## IV:-PREHISTORIC BURIALS IN THE COUNTY OF DURHAM.

By C. T. Trechmann, B.Sc., F.G.S.<br>[Read on 29th November, 1911.]<br>INTRODUCTION.

The following description of prehistoric burials in the county of Durham is compiled from several unpublished notes of finds which have occurred within recent years communicated to me by the Rev. Wm. Greenwell, D.C.L., F.R.S. I am also indebted to Mr. W. Parker Brewis, F.S.A., for details of several of the finds which came under his personal observation. It also includes the records of five barrows in this county examined by me during the years of 1911 and 1912.

To Dr. Greenwell I am indebted for the notes of the very curious and interesting barrow at Copt Hill near Houghton-leSpring, the primary interment of which was of the character of those occurring in the long barrows and which are generally attributed to the Neolithic period. The barrow was a circular one, but as several secondary bronze-age burials occurred in it, the shape may have been altered at this later period. The latest burial in this barrow was of Anglo-Saxon date.

The earliest phase of the bronze-age in the county is represented by three very typical unburnt cist burials accompanied by a beaker (commonly called a 'drinking-cup') type of vessel. As usual these burials are apparently unaccompanied by any covering mound or barrow. If any such existed it was probably a very small one and has been subsequently largely obliterated. These are the only recorded instances of this type of burial in this county ${ }^{1}$, but they are of more frequent occurrence in Northumberland.
${ }^{1}$ The identity of the type of skull found in the cist at Ryton with that occurring in cists of similar type in Aberdeenshire is regarded by Dr. Wright as of prime importance.

The Hasting Hill barrow was opened by me in 1911, and a rather detailed account of the unusually large number of interments found in it is given. A noticeable fact in this barrow is the markedly secondary character of the burnt burials, especially of the cremated urn burials, clearly indicating a later phase than the contracted unburnt primary interment. Another point worthy of attention in the primary interment of this barrow is the form of the vessel which occurred with it, and which appears to be of a type intermediate between the 'beaker' type and the typical food vessels found in the secondary interments in the barrow. The barrow on the summit. of Batter Law was only partially explored but the contracted skeleton of a large man with a very beautiful flint knife was undoubtedly a secondary interment.

The two barrows at Easington and Murton moor proved very unprolific, but as they are undoubtedly burial mounds they are of importance in the elucidation of the prehistory of the county and must not be neglected.

Of the cremated urn burials, other than those herein described, one of the most important discoveries was that made in 1873 on Humbledon Hill during the construction of the reservoir ${ }^{2}$. Unfortunately no details of the find were kept, but the two fine urns are now preserved in the Sunderland museum and Dr. Greenwell tells me that a very definite barrow existed on the site. Three cinerary urns were found only two of which were preserved. They are illustrated on page 121, figs. 1 and 2.

It is rather early, as yet, to attempt a chronological arrangement of the prehistoric finds in the county, but it is to be hoped that, as occurrences and records accumulate, something of the sort may be accomplished on the lines indicated in this short sketch.

I may perhaps here mention that two well defined phases,
${ }^{2}$ Greenwell, British Barrows, p. 440.

figs. 1 and 2.-Cinerary urns found in a barrow on humbledon hill ( $\frac{1}{3}$ ).

presumably of Neolithic occupation, have recently come to light in the county of Durham ${ }^{3}$. One occupies the coast line, especially in the southern part of the county, and the finds partake of the nature of true kitchen middens. The implements are largely made of locally occurring flint, apparently washed up from the Yorkshire coast and also, as. I have recently ascertained, very largely of chert which occurs in small nodules in the magnesian limestone of the sea cliffs.

The other chipping sites occur on the fells of moderate elevation in Teesdale and Weardale, notably in the neighbourhood of Eggleston. The material for the implements was brought by wandering or migrating tribes, in an already flaked condition, from Yorkshire.

The latter series bears a close comparison with similar finds both on the Northumberland fells and also in like situations on the western spurs and fells of the Pennine chain. Both these chipping sites occur in areas which have hitherto proved quite devoid of prehistoric burials.

It is to be hoped that the finds herein recorded will to some extent correct the somewhat unjust reputation which Durham bears of being unprolific in prehistoric remains and will furthermore show that the remains themselves indicate a certain amount of individuality when compared with the adjoining counties.

As an illustration of the latest phase of the bronze-age the magnificent find at Heathery-burn ${ }^{4}$ cave near Stanhope still remains unique in Great Britain.

