## EXPLORATION OF A "NATURAL BARROW" AT STONE.

The title of this paper is, it is feared, a misnomer, but was adopted for want of a better one. A barrow, as usually understood, signifies "a hillock or mound of earth, intended as a repository of the dead," * but as the A.S. word beorg, beorh (hill, mound, sepulchral mound) is from beorgan, to project, shelter, defend, the title is perhaps allowable. What is intended to be conveyed thereby is "A barrow-like natural hill," i.e., a natural, stratified hill, the rounding of which may, however, have been completed by human agency, and having a decidedly artificial or barrow-like appearance.

The main road running from Aylesbury in a southwesterly direction to Thame (and onwards), traverses a high plateau, and keeps for some distance nearly parallel with its northern edge, passing the almost contiguous villages of Stone and Hartwell, together with Hartwell House (with its treasures of architecture, pictures, etc.) and the beautifully-timbered park. The plateau drops somewhat suddenly on that side into the Thame river valley, and about five furlongs north by west of the centre of Stone village is a spur projecting some distance into the valley.

This spur has the appearance of having been artificially divided from the plateau, and again

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BURNE HILL, STONE, LOOKING S.S.E.
transversely bisected; and as if the soil thus removed had been heaped up on the two sections left standing, so as to form a pair of gigantic circular barrows.

The outside one (i.e. the furthest from the plateau), known as Burne Hill (perhaps more correctly Bourn Hill), bears N. by W. $\frac{3}{4} \mathrm{~W}$. of the inner one (from centre to centre), and is somewhat the larger. Measuring from the limit of the old ploughed area (now permanent pasture) its diameter from W. to E. was ascertained by Mr. Whitbread to be 280 ft .; and the height of the north face (opposite the central line north to south) from the lower side of the (?) vallum, 45 ft . 9 in. Dr. J. C. Baker, M.B., and Mr. James Berry, F.R.C.S., ascertained its circumference to be 869ft. (agreeing very closely with Mr. Whitbread's diameter); and found it to be 260 ft . over all, and about 15 to 20 ft . in actual height, measured no doubt from E . or W., because its height is greatest on the N. side (owing to the falling away of the river valley), and least on the S . side, where it is joined to the second hill by a col. The map in $\mathcal{E} d e s$ Hartwelliance, Addenda, Plate IV., opposite p. 85, shows the former "coach-road," of which we were constantly hearing locally, running between the two mounds, across what is above called the col, along the line of the hedge seen on the right of Plate I. A large portion of the line of the base is roughly indicated by what looks very like a vallum or encircling bank, which, however, is not continuous all round, but it would naturally have been destroyed in making the coach-road.

The sides are very steep until near the top, whence the slope becomes a gentle one. A ring of trees*

[^1](limes and wych-elms) is planted just at the edge of the gentle slope, and the large enclosure resulting forms a fairly well defined summit or top, about 100 ft . in diameter.

In April, 1906, the gamekeepers of Colonel E. D. Lee, of Hartwell House, the owner of the land, found a sett here occupied by badgers, which they proceeded to dig out. This, as is well-known, entails the moving of a great quantity of "ground," and in the course of following the unfortunate animals (of which they eventually secured the old female and her three cubs), they were a good deal surprised at encountering two human skeletons, the greater part of the bones of which they unearthed, and fortunately preserved.

The keepers notified the police, the police notified the coroner, who in turn communicated with the Home Secretary! Fortunately, however, Dr. J. C. Baker heard of the find, and having apprised me, I at once wrote to Colonel Lee asking for the things for the County Museum. Colonel Lee most kindly consented, and forwarded them to me, and I took the steps necessary for their preservation. Colonel Lee also very kindly gave permission to the Society to make further search in the hill, and has since offered to provide a show case for the new Museum; for all which I have the pleasure to acknowledge the Society's indebtedness to him, and my own personal indebtedness and thanks to him and Mrs. Lee for their hospitality and kindness to me at Hartwell House during the progress of the exploration, and also to the late Sir Henry Smyth and to Lady Smyth for a similar hospitality at S. John's Lodge, Stone, notwithstanding the precarious state of Sir Henry's

[^2]health at the time. The Society is also much indebted to Professor W. Wright, D.Sc., F.S.A., etc., of the Middlesex Hospital, for kindly examining and reporting on the human remains, and for the trouble he took in order to secure clear photographs of the two skulls reproduced as Plate II.

