

THE TUMULI OF WARREN HILL, MILDENHALL.

Read at Mildenhall, June 23, 1870.

To the north of the high road between Mildenhall and Bury, and at about two miles from the first-named town, is Warren Hill, an eminence of no great elevation or extent, formed by an outlying ridge of the escarpment of the chalk, overlaid by deposits of sand, gravel, and clay.

Its south-eastern termination rises somewhat steeply above Icklingham plain and the low meadows bordering the Lark, and upon it, at the commencement of the present century, stood the group of fine round barrows, locally known as the "Three Hills."

These, judging from what remained when I first visited the site, measured over 70 feet in diameter, and rose in a sub-conical form to a height of nine or ten feet above the surrounding soil. Like many of the larger tumuli in this portion of Suffolk, and especially those in the vicinity of highways, Scotch fir trees had been planted upon them and attained a considerable size, rendering the hills prominent objects in the landscape, while from them an extensive view of the valley of the Lark and the surrounding country could be obtained.

Salmon,* writing at the beginning of the last century, in his description of Suffolk, notices these tumuli, and tells us that each was surrounded by a fosse, "and that one hath been cut through half-way from the top, as if it were done with a saw, and from the outside to the middle, and the piece is wanting." It is, I think, evident from this that the barrows had not escaped the notice of treasure-seekers, who were wont, and in some cases under royal license, to delve on such mounds under a belief, not now altogether exploded, that money and articles formed of the precious metals were buried beneath them. The excavation in this instance was apparently small in extent, and most

* *A New Survey of England*, 1728, vol. i., p. 161.

probably did not yield sufficient to encourage the explorers to persevere in the quest.

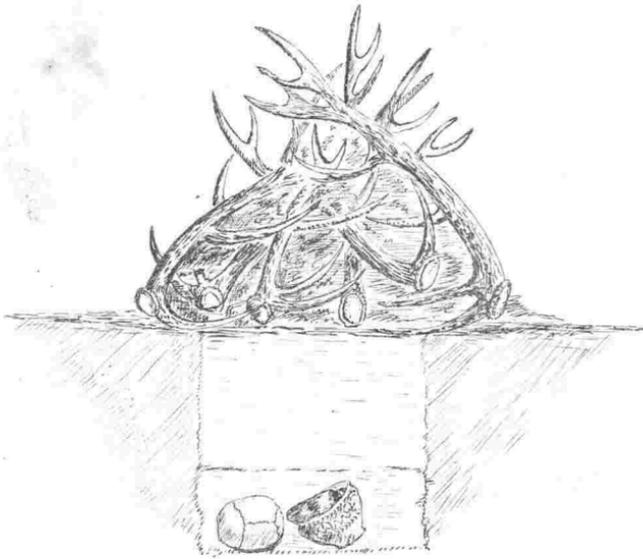
About 1820 the late Sir Henry E. Bunbury, Bart., caused a trench about five feet wide to be cut in an east and west direction through each of the barrows, down to the level of the natural soil, with a view of exploring them; but though I learned from an old servant of the deceased gentleman, who well remembered the circumstance, that pottery and other objects of antiquity were found, I can find no note in any contemporary periodical giving the result of the excavation, nor can I learn that any such exist among Sir Henry's memoranda.

During the last ten years the gravel deposits of Warren Hill have been rather largely worked for road-making material; and latterly the eastern end, from the abundance of stone it contains, has been subjected to much disturbance, and the barrows in their turn demolished.

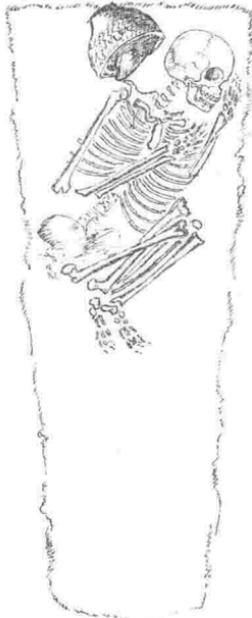
It is very much to be regretted that the razing of these old landmarks and monuments of a generation long since passed away should have been done at all, but more so that they should have been given to destruction without careful exploration by some competent person, and the relics they contained preserved from breakage and dispersion.