An acknowledgement is due to many friends̀ who have assisted me in the compilation of the present records. I should like to thank the Earl of Durham, K.G., Mrs. Challoner of Warden Law and Sunderland, and Mr. J. S. G. Pemberton, for permission to explore barrows situated on their properties.
${ }^{3}$ Neolithic chipping sites in Northumberland and Durham, C. T. Trechmann, Trans. Nat. Hist. Soc. of Northumberland and Durham, new ser., vol. iv, 1912.
${ }^{4}$ W. Greenwell, Archaeologia, vol. s.sv, 1890.

A BARROW AT COPT HILL NEAR HOUGHTON-LE-SPRING (fig. 3).
This barrow is situated on the edge of the magnesian limestone encampment at Copt Hill, about a mile from Houghton-le-


Fig. 3.-plan of a barrow on copt hill.
Showing the position of the mesial deposit of Neolithic age, the various secondary Bronze-age burials, and the uncontracted cist burial of Anglo-Saxon date. The latter occurs near the surface of the mound and has no connexion with the mesial deposit.

Spring. The somewhat mis-shapen remains of it still form a prominent feature of the landscape. The barrow was completely opened by Dr. Greenwell and Mr. T. W. U. Robinson during
the autumn of 1877. It measured 66 feet in diameter and $7 \frac{3}{4}$ feet in height. It was made chiefly of magnesian limestone with pieces of sandstone intermixed. Some soil, probably remains of turf, also occurred, together with pieces of burnt limestone. The stone on the surface was small for a depth of about $1 \frac{1}{2}$ feet and then became much larger without much admixture of earth. Some large limestone flags above 2 feet long and $1 \frac{1}{2}$ feet wide together with large sandstone boulders also occurred.

Dr. Greenwell remarks that it turned out to be one of the most interesting mounds he had ever had an opportunity of examining. It was of the usual round form and he at first expected that it would turn out to be a barrow of the period after the introduction of bronze ; but on commencing operations he found that it had a much earlier history, and belonged to the time when stone only was in use, that is, to the Neolithic period. Wherever mounds of that period had been found in Britain they were oblong in shape and approximately of the proportions of 4 in length to 1 in breadth. They were generally placed east and west, the higher and wider end being towards the east; and in that end the interments had generally been found.

The space occupied by the interment was found to be but a small part, generally speaking, of the whole mound. A very few feet might be found to constitute the entire burial space in a mound 200 feet long by 50 or 60 feet wide.

Whether this mound at Houghton had originally been oblong or not it was not easy to say. It might have been so, and might have been altered by later burials, several of which were found in it.

The long-barrow builders of Britain sometimes buried their dead after cremation and sometimes after inhumation. In the north of England by far the greater number had been after burning, and this one at Houghton contained burials after this fashion. The bodies occurring in these mounds appear to have been seldom found entire, and the idea suggests itself that they
were first buried in some other place, and afterwards removed to these barrows. This custom as to burials prevails indeed among many savage tribes at the present day. In the long barrows for instance, arm bones might be found alongside of leg bones, and leg bones sometimes placed in the position opposite to that in which they would naturally occur, and other indications would be found most markedly showing that the bodies had been placed where they occur without flesh or ligaments on the bones.

These features were present in the barrow under consideration. After being taken to the final place of burial, the bodies seem to have been laid on the ground and combustible materials piled upon them. At Houghton the material piled around the bones had been limestone. Around the limestone or chalk would be placed wood. In some cases the fire had not been carried along the whole of the deposit, and at the east end where it had been lighted the bones had been perfectly consumed, while at the west end they were untouched by fire.

At Houghton, however, the fire had gone through the whole mass of material. Behind the combustible material there occurred, surrounding and supporting it, an incombustible structure in the form of whinstone and sandstone boulders.

In addition to these early interments, there were found at Houghton burials of a much later date. Quite outside the line of burning of the primary burial, in what seemed to have been an addition to the original mound a small cist occurred, containing. the body of a child. Three or four more secondary interments also occurred, one of which was accompsnied by a good flint implement.

On the summit of the mound was found a grave, made of stones set on edge, which contained a body buried at full length, a position which led the excavators to conclude that it was that of an Anglo-Saxon, buried probably in Christian times.

In describing the interments and their positions in the present barrow it will be necessary firstly, to give an account of the primary burials, and then proceed to the secondary and in the one case, a very much later one, though by these means a commencement is made at the centre of the mound, working thence to the outside, contrary to the way in which the barrow was opened.

The primary burials of the Neolithic period had consisted of the bones of several bodies, but as they were very completely burned in some parts of the deposit, it is difficult to say with precision how many bodies had been placed there. The bones, as has usually been found to be the case, were not these of complete skeletons, but were imperfect, disjointed, and otherwise apparently affording evidence that the bodies had been previously deposited at some other place, and only brought to the final place of burial when flesh and ligaments had decayed, and the bones had become disunited and some of them missing. Upon these bones had been placed magnesian limestone and wood, the limestone being backed up by boulders of sandstone and whinstone. This mass had been ignited by means of a hole at each end of the deposit, and thus the bones had been burnt by the combustion of the wood and the fierce heat of the calcining limestone overlying them.