Mr. W. Whitbread, of Hanslope, a member of this Society, proved an invaluable foreman; and Mr. W. R. Kinnear, of Stone, who is now a member of the Society, was also a most valuable and reliable helper. These two, with myself and four or five labourers, formed the regular working staff, while various gentlemen paid us visits, to several of whom thanks are due for valuable aid. Dr. J. C. Baker kindly undertook the treasurer's department, which he carried out most successfully.

From July 23 to August 2, 1906 (both inclusive), we turned and thoroughly explored the whole of the top already described, to within four or five yards of the trees (so as to avoid disturbing their roots). The area thus examined formed a circle 70 feet in diameter.

This space, until the raid by the keepers, had evidently been a regular thicket of old-established nettles, which must have largely screened the entrances to the badger and fox setts. So many trenches had been cut in various directions in pursuing the badgers that there was no very large surface left undisturbed; but so long as there was any sign of turning in the soil, whether in prehistoric times, or by the keepers three months previously, or by badger or fox between these extreme dates, we followed downwards; and until we became perfectly familiar with the soil, even because occasionally we could not satisfy ourselves that it had never been moved. In this way about one-third of the area was dug 3 feet deep and more; in one wide trench in the northern half, extending in a N.E.-S.W. direction on the site of the principal ramifications of the badger sett, we followed these to a depth of 8 ft . 6 in ., while the whole of the remainder was turned to a depth of 2 ft . 6 in . We also cut a section from the N.N.E. edge of the summit, straight down the side of the hill, and through the mound near the base, which, running nearly half-
way round the hill, may be the remains of a vallum. (See Plate I.,* where the temporary rails we fixed to keep cattle from falling into this deep trench, are visible on the left-hand side.)

We are able to state positively that the hill is entirely a natural one; nowhere could we trace that so much as a single spadeful of soil had ever been added to it; even the "vallum" $\dagger$ is of unturned earth.

This, however, does not prevent the hill having been artificially rounded from a naturally irregular outline, nor does it prevent the "vallum" having been artificially laid out by excavating soil from its upper and lower sides. Only, there is not a vestige (as one would expect to find) of soil removed from one point, being used to raise a low place elsewhere. If any shaping has taken place, the soil has been entirely removed from the hill and scattered.

This conclusion is in complete agreement with the result of the investigation of the twin mound (locally known as Nitten Hill, Pincushion Hill, or Emp $\ddagger$ Hill) by the late Dr. Lee in 1849, as recorded by Admiral Smyth in Edes Hartwelliance, p. 5. "In Eythorpe fields, near Stone, there are two conical mounds, nearly touching at their foot, which appear to be artificial; but in the spring of 1849, at my request, Dr. Lee excavated the one which stands on his own ground. It is about 30 feet high, and of 200 feet radius at its base". . . . . "the geological details gave indisputable evidence of its being a natural deposition, like the strata of the district, from which the outer masses had been swept off by the floods which scooped the valley below." He adds the fol-

[^3]lowing "tabulated depths of the section" as taken by the Rev. J. B. Reade:-

| in. |  |
| :---: | :---: |
| 1 | 7. Vegetable |
| 0 | 5. Shelly oolite, con taining ammonites |
|  |  |
| 0 | 7. Sandy loam. |
| 0 | A bed of green san stone pebbles. |
|  | Yellow clay. |
|  | 0. Greyish yellow clay |

fic. in.
0 2. A well-defined and undisturbed green line, indicating an ancient surface.
3 9. Dark grey clay.
0 4. Band of iron-stone.
9 10. Light grey clay.
0 8. Kimmeridge clay.