The stone-raising operations were carried on at irregular intervals, and by different sets of men, which rendered it very difficult to exercise surveillance in any way over them, or to collect accurate information of the antiquities met with. Doubtless many interesting objects were overlooked entirely; but I am able to state with confidence that in the upper soil of at least two of the barrows were found human remains and other relics of the Celtic and Saxon periods, indicating an after use of them, and especially the centre one, to which this paper more immediately refers.

In the course of February, 1866, the labourers had reached the north side of this barrow, and were removing the surface soil when they came upon a deposit of so remarkable a nature that the work in this part of the pit was at once suspended, and a watch was, I believe, kept



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upon the spot for the two ensuing nights to prevent the ground being in any way disturbed ; for, owing to a report getting abroad that one of the identical chests of money buried by Hulliver Crumell (?) had been found, many persons from the neighbouring places visited the pits to ascertain the truth of the rumour, and, if possible, to get a look at the recovered treasure.

In the meantime I had the pleasure of receiving instructions from Sir Charles Bunbury, Bart., the owner of Warren Hill, to examine the discovery, and upon certainly one of the most uncomfortable of wintry days (for snow, sleet, and rain prevailed alternately throughout), with the late Mr. Edmund Skepper for a companion, I found myself at the "Three Hills," and had the gratification of examining what I must consider to have been, if not the principal, at least one of the primary interments of the barrow.

As explained by the men, during the process of uncaloring the gravel bed, they observed the points of several stags' horns projecting from the soil beneath their feet, and by the timely arrival of the steward the ground was reserved. We found it in consequence but little disturbed, and upon the removal of the surrounding loose material to the depth of the original surface of the hill, there were exposed eighteen fine antlers of the Red deer (*Cervus elaphus*), lying across each other, with the prongs directed upwards, forming a heap of some three feet in diameter by two in height. The position of this deposit in relation to the barrow, as near as could be ascertained in the ruined state of the latter, was about 14 feet from its northern edge, and some five feet beneath its surface. The removal of the antlers in an entire state proved impossible, on account of the very decayed condition in which they were, a circumstance to be regretted, for it will be seen, from the measurement given hereafter, they were of large size and had belonged to animals of prime age and growth.