This primary or mesial deposit was situated some 5 feet south of the centre of the mound and had an east and west direction. It measured about 34 feet in length by 6 feet in width, and at each end was found a hole presently to be described. The way in which the interments had been made, the fire applied, and the bones consumed, tallies very exactly with what has been observed in two long barrows in the East Riding of Yorkshire, two in the North Riding and one in Westmorland ${ }^{5}$, where flues were found rising from the level of the deposit of burnt bones through

[^0]the limestone, having formerly communicated with the surface of the mound, their evident object having been to keep up a draught so that the fire might not die out before all the bones had been subjected to its action. In this mesial deposit, as already indicated, were comprised the burials over which the mound had originally been thrown up and which in fact were the origin of the memorial mound covering them, and equally with the long barrow interments just mentioned there was an absence of any associated article or pottery with the interments.

The eastern one of the two holes, both of them oblong and roughly rectangular in section, was situated in a N.N.E. and S.S.W. direction and was entirely lined out with both limestone and whinstone boulders. At the bottom there was much charcoal, and it was otherwise filled with burnt earth. It measured 3 feet 3 inches in length, 1 foot 5 inches in width and was 1 foot 6 inches in depth. This hole had the appearance of having commenced the burning and was situated in the middle of the mesial deposit near its eastern extremity.

The corresponding hole at the western end of the mesial deposit had a direction N.E. by N. and S.W. by S. It measured 3 feet in length, 1 foot 8 inches in width and was 1 foot 10 inches deep. At the bottom charcoal occurred and over it burnt limestone; it was also noticed that a dark deposit containing burnt bones extended almost 6 feet beyond the western side of this hole. The mesial deposit was backed and supported very carefully with boulders arranged round its sides and ends, and it was observed that they were affected by burning on their inner sides. The larger boulders were arranged along the edges of the mesial line with the smaller ones behind them. Towards the west end of the mesial deposit on its south side it was noticed that the boulders backing up the limestone structure were not whinstone as in the other parts but were all of limestone.

The interments next to be described are those of secondary
burials placed in the barrow' at a long subsequent date, it may have been many centuries later, either by insertion into the mound or by placing them alongside or on the side of the barrow and then adding fresh material with which to cover them.

1. At a place 23 feet S.E. by S. from the centre of the barrow and about 2 feet above the ground level was a deposit of burnt bones rather widely scattered over a space of about $2 \frac{1}{2}$ feet in diameter. Amongst the bones was a piece of calcined flint, probably the remains of a small implement which had been burnt with the body.
2. At a distance of $16 \frac{1}{2}$ feet S.S.W. of the centre was a small cist made of four stones set on edge with a single flag-stone for a cover and another for the bottom, upon which was a deposit of small pieces of limestone about 3 inches deep. On this was placed the body of a child laid probably on its right side, the head having been to the N.N.W.
3. At $3 \frac{1}{2}$ feet S.E. of the centre and $1 \frac{1}{2}$ feet below the surface of the barrow was an unburnt body with probably another disturbed one. A flint scraper ${ }^{6}$ was found accompanying the disturbed body, apparently with the bones of the upper part of the skeleton.
4. At a distance of 17 feet E.S.E. of the centre and 5 feet above the ground level and 2 feet below the surface of the barrow was the body of a man, laid apparently on the left side, with the head to the W.S.W. The position, on account of the decayed condition of the bones, could not be ascertained with certainty.
5. At about 16 feet E.N.E. of the centre and at a distance of 3 feet 4 inches above the ground level and 2 feet below the surface of the barrow an unburnt body occurred. Just to the south of the head was found a food vessel. At a level of 1 foot higher than the last and 1 foot to the N.E. of it there occurred a burnt body. At 1 foot to the S.E. of the last, on the same level

[^1]and therefore immediately above the unburnt body just mentioned there occurred another burnt body.
6. At about 16 feet N.E. by E. of the centre of the mound there occurred a cinerary urn filled with burnt bones. Some


FIG. 4.-CINERARY URN FROM BARROW ON COPT HILL (4). Its position in shown by fig. 6 on the plan.
stones had been set round it. The urn came away into the excavation, so that whether it had been placed in an upright position or no could not be ascertained, but as some burnt bones were found amongst some loose stones under the spot where it had been
placed, it was judged that it had been deposited in an inverted position. The bottom of the urn was $2 \frac{1}{2}$ feet above the ground level and $2 \frac{1}{4}$ feet below the surface of the barrow.

