon after 2000 B.C.

CONTENTS OF THE MOUND.

#### Human Remains.

No part of the original, central, interment was found, either in the undisturbed or in the moved material of the mound.

Two accumulations of cremated bone were discovered in the south-eastern part of the mound as marked on the plan. These had apparantly been placed in holes dug into the tumulus and were unaccompanied by ritual deposits. No pottery was found associated with them, and it is not possible to offer any evidence of their date, although it is presumed that they were of Bronze Age origin. FIG. 5.



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## POTTERY.

Whilst several fragments of hand-made pottery of Bronze Age type were found during the removal of the mound it has not been possible to show without question that these had been connected with the primary interment. Although such may have been the case they may well have been derived from secondary burials destroyed by later diggers, or have been sherds left behind by people carrying out some ceremony there. Once incorporated in the surface soil, burrowing animals and digging operations would easily account for the rest and lead to their inclusion in the body of the tumulus.

The only sherd found in the central area occurred at the bottom of the filling of the old trench dug by the Ipswich Scientific Society. They do not record the discovery of pottery so far as is known, and the sherd may well have found its position by descent from upper levels when the spoilfrom the digging was thrown back into the trench. It is shown in Fig.6.B. It is undecorated dark in colour, very sandy in texture and poorly fired, being black right through. Its age is uncertain but it is well and regularly curved on both inner and outer faces. There are no distinguishable wheel turning marks. Another small sherd of rather similar ware but with a smoother surface was found in the south east sector, well out from the central area. Both might be of Neolithic or even Late Celtic, Iron Age, origin.

A larger sherd of coarser ware, hand-made, with smoothed but poorly finished surface and resembling the later Bronze Age ware, was found in the body of the mound near the outer edge, Fig. 6c. It is undecorated and evidently from the body of a globose pot. No other fragment of this vessel were detected.

Also in the south-eastern sector, about 20 feet in from the edge, there occurred a small spread of pot-sherds of entirely different ware. They are evidently parts of a vessel of Bronze Age type, and bear enough traces of decoration to show it had been ornamented with finger-tip impressions in both horizontal zones and vertical panels. The work is poor and the impressions blurred, but it is possible to see some analogy to a vessel of the Beaker period from Great Barton, West Suffolk, preserved in the Moyses Hall Museum, Bury St. Edmunds, figured in Plate II, Archæology of the Cambridge Region. (Cyril Fox). FIG. 7.

This vessel was therefore presumbly of the Beaker class as the appearance of the sherds does not suggest connection with the finger-tip decorated cremation urns of the East Anglian coastal region. It is certainly possible that these fragments are the remains of a vessel which accompanied a burial of the Beaker period in the mound or under it, but this is incapable of proof. There was no sign of an interment in the area in which they lay, but considerable disturbance had occurred close by through tree stump removal. It may, however, be noted that the late period fireplace in which iron was found, lay only a few feet away and it is possible therefore that the vessel was found, and perhaps, reburied by those who dug a place for their fire.



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A single sherd of a better made vessel, FIG. 6.c. with finger-tip ornamentation, in which the cuts made by the finger-nail still remain, was also found in the same sector. It was only one foot from the surface and close to the fireplace already referred to. It is a portion from the top of a vessel retaining part of the flat edge or rim, with the ornament disposed in horizontal zones. Here again a vessel of the Beaker class is indicated.

The basal sherd of an unglazed, wheel made pottery vessel of dark greyware was found in the mound about 30 feet south of the centre. It has been burned and is of poor quality and may be of Roman or early Mediæval date.

Several fragments of green glazed well-made pottery vessels were found at different levels in the central area. They may well have been left in the hole made there by early grave robbers and further distributed by rabbits, as were pieces of recent glass bottles and other 20th century debris.

#### LIBATION BOWL ?

A feature which may be of considerable interest in relation to the ritual of mound burial was detected at ground level in the centre of the barrow. Here the sand was seen to be loose in comparison with the well. compacted upper layers of the mound, and on being cleared away an oval bowl shaped spread of sand appeared which was darker in colour than the surrounding mass, and firm to the touch. The area measured approximately 14 by 8 inches, with a definitely formed though roughly shaped raised edge enclosing the space. It appeared to have been formed on the sand of the original surface after the vegetation had been cleared. The sand seemed to be compacted together but there was no obvious sign of a clay layer, or of firing. FIG. 8.