The first of these two columns agrees fairly with what we found in the other hill, and as a small radius at the centre of the top of Burne Hill had some few inches of a yellowish clay above the "shelly oolite," it may be inferred that that stratum had been detrited from the remainder of the rounded top, as well as from that of "Nitten" Hill; and our maximum depth ( 8 ft .6 in. ) would therefore leave a few inches of the "greyish yellow clay" unseen. It must, of course, be remembered that Mr. Reade's next stratum, the "well-defined and undisturbed green line, indicating an ancient surface," refers to mesozoic (Upper Oolitic) times, and not to any sign of human occupation.
In due course we came upon most of the remaining bones of the two skeletons overlooked during the badger hunt. At the exact point indicated by the keeper, we found, 2 ft . 6 in . below the modern surface, most of the leg bones of the principal skeleton-a very muscular man of middle age, whom I will not more particularly describe, as Professor Wright's report will furnish an accurate description. The previously-missing right femur and patella, both tibiæ and fibulæ, and the metatarsals, were in situ. The man had been buried extended, on his back. Not one phalange remained in place, all having been scraped away at some time by a badger when excavating a tunnel, and we kept finding them singly, several as much as some yards away. The distal ends of the tibiæ were 7 ft . 3 in . west of the centre of the hill. The body had been oriented, the feet pointing E. by
N. $\frac{1}{4}$ N. The sacrum, whether long ago disturbed by badgers, or perhaps more probably quite recently by their exterminators, lay 15 in . deep, $15 \mathrm{ft} .4 \mathrm{in} . \mathrm{W} . \frac{1}{2} \mathrm{~N}$. from the centre, or between 5 and 6 feet out of position.

A day or two after the keepers' raid there was found in the soil thrown out close to this burial, and evidently belonging to it, a socketed iron spear-head $6 \frac{1}{2} \mathrm{in}$. long, having the socket continued forwards up the blade, gradually tapering to nothing just short of the point. This form is identical with that of bronze weapons, and typical of that age, not only in this country, but elsewhere. In Sveriges Forntid af Oscar Montelius (Stockholm, 1872) is figured an almost similar Swedish specimen of the Bronze Age, and an equally similar example in iron of the Early Iron Age. The type is also illustrated by Norwegian examples in both metals belonging to these two Periods, in Norske Oldsager af O. Rygh (Christiania, 1885).

One or two of the examples in my own collection from Norway, now in the British Museum, are more or less modified varieties of the type, and I have to thank Mr. Reginald A. Smith, F.S.A., for finding me in the collection there a practically similar example, of the Early Iron Age, found in England. The blade of the present example is $3 \frac{1}{2}$ inches long, by about 1.4 inch broad. The socket which extends 3 inches clear of it is $\frac{1}{1}{ }_{6}^{3}$ of an inch in outside diameter at the butt end; the grain of the wood of the shaft is still visible inside.

The second skeleton found by the keepers' digging party lay about 14 ft . 2 in . S.W. by W. of the centre, that is about 9 ft . south of the shoulders of the extended skeleton, and probably about 3ft. below the present surface. It had been buried in a contracted position, the hands up in front of the face, and the keeper states that it was face-downwards, but usually in contracted burials the body is found lying on the side, generally the left side. This skeleton was that of a quite young person, of whom I leave it to Professor Wright to give all particulars. Various scattered phalanges belonging to this second skeleton were also recovered by us; as well as vertebræ, ribs, portions of the sterna, etc. belonging to both; in great
measure the bones were so scattered that they could not be assigned to the body owning them, merely by their position. A bone pin, $2 \frac{1}{2} \frac{9}{0} \mathrm{in}$. long, made from the scapula of a small sheep, was found not many yards from the contracted body, and had possiblyindeed probably-been associated with that burial.

From the undoubtedly unturned, stratified mass forming the hill, it is obvious that there is no "primary" interment on or near the ground line in the centre of the mound, and it seems curious that these two interments on the top (which one naturally supposed, until the contrary was proved, were "secondary" burials) should have constituted "omne quod mortale est" in what appears to one's modern eye so remarkably eligible a burial site from a prehistoric point of view. I venture to suggest that a tree standing at the time in the exact centre may account for the burials being placed to one side.*

We found no further human remains, but the oldest traces of man on the mound were nearly three dozen flint flakes, and two scrapers, one of which has exceptionally fine and minute chippings. It is not a flint district, and therefore it seems possible that out of about an equal number of small flint chippings that do not fulfil the orthodox conditions of flake-dom, there may be some that have nevertheless been brought to their present form by the industry of neolithic men.