The urn (fig. 4) is 13 inches in height without an overhanging rim, it is decorated round the top with impressed thong markings arranged in herring-bone pattern. It is now in the British Museum, and I am permitted by the authorities to figure it.
7. An unburnt body occurred on the summit of the mound about 10 feet S.S.W. of the centre. It was laid on its back at full length with the hands to the sides, in an E. and W. direction with the head to the $W$. It occurred in a grave constructed of stones set on edge, the cist measuring 6 feet in length and 2 feet 3 inches in width. It was $4 \frac{1}{2}$ feet above the ground level and 3 feet below the surface of the barrow.

No implement occurred with this interment and it was judged to be of Anglo-Saxon and possibly Christian times.

## AN UNBURNT CIST BURIAL WITH A BEAKER AT BRANDON.

A cist was found at Brandon, county Durham, during quarrying operations in April, 1904, and was opened by a quarryman who removed the coverstone before reporting the discovery. In doing so he let a number of small stones fall into the grave which broke an earthenware vessel, the fragments of which were, however, preserved. The grave was placed E. by S. and W. by N. but it was noticed that its position had evidently been intended to be in an $E$. and W. direction.

The distance from the present surface of the ground to the bed rock upon which the bottom of the grave was placed was 6 feet, and from the surface to the upper part of the grave cover was 3 to 4 feet. Over the grave a thickness of about 2 feet of made soil was observed, which was probably the remains of a barrow.

The grave was formed of flat stones set on edge upon the bed
rock. It measured 5 feet in length, 2 feet $10 \frac{1}{2}$ inches in width at the west end, 2 feet 4 inches in width at the east end. and 2 feet 6 inches in depth. The side slabs were not quite perpendicular, but were inclined inwards giving a width at the top of 1 foot $11 \frac{1}{2}$ inches at the west and 1 foot 10 inches at the east end. Between the coverstone and the top of the side and end slabs a


FIG. 5. - BEAKER FOUND WITH AN UNBURNT CIST BURIAL AT BRANDON (HEIGHT 8 $\frac{1}{4}^{\prime \prime}$ ).


FIG. 6. - BEAKER FOUND WITH AN UNBORNT CIST BURIAL AT RYTON (HEIGHT 75 ${ }^{\prime \prime}$ ).
quantity of small broken stones had been packed, which fell in on moving the cover.

The body was laid on its left side with the knees doubled up, and the head to the east, consequently facing south.

The drinking cup or beaker was in the N.E. corner near the skull, at the back of the head. It is brown in colour on the surface, but shows black on the broken edges. It was empty. The
slabs forming the cist show some signs of fire in the interior and also at the top of the grave. Some of the bones also appear to have been partly calcined. The beaker is now in Dr. Greenwell's possession. Its description is as follows:- $8 \frac{1}{4}$ inches high, 6 inches wide at the mouth, $3 \frac{3}{8}$ inches wide at the base. The beaker is a vessel of graceful shape and decoration. It is made of light brown clay largely mixed with broken stone. The decoration consists of 21 encircling notched lines between which are eight lines of herring-bone pattern and three broad plain bands without any ornamentation (fig. 5).

## AN UNBURNT CIST BURIAL WITH A BEAKER NEAR RYTON.

This find occurred on 8 March, 1911, close to Clara Vale colliery near Ryton. Although a formal inquest was held by the coroner of the district on the remains which were wisely judged to be those of an 'Ancient Briton,' the details of the find were neglected. I am indebted to Mr. J. W. Carr of Ryton, for those which I am able to record (but see Proc., 3 ser. v. p. 18).

The field in which the find occurred is situated close to the pit, and contains two or three nicely rounded hills. On the top of one of these hills the grave was discovered by a man who was ploughing. There does not seem to have been any definite trace of a barrow. The plough came in contact with a large flat stone, which cannot therefore have been at any great depth. On this being lifted it was found to cover a grave made of upright slabs set on edge. The grave measured approximately $3 \frac{1}{2}$ feet in length, 2 feet in breadth, and 2 feet in depth. The skull (fig. 7, 8 and 9 ) and beaker (fig. 6) or drinking cup were found in good condition, the latter being close under the left arm of the skeleton. The skeleton was in a contracted position with the head towards the east, presumably resting on its left side.