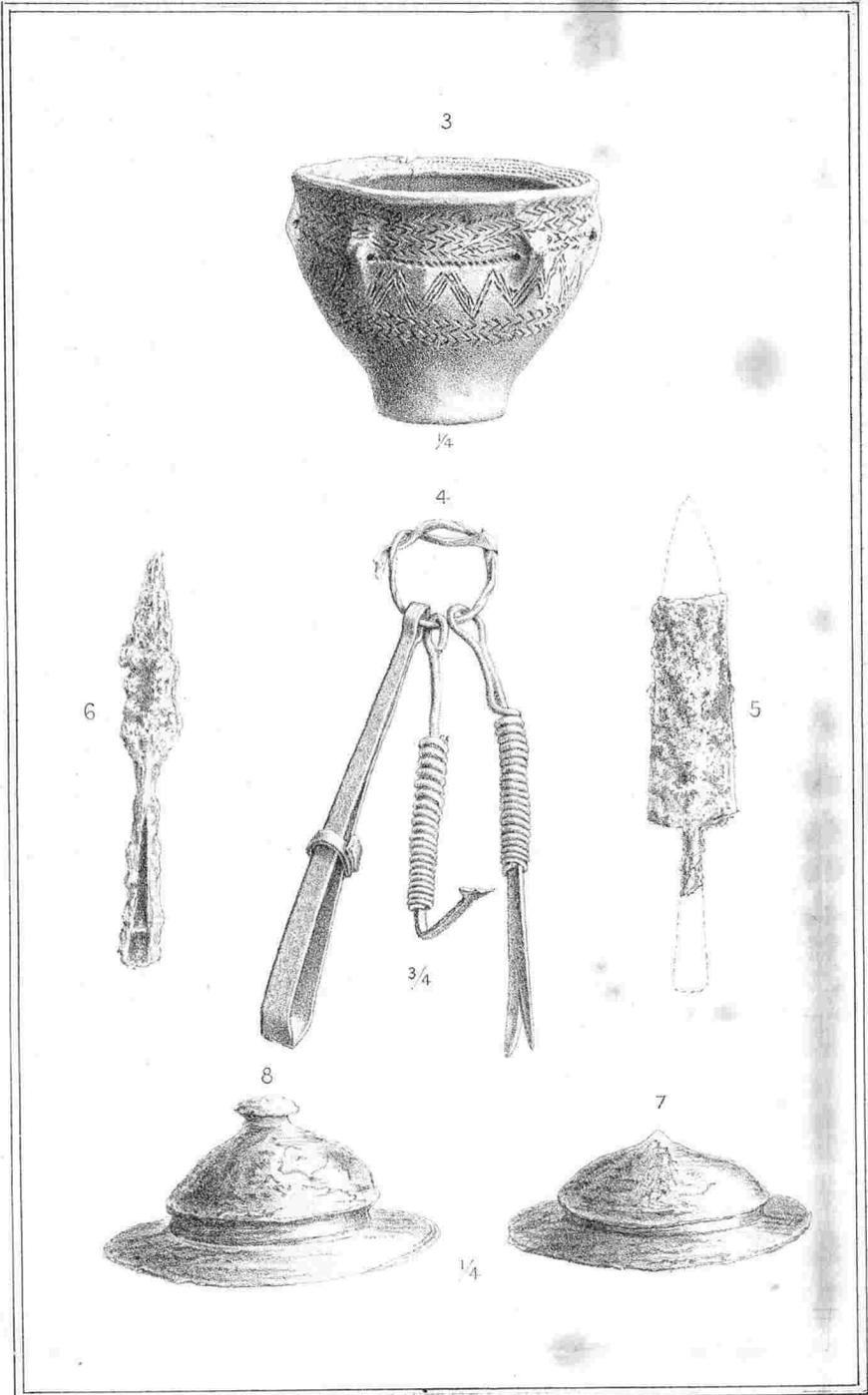
The ground below, consisting of the ordinary grit and sand of the hill, and showing little trace of previous disturbance, next occupied attention, and was removed inch by inch to a depth of two feet, when the looked-for discovery was made.

Reposing upon its left side, in the primitive burial posture, with the head pointing to S.W. and the face to the West, lay the skeleton of a young person, whose bones, though slight, had well sustained the long embrace of mother earth; for without displacing them I was able to uncover nearly all, and to make the drawing from which the accompanying illustration (Fig. 2) was taken.

The body, with its lower limbs doubled upwards, the right arm placed across the chest, and the left bent from the elbow supporting the face with the hand, had been deposited in a grave some five feet in length by two feet in breadth at the head, gradually narrowing to 16 inches at the foot. It had apparently been lined with short splines of wood, or pieces of bark, for the outlines of a sort of cist were distinctly to be traced in the slight and irregular line of carbonaceous matter which enclosed the skeleton.

Upon the floor, and covering the bones to some extent, traces of some other substance were distinguished, the remains possibly of the skin of some animal, or a garment in which the corpse may have been wrapped. In addition to this, adhering to the back and lower side of the skull, was a dark unctuous concretion, not improbably the residue of the long hair of the deceased.

Behind the skull, and nearly touching it, was a perfect urn, five inches high by six and three-quarters in width at the rim, of the variety denominated "Food Vessels" by some antiquaries (Fig. 3). It had originally been placed upright in the grave, partially covered with a rough flint pebble, and most probably once contained food or some offering to the departed spirit. Nothing but sand was found in it; but this, near the bottom, was to an extent discoloured by the decay of some substance. Like all the pottery of this class, it is hand-made; externally light brown in colour, and resembles in form the marble mortar used for culinary purposes. Upon its sides, at regular intervals and one inch below the top, are six projecting knobs or ears, perforated from side to side; and besides this, it is further ornamented with two bands of herring-bone markings, separated by one filled in with a plain



Kell, Bros. Lith. London, E. C.