This discovery at once recalled the clay lined hollows discovered in the Sutton Hoo tumuli where they were found in the mound with cremated bones, excavated in 1938, and fully exposed in the great ship burial mound, excavated 1939.

The present example was successfully removed but most unfortunately met with disaster before it could be placed in safety, only a small piece of one side being saved.

There is no reason to attribute this feature to the action of rabbits. Where these animals had rested in the bottom of their burrows, clear evidence of the origin of the excavation can be expected in the form of surface dirt and recent refuse brought down from the top, as was repeatedly seen during the excavation of the mound. Nothing of the kind was present in the loose sand immediately over the pan or bowl, or visible in its substance. Furthermore, the raised edge or rim was clearly defined. The feature was first detected by touch in the removal of the loose sand covering it, and when cleared was perfectly distinct, being compact and darker in colour than the sand of the level in which it was found.

## BURNT TREE TRUNK.

About 18 inches north of the bowl, and at about the same level and alsoabout a foot above it grains and trails of carbon began to appear in the sand. These resolved into curved lines and presented very clear evidence:



FIG. 7.—Sherds of Bronze Age Finger tip ware found with 5 others, 29 inches from surface Grid square h.8. Full size.

that a tree trunk had been present, the upper extension of which could be traced for three or four feet. No trace of wood was present other than the charcoal crust. The sand at base level and in the lower part of the area enclosed by the carbon zone was whitened, presumably by heat.

The feature suggested that the tree trunk had been of irregular form and open toward the south and west, resting for a foot or so horizontally on the ground. Upwards the carbon showed a ring, roughly circular, about 8 inches in diameter. The impression gained was that the carbon represented the burning of the inner surface of a hollow log or tree stem.

No clear evidence was seen to prove that the features resulted from the burning in situ of a tree stump rooted to the spot. While this may have been the case, it seems equally possible that it represented the burning of an old contorted tree stem or thick branch brought to the place. The way in which the lower part rested on the ground instead of passing down into it strengthened the feeling that the latter explanation was the true one.

The close proximity to the presumed centre of the mound, and to the pan or bowl described above, raises a suspicion that the two features were connected in some way. If the bowl-shaped hollow was for the reception of libations, it becomes a question as to whether the hollow tree trunk was not associated with it in order that offerings might be made after the inner mound had been constructed over the burial. FIG. 8.

#### BURNT POST.

About five feet from, and to the N.N.E. of the presumed centre of the mound and the position of the pan or bowl, occurred the only definite evidence of a post found in the barrow, this was represented by a circular patch of charcoal about 8 inches diameter, which could be traced for about the depth of one foot.

#### HEARTHS.

A well defined patch of blackened sand with charcoal was found 11 feet N.N.W. of 'centre.' The spread was about one foot in diameter and roughly circular. It lay as far as could be judged on the general ground level of the heath and was 4 feet 7 inches below the existing turf at the top of the mound. No objects were found either in nor close to the hearth. Careful examination of this area for other patches which might have resulted from the burning of the uprights of a hut or shelter erected over the burial was made but nothing was seen. FIG. 9.

Around this hearth were considerable spreads of darkened sand with a few carbon grains, also small dark patches as is shown in the plan of the central area. This spot had not been reached by earlier excavators, but had to some extent been pierced by the activities of rabbits. Under the circumstances it was not possible to decide whether this hearth was connected with the formation of the tumulus, or was of older date.

In the south-east sector of the mound a well-formed fireplace was discovered which contained a mass of charcoal, in the midst of which was a piece of iron and a few burnt flints. There was a considerable spread of wood ash and charcoal before this fireplace which was in the form of a recess cut into the compact sand of the

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FIG. 8.—Plan of features in central area shown above, including the traces of a hollow tree stem leading down to prepared pan-like depression, possibly a libation bowl.

mound, and provided with a circular flue traceable for over one foot above the fire hole. The late date of this find is indicated by the presence of iron actually in the fire and by the presence of iron nails in the ash spread which had been raked from the fireplace.

The whole arrangement may represent a fireplace made by workmen in the side of a trench during the tree planting episode, or by one of the earlier excavating parties.

#### SHELLS.

Another feature which may possibly have a ritual significance was the occurrence in the mound at various points, one of them deep in the central area, of small pockets of Red crag sands and fossil shells from the Pilocene deposits of the district. It is inferred that they were brought from some outcrop of the Crag (the nearest is at least a mile distant) and placed in the mound for some definite purpose. The ritual significance of shells in connection with ancient burials is well known, and the only alternative to intentional ritual deposition as tokensofimmortality which seems to offer itself, is that the surrounding heathland had been treated with shelly Crag debris in connection with agriculture; there is little likelihood that such was the case in Bronze Age times. If the pockets came from a later scattering, their presence, even allowing for the activities of rabbits and grave robbers, is hard to account for.