Three minimi, and four tiny fragments of pseudoSamian pottery, are the only evidences of the Roman period. One of the pottery fragments has been ground into a circular disc, apparently as a draughtsman, and again broken-only the smaller segment being found.

Two of the minimi are of Constantine the Great, A.D., 306-337.

The first has, Ob. Bust to left, with helmet. CONSTANTINO. . . . . . . Rev. Winged figure with spear.

The second (of the same reign) has, Ob. Head to right. [CONSTANT]INV[S]. Rev. [GLORIA

[^4]EXERCITVS]. Two soldiers, each holding a spear in outer hand, and a shield resting on ground, supported by inner hand. Between them a trophy.

The third is of Constantius II., A.D., 337-361. Ob. Head to right. [FL. IVL.] CONSTANTIVS Rev. GLORI A EXER [CITVS]. (The A of GLORIA is divided from the remainder of the word). Ditto to last. Below: TRS (= Treves, where it was minted).

I may here mention the purchase on the Society's account, from one of our labourers, of another minimus of Constantine the Great, which he said he had dug up on Round Hill, close on the S.E. of Stone village. Ob. Head with helmet, to right. Rev. Two draped winged figures, between them an altar. (Inscription illegible.)

Bones of various animals were ubiquitous throughout the surface soil, and there were also a few birds' bones; some of these bones seem likely to be of a certain degree of antiquity, as is mentioned under the respective species.

Horse.-Four upper and one lower teeth, and some small fragments of a lower mandible, may belong to any period.

Pig.-A few fragments. Probably of the same date as the oxen and sheep bones.

Ox.-Nearly thirty fragments of bone, and teeth, representing oxen somewhat smaller than the ordinary modern breeds, but not tiny like the so-called Bos longifrons, or the Britanny breed. These may date back to almost any age between say the 17 th century and the Early Iron age, but the, apparently, entire absence of bones of Red deer, points to mediæval rather than prehistoric times.

Sheep.-A large number of bones of small sheep occurred throughout the surface soil. From the very uniformly small size, there is every probability that they are of a certain degree of antiquity.* Whether

[^5]they were the gradual accumulation from the dinner of a solitary shepherd (or watchman of any kind), or whether they were all thrown away within the space of a very few days by a large number of men temporarily assembled here for some warlike purpose on one particular occasion, there is nothing to show, except, perhaps, two little facts. If a solitary shepherd was in the habit of eating his dinner here daily for any length of time, he would have been almost certainly (at any period) accompanied by a dog, who would have had ample time to dispose of all but insignificant fragments of the daily bone, supposing, that is, that the shepherd was in the daily habit of dining off mutton (even braxy!). Whereas a body of men, assembled for military purposes, would have been in the main without dogs, and therefore a large number of bones, broken though most of them are (with a comparatively small proportion gnawed), would naturally come down to us. A shepherd, moreover, would always have seated himself in the same place, and have dropped his daily bone within a few feet of the same spot; but the bones were found distributed fairly evenly over the entire area.
It is impossible to determine positively the period of these sheep without comparison with a large series of known date (i.e., bones found associated with human handiwork of recognised age); but as the scapula from which the pin was manufactured seems to have agreed closely with the unworked fragments of these bones which we found, it is quite possible that they date, like the human skeletons, from the late Celtic period (but even if so, not necessarily contemporaneously with the burials). There is a close agreement between these bones and those from Walton Road, Aylesbury (described further on), which are probably mediæval. The sheep bones from the Hedsor Pile Dwellings, of probably a later period than the earliest extreme suggested for the present series, show a certain range of size (as if from some amount of mixture of breeds). but the predominating type is larger.
There are less than a dozen fragments of skull in all, so small as to admit of no measuring; the lower mandibles, like nearly all the other bones, are im-
perfect, but I took some little trouble in taking such measurements as are possible, and comparing them with modern specimens in my collection, only to find that owing to the varying degrees of immaturity among them, such few measurements as were possible were untrustworthy and only misleading.

The following few measurements of other bones are given for what little they are worth:-

Two atlas vertebræ, measured transversely at their widest point about the centre, would each be barely $2 \frac{1}{2} \mathrm{in}$. if perfect.