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zigzag, the whole incised with some simple instrument, probably a sharpened stick or bone, while the clay was still in a moist state. The lip of the vessel is likewise (Fig. 3) ornamented with four lines produced by the impress of a twisted cord or thong.

Vessels of this description, more or less ornamented, have been found, generally accompanying unburnt burials, in several of the barrows opened in the counties of Derby, Wilts, and York. In this district I am led to believe them of somewhat rare occurrence, for in the six barrows examined by Canon Greenwell, no example, either whole or fragmentary, was found, nor any pottery of so fine a character.

It is a moot point as to what use the knobs upon this vase, and some kindred forms of vessels were actually applied; some regarding them as merely ornamental, others that they were intended to hold cords to enable [the vessel to be more easily carried or hung up out of the way. Mr. Birch, in his works on Ancient Pottery,* suggests that they may have been used as lamps, and as such suspended from the roofs of the Celtic huts. A smaller form of vase, having pierced projections and the sides also perforated, are regarded as Thuribula, or Incense Cups, a name given them by Sir R. C. Hoare, who believed them to have been used during the rite of cremation. In the present example, though, a twisted cord has certainly been passed through two of the ears, for it has left its impression on the clay; still, as this was done when the material was soft and the vessel unfit for use, I am inclined to favour the first opinion, and to regard them as primarily ornamental.

Much light is thrown upon the mode of manufacture of pottery without the use of the lathe or wheel, by the descriptions of similar arts employed by uncivilised peoples of recent times. Thus Mr. Charles Rau, in the *Smithsonian Institute Report* for 1866,† writing of the Indian tribes who lived on the Cahokia Creek, tells us that "one of the methods employed by them was to weave baskets

* Vol. ii., p. 380.

† Page 346.

of rushes or willows, similar in shape to the vessels they intended to make, and to coat the inside of these baskets with clay to the required thickness; the baskets, after being destroyed by the fire, left on the outer surface of the vessels peculiar impressions, resembling basket-work, which produce a very pleasing effect, and to a certain extent are a substitute for ornamentation."

Dumont again, in his *Mémoires Historiques sur la Louisiane*,* gives a still more interesting and instructive account of a different process, and one that would probably be adopted in the manufacture of such vases as the specimen from Warren Hill. He writes:—"After having amassed the proper kind of clay, and carefully cleaned it, the Indian women take shells, which they pound and reduce to a fine powder; they mix this powder with the clay, and having poured some water on the mass, they knead it with their hands and feet, and make it into a paste, of which they form rolls six or seven feet long, and of a thickness suitable to their purpose. If they intend to fashion a plate or vase, they take hold of one of these rolls by the end, and fixing there, with the thumb of the left hand, the centre of the vessel they are about to make, they turn the roll with astonishing quickness around this centre, describing a spiral line; now and then they dip their fingers into water and smooth with the right hand the inner and outer surface of the vase they intend to fashion, which would become ruffled or undulated without that manipulation. In this manner they make all sorts of earthen vessels, plates, dishes, bowls, pots, and jars, some of which hold from forty to fifty pints. The burning of this pottery does not cause them much trouble. Having dried it in the shade, they kindle a large fire, and when they have a sufficient quantity of embers, they clear a space in the middle where they deposit their vessels, and cover them with the charcoal. Thus they bake their earthenware."

Reverting now to the occupant of the tomb, the remains

* Vol. ii., p. 271. Paris, 1753. "Flint Chips," p. 251.

indicate a person of about 18 years of age, whose height probably did not exceed five feet three inches. From the form of the skull and slender character of the bones, there is good reason to believe that they belonged to a daughter of Icenia, whom, in the full springtide of life, death plucked away. She was doubtless the child of a chief, or person of mark in her tribe, from the care bestowed on her interment, and the lasting monument raised over her remains.