The skull and beaker were given to Dr. Greenwell, in whose possession they now are. The beaker is a well made vessel of


FIGS. 7 AND 8.-SKULL OF A MAN FROM AN UNBURNT CIST BURIAL WITH A BEAKER NEAR RYTON.
well baked dark brown clay. Its height is $7 \frac{5}{8}$ inches, diameter at the mouth $5 \frac{3}{8}$ inches, and diameter at the widest part $5 \frac{3}{4}$ inches. The decoration consists of encircling notched lines between which are several bands of herring-bone decoration also made with a notched instrument and two broad plain bands.


FIG. 9. - SKULL OF A MAN FROM UNBURNT CIST BURIAL, WITH A BEAKER, RYTON.

AN UNBURNT CIST BURIAL WITH A BEAKER AT SACRISTON.
A cist was found in 1888 in the churchyard at Sacriston, the occurrence of a prehistoric burial in such a place being of course a mere accident.

The burial was that of an adult man, but it does not seem to have been recorded in which direction the body had been laid.

The cist consisted of four slabs set on edge with a larger slab for a cover. The cist was sunk into a hollow excavated in the ground and the cover occurred on the level of the natural surface. It seems to be uncertain whether any trace of a barrow had existed on the site.

The cist was situated in a direction nearly east and west with a point south of east and north of west, it measured 3 feet 10 inches in length, 2 feet in width, and 2 feet in depth, so that the skeleton must have been strongly contracted. The coverstone was 4 feet 10 inches long, 3 feet 9 inches wide at the broader end, 3 feet 2 inches at the narrower and 8 inches thick. The bones were much decayed. The vessel was perfect when found but was broken later and only portions of it were preserved.

It was $6 \frac{3}{4}$ inches high, $5 \frac{1}{4}$ inches wide at the mouth, $5 \frac{3}{4}$ inches at the middle, and 35 inches at the base. It was made of well tempered clay and had been thoroughly baked at an open fire. The ornamentation consisted of eight encircling plain grooves at the top of the vessel. Below this occurs a design of 15 encircling notched lines between which occur four broad bands of herring-bone design and cross hatched decoration made with the same instrument as the encircling lines. This vessel is now in the British Museum. It is well figured by the Hon. John Abercromby, ${ }^{7}$ and is shown on p. 176.
a barrow on hasting hill near offerton (fig. 10).
(Opened by C.T. Trechmann, 7-10 November, 1911).
The occurrence of a barrow on Hasting Hill was brought to my notice by Dr. Greenwell, who remembers having seen a barrow about 50 years ago while he was riding somewhere in the neighbourhood of Offerton. After a short search in the area indicated I located it on the summit of Hasting Hill. On making enquiries of the tenant, Mr. Thomas Brown of East Herrington, I was informed of a record in his possession to the effect that on 5th October, 1827, a contracted skeleton had been found there having the hair on its head, and that the finders concluded that

[^2]a murder had been committed. The supposed hair on the head was probably some small fibrous roots of plants grown round the skull, and as the skeleton was found in the contracted position it was undoubtedly British.

fig. 10.-plan and section of a barrow on hasting hill near offerton.
Hasting Hill is a small knoll of lower magnesian limestone about $3 \frac{1}{2}$ miles S.W. of Sunderland, rising sharply on the west side to an elevation of 412 feet o.d., and sloping more gradually to the east. To the west is Painshaw Hill also of lower magnes-
ian limestone, and to the east is Grindon Hill, a mass of glacial sand and gravel. Several skeletons were recently found at Grindon Hill during quarrying operations. No trace of a barrow exists on the hill and the skeletons were uncontracted and were concluded to be of Anglo-Saxon date.

The immediate district is the richest in the county in prehistoric burials and it is probable that in ancient times most of the surrounding hills were capped with burials and their accompanying barrows of which the visible traces have in many cases disappeared. The two magnificent cinerary urns now in Sunderland Museum were found on Humbledon Hill during the construction of the reservoir, though by an unfortunate chance no detailed record was kept of their occurrence except that there was a very fine and definite barrow on the spot (figs. 1 and 2).

To return to Hasting Hill. The barrow about to be described is a typical round example of the low flat variety which is generally found to be prolific in remains, as indeed it proved to be. Its diameter is about 40 feet and height about 2 feet 9 inches in the centre and about 3 feet near the circumference, being thus slightly bowl-shaped, though whether this was an original feature of the mound or was due to subsequent disturbance I was not able to ascertain.

On climbing the hill the limestone is seen to disappear beneath the grass a short distance below the base of the barrow which is easily recognized by the corners of large boulders of sandstone, whin, and other extraneous rocks protruding through the grass. It is a fairly conspicuous object, but nevertheless seems to have escaped the notice of the geological surveyors of the district. The barrow is built up directly upon the limestone of the hill top which was found to be approximately level beneath the mound, rising only slightly towards the northwestern boundary. I cannot definitely say whether the top of the hill was levelled or treated in any way before the erection of
the mound but as no trace of vegetable soil or mould appeared at the base of the barrow one may probably conclude that the hill top was to some extent levelled and cleared to receive the primary interment and mound covering it.