A sacrum, if perfect, would be about $2 \frac{17}{2} \frac{\mathrm{in}}{\mathrm{in}}$. in width at the anterior surface.

The radius of a young example measures without the distal epiphysis, which is missing, $4 \frac{11}{2} \mathrm{i} \mathrm{in}$. (An ulna, and part of a humerus, apparently belong).

Metacarpal, adult, 4in. long. Ditto of a young. example (epiphysis of distal end detached and found separately) $4 \frac{1}{1} \frac{1}{6} \mathrm{in}$.; bone proportionately stouter than the last. Another young example (distal epiphysis missing) is of intermediate length, but barely stouter than the first mentioned.

The most perfect tibia, probably measured barely 7 in.

Metatarsal, adult (imperfect, gnawed, about) $5 \frac{1}{8} \mathrm{in}$. Other examples, probably also adult, but imperfect, match very closely in size.

Astragalus, length $1 \frac{3}{16} \mathrm{in}$.
Calcaneum, measured from the posterior extremity or tuber calcis, to the posterior articular facet for the astragalus, 1.3 in . A second example, $1 \frac{11}{20} \mathrm{in}$. A third (immature, epiphysis not formed), $1 \cdot 2 \mathrm{in}$.

Badger and Fox bones were, as was to be expected, numerous.

Otter.-Two left scapulæ of young otters, probably from 4 to 6 months old, match so exactly as to size that it seems likely they belonged to cubs of the same litter. One is perforated evidently by a sharp canine tooth, which helps to bring its undoing home to a fox.

A matter of considerable interest from a zoological point of view,--and as the animal has long been
exterminated in the county, almost from an archæological point of view also,--is the finding of bones of -

Pine Marten (Mustela martes), which seem to have been captured by foxes, and carried to their earth on this hill to eat. From the comparatively recent appearance of the bones (in common with the remaining bones mentioned below), it seems improbable that these were martens trapped by men at an early period, and brought here to be skinned.* My identification of these bones has been confirmed by Dr. C. I. ForsythMajor and Mr. Oldfield Thomas, F.R.S. They comprise : -

Left ramus of lower mandible, from symphysis to within about $\frac{1}{2}$-inch of angle. The canine, and 3 rd and 4th premolar teeth, are in situ, the alveoli of the first two præmolars and of the second molar, have completely closed. The first molar has been broken short off during life, and the alveolus is in process of closing over the fangs. The remaining teeth, however, do not show much wear.

Portion of a right ramus of a large individual. No teeth remaining.

Humerus. A left and right are probably a pair. A perfect left, and the proximal $\frac{2}{3}$ rds of a right, may also be a pair. Also the proximal two-thirds of another left, and an immature left wanting both epiphyses. At least four animals represented.

Ulna, one example.
Tibia and fibula. 5 right, and 3 left. At least 5 animals represented.

The imperfect ends of some of these bones are caused, with little doubt, by their owners having served as food for foxes. The inference that martens are naturally captured and eaten by foxes is, I believe, an entirely new suggestion, and the fact that remains of at least five individuals (four old, one a young adult) occurred, also tends to show that the species was formerly common in this part of Buckinghamshire, although many years may have elapsed between the capture of the first and the last. An interesting ques-

[^6]tion is their age, not only as showing evidence as to how recently martens were still fairly plentiful hereabouts, but also as an indication of the age of the fox (and inferentially of the badger) earths. Documentary evidence is only negative on the point, but we may suppose that the species was practically exterminated in the county more than one century since: and to go back to a time when it was still at all numerous, we must suppose that this badger earth, to which the fox earth appeared to be a mere annex of later date, was at least two, and probably even three or more centuries old!

Domestic Cat.-The upper portions of a femur, tibia, and humerus. The latter bone has been fractured during life, and a very strong natural mend effected, but there is a lump (exostosis) on the posterior surface decidedly larger than the entire proximal head of the bone.

There are numerous bones of Hedgehog, and of Rabbits, and of smaller rodents.