From a fact to be noted hereafter, the imagination, I regret to say, will be disappointed if it arrives at the romantic conclusion that the stags' antlers so immediately covering her resting-place were trophies of prowess in the chase, and deposited there by the young hunters who may perchance have sought her in marriage. Rude as society then was, without question they were placed there by some loving hand to mark the grave, and to protect it until the tumulus should be raised over.

Owing to the distorted and partially decaying condition of the lower side of the skull from long contact with the earth, I regret all the measurements required for its comparison with well authenticated examples of crania from ancient British tumuli cannot be made; nevertheless the right half of the skull has suffered very little from posthumous distortion, and is sufficiently perfect to be pronounced that of a typical British skull of the early part of the bronze period, such indeed as we might expect to be found in a round barrow in which the dead were interred entire. It is eminently brachy-cephalic,* which is in a great measure due to the full parietal region, the bosses of which are large

* Approximate measurements of the cranium from Warren Hill, expressed in inches and tenths (system of J. Barnard Davis):—

Circumference.....	19·4
Fronto occipital arch—f. 4·5; p. 4·8; o. 4·1	13·4
Intermastoid arch	14·
Longitudinal diameter	6·7
Transverse diameter, <i>p.</i>	5·7
Height.....	5·5
Length of face	4·3
Breadth of ditto (interzygomatic diameter)	4·9
Breadth—index	85
Height—index	82

and prominent. It also exhibits the peculiar flattening of the lower part of the parietals, and the adjoining border of the occipital, so often found in British skulls of this period, which in the opinion of some authors was caused in infancy by a method of nursing, analagous to that practised by some of the Indian tribes of North America at the present day. The frontal bone, though somewhat too low and square, is broad and smooth—devoid of any brow ridges; it rises with a gentle curve, and has the frontal protuberances well developed. The supporting zygomatic arches are slight, and scarcely project beyond the outline of the temples. The jaws exhibit traces of prognathism, but not sufficient to mar the generally harmonious contour of the face. The teeth, to the number of twenty-eight, were in place at the time of exhumation, and in good condition; the *dentes sapientie*, though developed and visible, remain within their alveoli. Altogether this skull, from the delicacy of its moulding and the absence of any detracting feature, gives reason for the belief that its owner was possessed of a fair share of good looks, and may possibly have been a beauty in her day.

Since this paper was first written, I have submitted the skull to the examination of that eminent craniologist, Dr. J. Barnard Davis, F.R.S., of Shelton, who has favoured me with the following letter respecting it, which confirms the opinions I had previously expressed:—

“*Shelton, April 14, 1869.*”

“ There is little that can be said upon this skull, and I think you have anticipated that little in every particular.

“It is the cranium of a young woman who had just reached her maturity. I think her age to have been, as nearly as can be determined, eighteen years, when every structure was fully developed and vigorous. It is tolerably sure that she belonged to a family of position in an Icenian tribe. The facts of her interment in such an important tumulus, the protection of her body by the pile of antlers

of the stag, and the state of perfect preservation of her teeth indicate this.

“The drawn-up position of the body, with surrounding pieces of wood or bark for its protection, closely resembles that of the Coritanean woman of Middleton Moor, Derbyshire, figured and described in the *Crania Britannica*, (Plate 35), save in this particular, that pieces of the there-abundant limestone were placed around the corpse in the latter case.

“The cranium is brachy-cephalic, and of the form which may be regarded as *typical*. It is also slightly prognathic, which is in this case mainly a sexual character, and would not have been apparent in the skull of a man.

“This cranium is of great interest, as the only known example of an ancient British skull recovered from this part of England, and also from its offering a confirmation of the views upon the craniology of the ancient Britons in the work above alluded to.

“J. BARNARD DAVIS.”