#### WORKED FLINTS, ETC.

Worked flints occurred in considerable numbers throughout the mound. No marked concentration was observed in the central area, and the impression was gained that they had been strewn haphazard in the course of the construction. They were perhaps more numerous in the outer zone of dark sand, and in the upper part of the piled sand area.

Their abundance did not correspond with the normal distribution of worked flints in the undisturbed sandy humus of the surrounding heathland, and in the view of the present writer there is little reason to doubt that their presence is due to a ritual distribution during the building of the mound.

The flints are nearly all unused cores, and flakes struck from such cores. Very few flakes show any secondary sedge working or signs of usage, and the cores are only in a few instances flaked with care. The whole assemblage seems to suggest that the cores and flakes were specially made tokens representing planing, scraping and cutting tools of various types, roughly shaped, and deposited in the mound together with the waste flakes produced in the making. FIGS. 11 & 12.

While worked flints with a trace of Crag shell occurred in a trench cut across the perimeter of the mound in the search for the boundary ditch, their presence close to the mound seems natural if such were brought there for ritual purposes, as some would probably be dropped outside the actual area of the tumulus. No Crag material was seen in such other sections as were observable in the neighbourhood, and although flint flakes and cores pieces do occur sporadically on the surrounding heath, the uniform condition and lack of patination of the mass of those found in the barrow, may well be taken as pointing to their having been produced at the time of the erection of the mound itself.



FIG. 10.—Sandstone pebble used as a hammer. (full-size).

A number of quartzite and sandstone pebbles exhibiting end or side battering with resultant flattened areas, likewise occurred, and may be regarded as hammerstones. One of these, larger than the usual dimensions, has the edge so reduced and flattened as to indicate that it was used for some other purpose, possibly grain crushing, although no large flat stone upon which such a pounder might have been used, was discovered. FIG. 13.

A few, roughly hemispherical, blocks of sandstone were found on which the flattened transverse face is seen to be hollowed, apparently by battering, not, however, it is thought by the hammer-stones mentioned above, which would hardly produce the result observed, but more probably by their use as anvil stones on which small flint cores were rested while being struck. It seems difficult otherwise to account for the dents and cuts present on the restricted areas of the surface of these blocks. Fig. 14.

A large number of pebbles of quartz, and other rock, also occurred in the mound, scattered in the same way as the flint cores and flakes. Whilst these stones are undoubtedly derived from the glacial sands and gravels of the region, and indeed occur in the subsoil sand of the site, their presence may well not be without significance, although all of them need not be regarded as having been intentionally deposited; some may represent food, being a token form of eggs or nuts, etc., and likewise be linked with the idea of imortality.

The considerable distance from any source of water supply render it extremely improbable that the site was used for ordinary camping purposes, or for settlements in which 'Pot-boilers' would normally be produced, but fire marked flints, whitened and cracked by use as 'Potboilers', or reddened by heat, also occurred in considerable quantity, and may again be presumed to have been intentionally deposited in the mound.

The specimens referred to in this report together with the original notes are preserved in the Ipswich Museum to which the objects found in the course of the investigation were presented by the Office of Works with the concurrence of the Air Ministry, and this report is published with their concurrence,

The writers desire to record their appreciation of the facilities provided by the Officials connected with both Ministries.





FIG. 12 — Flint scrapers and fabrication flakes. (Full size).



FIG. 13.—Quartzite pebble used as a pounder. (Full size).



FIG. 14.--Sandstone anvil block. (Full size).



- 1, 2. Cremated burials.
- . 3. Bronze Age potsherd.
- 4. Sherd of Beaker pottery.
- 5. Sherds of Finger-tip ware.
- 6. Sherd of micaceous hand-made ware.
- 7. Burned tree stump or log.
- 8. Libation pan.
- 9. Green glazed sherds.
- 10: Charcoal patch. Hearth.
- 11. Superimposed charcoal streaks.
- 12. Small post hole or root mark.
- 13. Post holes. Not reaching base.
- 14. Earlier excavators trenches.
- X. Crag sand and shells.
- -. Hearth with iron.
- \*. Worked flints and hammerstones scattered throughout.

FIG. 15.-Key plan of "Finds."