Bird Bones.-The remains of birds are few. They comprise two fragments of right ulna representing two domestic fowls; a coracoid is that of a duck, and so probably are a portion of humerus, and an (anchylosed) ii. and iii. digit. Another pair of these bones probably belonged to a goose; they seem small enough for those of a Brent Goose, with which I have had no opportunity of comparing them.* A second coracoid represents a pigeon, and a portion of rib probably belonged to a bird about the size of a duck.

There are in addition three or four bones of small passerine birds.

Probably all these, with the exception, perhaps, of the small birds, had furnished meals for foxes.

Among the inevitable sundries which always make their appearance, dig almost where one will, in this old-inhabited country, are a dozen tiny fragments of mediæval pottery; a piece of very thin lead, about $2 \times \frac{5}{8}$ in., having a very slight rim along one edge, which is somewhat curved. This, and a split running

[^7]out to the lower, torn edge, suggests that it may have been originally rounded, as if forming part of a very small vase. Also a defaced copper coin, $1 \cdot 1 \mathrm{in}$. diam.probably a lucky halfpenny, round one side of which is rudely engraved-William DVBLIN Overend 1737. In the centre is a circle filled by numerous lines crossing in different directions. (The other side blank, except for a few slight marks visible with a glass in a good light, left when the coin was defaced.)

It is many years since I saw the enormous barrows of Odin, Thor, and Freya, with the fourth lesser, but still huge Kings' Barrow, at Gamla Upsala, Sweden, so it is difficult to compare them (even with the help of a small photograph *), but no doubt the hill now under discussion must be bigger than either of them. The largest (real) barrow that Canon Greenwell in his unique experience met with is very considerably smaller. He says $\dagger$ "The largest that I am acquainted with is Willy Houe, near Wold Newton, which is very, nearly 150 feet in diameter, and about 24 feet high.,"

With regard to "natural barrows," another, probably water-rounded, isolated, conical hill which I have known all my life, is the Moel glas ( $=$ the green [strictly blue] conical hill) which gives the name to the property and parish in which it is situated (Voelas) in Denbighshire. This hill is much larger than Burne Hill, and is almost obviously too large to be artificial, but has nevertheless a most artificial appearance. I have never measured it, but its size may be to some extent inferred from the fact that it is covered by trees forming the site of by far the largest rookery I have ever seen. The Castle Mound at Oxford is a familiar example of somewhat similar appearance. This, as we know, was formerly surmounted by a castle (of masonry), but the mound itself can hardly be artificial, though possibly, as in other instances, the perfecting of the conical form may be so.

In April last I received a letter from Dr. J. Sinclair Holden, M.D., of Sudbury (Suffolk), informing me that

[^8]Plate 2.

\% Norma Facialis.


ठ Norma Verticalis.

if Norma Verticalis.

$\sigma^{\circ}$ Norma Lateralis.


б Norma Occipitalis.


ㅇ Norma Lateralis.

SKULLS FROM BURNE HILL, STONE.
about four miles from there a bluff projecting into the Stour valley has been found to contain urns; "the large ones contained ashes and bits of bone, all rude and hand-made pottery. The bluff is composed of glacial drifts, sands and gravels, and the urns are found generally about 5 feet from upper surface, no doubt some denudation has taken place since their burial. No sign of bronze or [other] metal, but I, have found a few flint neoliths in form of scrapers." At the rear of the bluff is a church, in the tower of which, and elsewhere close round, are about 24 sarsen stones, and Dr. Holden suggests as a possibility that these may have formed a stone circle. He adds "Do, you term these natural sites of burial-a Barrow?" To this question I shall be grateful for replies.

Alfred Heneage Cocis.

## From Professor Willlam Wright, M.B., D.Sc., F.R.C.S., F.S.A.

Two skeletons in a more or less fragmentary state were forwarded to me by Mr. A. H. Cocks for examination. One had belonged to an adult male; the other to a female of eighteen to twenty years of age.

## Male skeleton-

An examination of the body skeleton leads me to conclude that the stature of the man was 5 ft . 8 in. He was of powerful muscular build.

An examination of his skull shows it to be of the long variety-dolichocephalic. It has an index of 73 .