Of the group of antlers that formed the remarkable feature of this interment, all, as stated, were in a very friable condition, and it is fortunate that I secured the length of two examples before disturbing them; for the longest piece of beam now remaining scarcely exceeds a foot in length. The following details will convey an idea of the magnitude of the specimens, and of the noble animals from which they came:—The beams of four horns, midway between the bez antler and crown, measured in circumference respectively six, five and a quarter, and five inches; another, at an equal distance between the brow and bez antlers, had a circumference of seven inches, and a brow antler originally quite fourteen inches long following the curve, the greatest circumference of which was five inches; another brow antler measured thirteen inches. Immediately above the burr four other portions measured nine and a quarter, nine, and eight and a half inches. In some cases the brow antler was double. The entire length

of the two horns measured was respectively three feet two inches, and two feet eleven inches.

The foregoing dimensions, compared with those of antlers found by the peat-diggers in the fens of Cambridgeshire, and in some still more ancient deposits, exhibit no material declension in size, while in comparison with those of the horns of recent animals of the same species from the deer forests of Scotland and Ireland, there appears to be a marked superiority in length and bulk. This probably may be attributed to the greater age to which the animals lived, and the vastly superior advantages they enjoyed in the extent and variety of feeding ground afforded by the great tracts of moor-land, forest, and morass, that then occupied so large a portion of the country, through which they roamed with little restriction or danger except from the occasional attacks of wolves, bears, and their more wily adversary, man.

The following table will more readily show this divergence. It is compiled from measurements given in Owen's *British Fossil Mammalia*, largely supplemented by details most kindly furnished by Professor Newton, of Cambridge.

	Fossil No. 1.	Fossil No. 2.	Fossil No. 3.	Fossil No. 4.	Fossil No. 5.	Fossil No. 6.	Warren Hill.	Warren Hill.	Modern.
Circumference immediately above burr	9.85	7.75	8.5	8.25	8.6	8.75	9.25	8.50	7.
Length of brow antler, following curve	14.	16.	11.25	14.4	14.25	11.	14.	13.	12.
Ditto entire horn, ditto	39.5			36.	35.	33.5	38.	35.	31.50
Circumference between bezel antler and crown			6.		6.		6.	5.25	

Example No. 1 is that of a "crowned hart," from five or six feet in "tuft," at Alport, in the parish of Youlgreave, Derbyshire.

No. 2 and the three following are measurements of the largest antlers of *Cervus elaphus* in the Zoological Museum of the University of Cambridge. Nos. of Museum Catalogue: 773v, 734r, 733r, 734b. No. 2 is from the gravel of Barnwell; nos. 3, 4, 5, from the peat of Gt. Shelford, Coldham, and Stourbridge, Cambs.

No. 6 is from an antler of six points, medium-sized, from the peat of Poppelot Fen, Feltwell.

It is to be remarked that with the exception of three, which retain portions of the frontal apophyses, all the antlers from Warren Hill have rounded bases, showing that they were shed by the animals in the natural process of absorption, and not broken off by violence from the skull.

From the tan-like stain which some two or three of the larger horns bear, I am inclined to think they must have lain some time in contact, or even embedded, in peaty soil. Stags' horns are known to have been very largely employed by the people of the later stone period inhabiting this country and the continent, not only as tools in their nearly entire state, but also as mounts for their stone axes, chisels, &c. ; while the detached tynes were useful in a variety of ways. They in consequence formed an article of no small value to the early inhabitants of the district, and I think it probable that although the stag abounded in the woody confines of the adjacent fens in very considerable numbers at the time of the erection of our tumuli, and many were annually taken in the pitfall and the chase, yet the shed horns; some of which may have lain for many years on the spot where they fell, would be sought for and used, in addition to those procured from the slain animals.

So far as I can learn, no instance of a similar deposit of horns is recorded by the explorers of tumuli of the Celtic period in this country. Stags' horns, to the number of two or three, have occasionally been found associated with contracted burials, accompanied with flint arrow-heads and flakes, pottery, &c. ; and in some instances the entire skull and horns have been found. In a barrow in Dale Park, near Arundel, opened in June, 1810, the Rev. Jas. Douglas met with an extended skeleton, at whose feet were placed a pair of large stags' antlers ;* and another instance occurred some years ago at Icklingham. In the course of removal of a small mound in a meadow known as Harland's, near Temple Bridge, a skeleton was found, which had its feet resting upon the skull of a stag, so laid that the horns curved upwards on either side of the lower limbs of the

* *Archæological Journal*, vol. ii., p. 80.

skeleton, which apparently must have been extended, as that of Dale Park. Such position would imply a rather later period than the contracted burial.