The barrow was made of earth and stones, some of the latter being of great size and weight, chiefly of magnesian limestone but also of red and yellow coal measure sandstone, whinstone, and various glacial erratics of the district. The larger cists were formed of magnesian limestone and sandstone slabs while for the smaller ones the favourite material was the fissile lower magnesian limestone of the district which splits along the planes of stratification forming slabs very suitable for cist building.

We commenced operations with a trench on the southern edge, and gradually trenched through the mound to the northern edge, keeping well down upon the surface of the limestone and carefully examining the south and east sides of the barrow where secondary deposits are generally expected to occur, following the plan of complete examination adopted with so much success by Dr. Greenwell in Yorkshire and elsewhere.

The work occupied four days from Tuesday, 7 th November, till Friday, 10th, 1911. Three diggers were employed. The weather on the first two days was stormy and cold with a high wind and the conditions were unfavourable for photography.

The barrow yielded examples of nearly every variety of interment met with in the round barrows of Britain.

For the sake of clearness the finds are described in the order in which they occurred in trenching the mound from south to north.

Find i: On cutting the turf for the first trench we encountered almost immediately a small oblong cist formed of four slabs of magnesian limestone of the fissile variety already mentioned. The cover-stone was missing and the cist was completely filled with soil. The cist was on the south side of the mound, slightly
east of the north and south axis of the barrow, and lay in an east and west direction about 15 feet from the centre. It measured 2 feet 1 inch in length by 1 foot 1 inch in breadth and 1 foot 1 inch in depth. There was a basal slab of similar magnesian limestone which lay on a bed of small rounded gravel. It was noticed that the side slabs of the cist were slightly out of the perpendicular, leaning towards the south, that is down the hill. This may be due to slight movements of the material of the barrow down the slope or it may have been an intentional feature in the construction of the cist. The basal slab of the cist was some few inches above the base of the mound. The cist contained calcined bones, and mixed with them were several fragments of pottery comprising remains of at least two vessels. One of them is apparently a fragment of a food vessel, the only ornamentation visible on it being part of a simple raised line.

The other fragments appear to be those of an incense cup, though owing to their fragmentary condition there is some doubt in this attribution. These pieces are much darker in colour than that of the presumed food vessel. One piece ${ }^{8}$ shows the vessel to have been decorated both inside and out by incised cross lines forming triangular spaces, each alternate space being decorated by punctures with a sharp instrument. No perforations characteristic of many incense cups are visible. As these two vessels cannot have got into their present condition by the ordinary processes of decay in the ground it is suggested that they were thrown on the pyre together with the body and that some of the fragments were gathered up with the calcined bones. The dark carbonised appearance of the fragments of the incense cup seems to favour this idea. A flint core, a flake, and an implement with secondary chipping, all more or less calcined, were also found mixed with the burnt bones.

[^3]A curious fact was noticed in connexion with this cist, and also with others in the same barrow. A quantity of snail shells were dug out from round the outside of the slabs though not to any extent inside the cist. The presence of shells of helix has been recorded by others in similar situations and I have found them in other barrows; but no satisfactory explanation of their presence seems to have been given: If they were accidentally introduced during construction of the cist they would seem to indicate a wetter climate than prevails at the present day. On the other hand they may have crept into the mound to hibernate, but why they should only congregate round about the cist and not inside is not easy to explain. In any case the matter seems to merit attention. ${ }^{9}$

Find II: About 12 feet S.E. of the centre and about 9 inches under the surface, not far removed from the cist just described occurred the remains of a very large cinerary urn which had been filled with calcined bones. The urn had been disturbed by digging at some previous period and was completely crushed and scattered. All the fragments found were collected but they represent only a portion of the original vessel and it is found to be impossible to join them together again. The ornamentation can, however, to some extent be ascertained and shows it to have been a simply decorated example with a smooth base and body, the neck or shoulder being decorated with roughly impressed twisted cord pattern in vertical and horizontal lines crossing one another. The rim, of which a few fragments remain was decorated on the outside with diagonal impressed twisted cord ornamentation. Along the margin and inside the rim were four concentric lines of a similar character.

Neither the size nor the position of this unfortunately destroyed example could be ascertained with certainty. It is made

[^4]of clay very largly mixed with stones but has a fine smooth surface on the undecorated part. The decoration is very different from that of the other cinerary urn found in the barrow, and it seems to have been a larger and coarser although more profusely decorated example.