The sutures of the cranium are still open; further, the halves of the frontal bone had not united-the condition known as Metopism. The supraciliary eminences, mastoid processes, and occipital ridges are all well marked. The teeth are good, but worn by long use. The chin is prominent, the angle of the mandible rounded.

Norma Facialis:-Viewed from the front the long ellipsoid character of the face is recognised.

Norma Lateralis:-Viewed from the side the large mastoid processes behind the ear are seen, also the projection of the chin and the nature of the teeth.

Norma Verticalis:-Viewed from above, the cranium is seen to have its maximum width behind the centre; the eminences above the orbits are distinctly visible.

Norma Occipitalis:-Viewed from the back a rounded sagittal ridge is noticed above, and a shallow groove, also directed sagittally, above the mastoid process.

## Female skeleton-

The body skeleton, owing to the age of the individual to whom it belonged, has not attained its full size. The epiphyses or growing ends of the long bones are absent. There are, however, no reasons for supposing she was of other than medium height. The bones do not exhibit such asperities for muscular attachments as suggest an arduous life.

Of the skull only the cranium remains, the face, with the exception of the lower jaw, being entirely absent.* The cranium is of medium length-mesatice-phalic-having an index of 76. The sutures are open, and, as in the case of the male skeleton, metopism obtains.

Norma Verticalis:--Viewed from above, the cranium has a similar shape to that of the male, but is somewhat broader. The supraciliary eminences are only very faintly marked.

Norma Lateralis:-Viewed from the side, the forehead is smooth and almost vertical; the shape is ellipsoid.

|  |  |  | $\stackrel{8}{8}$ |
| :--- | :---: | :---: | :---: | ---: |
| Glabellar-Occipital length ...... | 199 | $\ldots$ | 178 |
| Maximum width ................ | 146 | $\ldots$ | 135 |
| Minimum Frontal width ....... | 100 | $\ldots$ | 98 |
| Basi-Bregmatic height ........ | 148 | $\ldots$ | 133 |

As to whom these skeletons belonged, it is impossible to say much with certainty. It must be remembered that late Palæolithic Man had already lost from his skeleton whatever low and anthropoid features early Palæolithic Man may have possessed. One looks in

[^9]vain in skulls of later date for any progression or retrogression in cranial form and features. A cranium of late Palæolithic Man may be indistinguishable from that of the Man of to-day. We therefore have to content ourselves with the study of slight and unimportant variations, with the comparison of unidentified skulls-such as these under consideration-with those which have been identified by strong collateral evidence, archæological or historical. We can so arrive at a conclusion which, however, considering the small number of well-authenticated skulls extant, can never be regarded as very sound.

From what is known of the skulls definitely assignable to the Neolithic and Bronze Ages, I have little hesitation in declaring that the skulls under examination belong to neither of these periods.

Coming to the Early Iron Age, the authenticated skulls are unfortunately extremely rare for England as a whole, and for South-East England in particular. It is thus impossible to fix upon any skull as a type for this period.

During the Roman occupation it was the custom here, as it was in other distant parts of the Empire, to mingle peoples of very different origin for the avowed purpose of destroying all community of interest and sentiment. We find the ethnology of Britain complicated by the introduction, among others, of Frisians, Germans, Gauls, Spaniards, Moors, Thracians, and Sarmatians. There is consequently no definite Roman type.

Further, later comers, Jutes, Angles, and Saxons had no cranial form sufficiently definite to afford much assistance in the identification of skulls. Weighing the probabilities of the case, and chiefly by a process of exclusion, I am led to attribute the skeletons to either the Early Iron Age or the Anglo-Saxon Period.


[^0]:    * Webster's Dictionary (Revised Edit., 1864?). In "Words and Places," by Isaac Taylor, 1873, p. 81, is "Related to the AngloSaxon verb beorgan, and the German bergen, to shelter or hide, are the suffixes bury, borough, burgh, brough, and barrow. Sometimes: these words denote the funeral mound which gave shelter to the remains of the dead, but more frequently they mean the embanked inclosure which afforded refuge to the living. Such places were often on the crests of hills: hence the word came to mean a hillfortress, corresponding to the Celtic dun. . . . . The word barrow, however, is generally confined to funeral mounds." Canon Greenwell, in a foot-note to the very beginning of the Introduction to "British Barrows," says:-"I have preferred to use the English barrow rather than the Latin tumulus, on account of the word being in the vernacular, and because tumulus does not necessarily imply a sepulchral mound." Thereby implying that barrow must bear that meaning. Sir Norman Lockyer, in "Stonehenge and other British Stone Monuments Astronomically Considered," 1906, p. 131, speaks of a certain "natural tumulus more than 500 feet high."