The Warren Hill barrows, when they no longer served as burial-places of the Celtic chief folk of the neighbourhood,* were not allowed to remain useless, for during their demolition it was evident, from the wood ashes that mingled with the uppermost layers of the soil of two of them, that they had served as tothills, and upon them had blazed the beacon, and perhaps the Beltaine fire.† The Teutonic immigrants from the country of the Rhine and Elbe, who several centuries later possessed the land, likewise used them as burial-places for their warriors.

In the central tumulus several graves of the Saxon age were met with, where the dead were interred with the usual deposit of the arms and accoutrements of the deceased. Some of these, to my knowledge, were thrown aside or wantonly destroyed by the labourers in ignorance of their archæological value. One small group of articles alone found their way to me, viz. a bunch of toilet implements in excellent bronze (Fig. 4), consisting of an ear pick, tweezers, and nail cleaner, suspended from a ring; and the volute handle of some instrument in the same metal. To the latter I think a Roman origin must be assigned. Mr. Simeon Fenton, of Mildenhall, was more fortunate in securing some fine specimens of arms, &c., comprising two perfect umbones of shields, with the iron handles that belonged to them, the portions of two others of similar

* Upon Icklingham plain, near the foot of Warren Hill, there are abundant traces of ancient habitation. Fragments of pottery of Roman-British and Saxon make are of frequent occurrence in the earth thrown from the numerous rabbit and mole burrows. I have also found fragments of querns of tufa, and the simpler forms of flint implement. In making slight excavations with the hope of discovering an old burial-place which there is reason to believe may be found in the immediate neighbourhood, I have come upon the sites of huts, with hearths of pebbles, broken bones of animals, and

charcoal. In one instance, in endeavouring to follow the floor line of a hut, a heap of refuse flint flakes and a battered pebble were found together, seeming to indicate the spot where some old flint worker had sat while he "roughed out" an implement.

† In heathen times the sacred fires of the Beltaine flamed thrice a year in honour of Beal, or Bealan (the Sun); viz. on the eve of May-day, Midsummer-eve, and the eve of the first of November. The practice in part survived in Ireland and some parts of Scotland at the commencement of the present century.

form, and two convex iron plates or studs that probably ornamented or strengthened one of the shields. Besides these were the cusps of four spears. Three are of the forms usually found with Saxon interments in East Anglia; the fourth is peculiar (Fig. 5), the blade resembling more that of the *Wæl Seax*, or "Slaughtering Knife," an antiquity of the greatest rarity in this district, for which weapon I should take it, were it not for the remains of the socket. Like most of the iron relics from the Saxon graves, these examples are much oxidized.

Beneath the tumuli themselves, ancient as they are, are the relics of a people once resident in the locality, the memory of whom is lost in the long lapse of time, but whose imperishable implements are found entombed deep in the gravel beds. With them also are the remains of animals whose forms are no longer familiar to us, some species of which are indeed wholly extinct.

In the autumn of 1864 I had the honour of communicating to Sir Chas. Lyell, Bart., the finding by myself of flint implements in the gravel of Warren Hill, since which many hundreds of examples have been found there.

As I hope to describe the flint implement-bearing deposits of the valley of the Lark in a future communication to the Institute, I shall give no details here. The subject is one of great interest, and in connection with the history of our race, deserving of the most careful examination.

Of the "Three Hills" what further can I add? They are no longer to be found; nay, the very ground upon which they stood is so broken up and shrunk, that it is with difficulty the once verdant slope with its crown of firs can be recognized. One cannot but regret the change and the chances that have brought it about, remembering the fact so well expressed by the good Sir Thomas Browne, that "surely many noble bones and ashes have been contented with such hilly tombs which, neither admitting ornament, epitaph, or inscription, may, if earthquake spare them, outlast all other monuments."

HENRY PRIGG, JUN.