Find iII: About 12 feet S.W. of the centre of the mound a deposit of calcined bones occurred, a few inches beneath the sur-

fig. 11.-hasting hill-find iv: a food vessel found among the MATERIAL OF THE BARROW ( $\frac{1}{2}$ ).
face, among the soil and stones. It was unaccompanied by any object but had evidently been a definite interment.

Find iv: Slightly to the W. of the last find, a perfect food vessel (fig. 11) occurred, lying on its side about one foot beneath the surface of the mound. The mouth of the vessel was towards the west. It measures 4 inches in height by 5 inches across the rim. It is of a somewhat roughly made type with two lines of a
herring-bone decoration round the outside made with an impressed twisted cord. Inside the rim are three concentric twisted cord lines the space between the two of them being filled with short diagonal lines made with the same twisted cord. The vessel contained nothing but earth and small stones, but part of


FIG. 12. - HASTING HILL-FIND V.
A cist of unusual form with coverstone removed, constructed upon the limestone of the hill top. It contained a calcined burial.
the inside is blackened with carbonaceous matter indicating the former presence of some organic substance which had been burnt in it.

Find v: About 12 feet S.W. of the centre a cist of unusual form was found constructed upon the limestone of the hill top
at the base of the barrow. It was roughly circular in outline 1 foot 2 inches in diameter, and formed of five rough undressed masses of sandstone and magnesian limestone, not however in this case of the fissile variety. These were arranged as stated in a circular outline and for better support were sunk some inches into the limestone rock. Over the top of these was a coverstone consisting of a large roughly circular thick slab of sandstone dressed round the edges. The coverstone was met with at a depth of $2 \frac{1}{2}$ feet beneath the surface of the mound. The cist contained calcined bones of an adult individual which had been deposited in a small heap on the limestone rock. A fragment of pottery, apparently of a food vessel occurred in the cist, and mixed up with the burnt human bones was found an unburnt mammalian tooth. Professor Meek has identified this as the fourth molar of the left upper jaw of a sheep.

Find vi: An inverted cinerary urn near the S.W. edge of the barrow, about 15 feet from the centre and about 1 foot beneath the surface of the mound. The rim of the vessel was a few inches above the level of the limestone rock beneath the barrow and apparently rested upon a bed of prepared gravel. It had been carefully protected by thin slabs of fissile magnesian limestone resting against it all round and projecting above the base. Over the edges of these had been laid another thin slab of fissile limestone as a protective covering, nearly touching the base of the vessel. A photograph (fig. 13) was taken of this find before its removal from the earth and shows the urn and slabs in situ as they were found. The lower part of the urn as it occurred was in a very good state of preservation but the upper part, that is the base of the urn, owing to the slabs not having fitted closely against it was much disintegrated due to the percolation of air and moisture through the space between the urn and the slabs. It contained a large quantity of calcined bones chiefly in very small fragments. The body seems to have
been more completely and successfully burnt than in the case of other deposits in the barrow and the calcined fragments gathered up with great care. Several of the third phalanges of the hands were


FIG. 13.-HASTING HILL-FIND VI.
An inverted cinerary urn photographed in situ with protecting slabs covering the sides and top. It is filled with burnt bones. noticed amongst the calcined bones shrunk through the action of the fire to a very small size.

The urn is a moderately sized example, itmeas ures 10 inches in diameter at the rim and has been about a foot in height. As usual it is made of clay very largely mixed with stone fragments and has a fine smooth terracotta coloured outer surface. The decoration is simple but effective, without any twisted cord or cross line ornamentation. Two raised lines run round the shoulder, on either side of these lines are rows of indentations made with a blunt instrument or a small finger nail. Outside the rim is another raised line above which is a row of indenta-
tions made with a sharper instrument. The rim is decorated with a row of herring-bone indentations made with a similar instrument.

Find viI: A pick formed of a stag's antler (fig. 14), 16 inches in length. It was found among limestone rubble a few feet N.W. of the primary grave and a few inches above the limestone rock. This is the type of implement apparently in general


FIG. 14.-HASTING HILL-FIND VII.
A pick of stag's antler ( $\frac{1}{4}$ ) found in limestone rubble near the primary grave.
use in constructing barrows. The brow tine nearest the skull of the animal has been used as the point of the pick and has the end broken off or worn away. The fragment of stag's antler found in the primary grave may very possibly be the end of this pick broken off and left in the grave by accident. The pick has a part of the skull attached, showing it to be the antler of a killed stag and not merely a shed antler.