[^1]:    * The Rev. J. L. Challis, Vicar of Stone, kindly furnished the following extract from the parish register:-" Memdm. That the Ashen Trees were planted upon Bourn Hill in October, 1722. By Scawen Kenrick Vicr." These would seem to have been the predecessors of the present trees, which are limes and wych-elms (no ashes), and which were evidently planted somewhere about half a century ago, outside the former ring, as we met with decayed roots some yards inside the present circle. This is the oldest documentary evidence either Mr. Challis or I have found for the form of the name of this hill; and though both Burn and Bourn have meanings according to Halliwell, the latter seems the more likely to be correct, and its first meaning, " a limit, or boundary," is by no means an unlikely explanation of the name. Mr. Challis thinks that the name formerly included both the hills, which are called "The Mounds" in some maps. In the map already alluded to in

[^2]:    the Addenda to $\boldsymbol{E}$ des Hartwelliance, in which the two mounds are figured, "The Mounds" is inscribed above them, and "Burn Hill" below them. Mr. Challis knows the name "Nitten Hill" for the second mound (but cannot find any record of it), but has not heard the other two names that the labourer supplied (see p. 267). "P Pincushion" is given by Halliwell as a local name for the sweet scabious. Mr. Chaillis writes: "You may take it that the hill last opened is now commonly known as Burn Hill, and the other as Nitten Hill. In the account of the opening of this latter in the Ædes Hartwellianæ, the name of the hill is not once mentioned." There is a Hemp Hill, just north of Hartwell village and about three-quarters of a mile east of the mound, and there seems every likelihood that the labourer (who was born within a stone's throw of Nitten Hill) transferred the name of the other hill to it in error.

[^3]:    *Reproduced from one of 9 excellent photographs kindly taken by Mr. S. G. Payne (see p. 262).
    $\dagger$ I am very doubtful whether this bank is the remains of a vallum, because the level ground immediately up to it was formerly ploughed, and a headland always produces in the course of time a considerable drop or small precipice where it abuts against steeply rising ground; then if a fence divided the plough from the mound, and cattle pastured on the mound continued through a number of years to walk to and fro along the barrier, a vallum-like result is naturally produced. The fact of no turned soil being found on the bank shows that if it was purposely made by human agency, it must have been carved out of the solid by cutting away the soil on both its upper and lower sides,-a very unlikely proceeding.
    $\ddagger$ Query Hemp? See foot-note, p. 265.

[^4]:    * As, however, a large flagstaff stood for several years in the exact centre of the summit, on which a danger flag was hoisted when there was rifle-shooting by the volunteers at the butts which were here, it is just possible (though unlikely) that in digging the hole to plant the pole, a burial may have been disturbed and escaped notice.

[^5]:    * The apparent condition of the bones also corroborates this supposition: though it is possible that they are merely some of the foxes' spoil. The foxes would hardly, however, have been allowed to kill so many actually at their earth, and it is a physical impossibility for a fox to transport an entire sheep, or well-grown lamb even of a small breed; and contrary to their habits to break up a sheep's carcase, and transport the dismembered joints. The admixture of ox and pig bones goes far to prove the innocence of the foxes.

[^6]:    *The possibility that these bones, and those of the animal preceding and succeeding, were from specimens that had fallen from a "keeper's museum", has not been overlooked, but from the situation of the hill this is extremely improbable.

[^7]:    * The Brent is, however, essentially a marine species, and can at no time have been at all common in this inland county.

[^8]:    * There is a very inaccurate coloured plate of this remarkable group in Sir John Lubbock (Lord Avebury)'s " Pre-historic Times" (3rd edition).

[^9]:    [* It was struck and broken by the spade of one of the keeper's party, before it was discovered.-A.H.C.]