Find viri: A small nearly square box-shaped cist of thin slabs of fissile magnesian limestone occurred very slightly to the N. of the primary grave and very near the surface of the mound. It measured 1 foot 2 inches by 1 foot and had a depth of 1 foot, and was about 6 feet from the centre of the barrow. There was a basal slab upon which the four upright. slabs had been constructed. The coverstone being practically coincident with the surface beneath the turf had been partly broken and crushed in. It contained calcined bones but no other remains.

Find ra: This is undoubtedly the deposit over which the barrow was erected though whether finds v and xi may not have deposited contemporaneously with this seems rather questionable, as they are both sunk to some extent into the limestone of the hill top and may perhaps be regarded as primary interments though of secondary importance to the one about to be described. We uncovered a large slab of sandstone resting upon and protruding a little above the surface of the limestone with four or five smaller slabs round about it, some overlapping it at the edge and others partly underlying it. To ensure a better light for investigation and photography it was left till next morning before being raised.

The principal coverstone was a large mass of sandstone roughly triangular in shape with sides about three feet in length and having a thickness of about 8 inches; it had been roughly dressed at the edges. It was found to cover a grave let into the limestone of the hill top to a depth of about 2 feet, lined with 5 slabs of sandstone and magnesian limestone and several smaller blocks set round the edges of the sunken grave forming a cist whose internal measurements were 3 feet in length, 1 foot 10 inches in width, and having a depth of slightly over 1 foot 9 inches. The longer axis was as nearly as possible in an E. and W. direction. The east end of the grave was formed by a single slab of sandstone but at the west end two slabs were set at an
angle to one another giving a pointed termination to the cist which better accommodated the head and shoulders of the skeleton.

When the coverstone was lifted the grave was found to be filled nearly up to the top with loose limestone rubble and earth, prob-


FIG. 15. - HASTING HILL-FIND IX.
The vessel found with the unburnt burial in the primary grave (Height $5 \frac{3}{4}$ ").
ably carried in by the combined action of percolating water and earthworms. On clearing out the rubble a skeleton was found at the bottom of the grave resting upon the limestone. The skeleton, that of a man of about middile age, was laid on its right
side with the head to the west and consequently facing south, in a strongly contracted position with the hands, as far as could be ascertained, brought up before the face. The skeleton was in a good state of preservation though nearly half of the skull had been dissolved away, together with many of the smaller bones. In front of the body and facing the skull was found a vessel (fig. 15) lying upon its side, the opening towards the N. or N.W. It measures $5 \frac{3}{4}$ inches in height and $5 \frac{1}{2}$ inches in diameter across the opening, with a diameter at the base of $3 \frac{1}{2}$ inches. It is of somewhat slender build but is made of clay with a large admixture of broken stone. It must apparently be described as a food vessel, but it is a food vessel strongly approaching the beaker type, and may represent a type intermediate between the two forms. It has been ornamented over the entire outer surface by a triangularly terminated instrument. The ornament follows no definite pattern except that the corners of the angular marks point upwards. Round the base there is a line of angular indentations all pointing upwards. The rim is plain both inside and out, differing in this respect from the typical food vessels. The colour of the vessel is a light brown but the material is black inside as shown by the freshily fractured surfaces: In front of the body was found a roughly made flint knife (fig. 16, 1) 2 inches in length, it is made from a flake of grey translucent flint showing a bulb of percussion and secondary chipping along one edge. Part of the crust of the nodule remains with indentations still filled with chalky matter showing it to be an imported flint comparatively fresh from the chalk. It is slightly bleached to a bluish surface and has an incrustation of calcium carbonate or phosphate over a part of the surface orginating probably from solution of the bones.

Near the head and shoulders of the skeleton was found a bone pin $2 \frac{1}{2}$ inches long (fig. 16, 2), made from a mammalian bone. It is ground to a point and slightly curved, of the simple primitive type without a head. It may have fallen out of the hair or may have


FIG. 16 (ABOUT $\frac{1}{1}$ ).
Hasting Hill :-1. Flint knife ; 2. Bone pin ; 3. Point of a pick-all found in primary grave; 4. Fragment of 'incense cup' in cist no. 1; 5 and 6. Flint flake and saw accompanying burial no. $x$.
fastened some garment in which the body was wrapped. Four or five shells of the common periwinkle (Littorina Littorea, Linn.) were also found in the cist together with some vertebrae and dentary of a bony fish, showing curiously enough that a somewhat varied diet of fish had formed part of the last provisions of the dead. Some bird bones and a few calcined mammalian (non-human) bones were also found in the cist.

The end of a tine of a stag's antler was also found in the bottom of the grave (fig. 16, 3). It is probably the point of a pick broken off when constructing the cist and left there by accident. This, "the primary grave of the barrow as in many recorded instances, was situated not beneath the apex of the mound but about 5 feet S .W. of the centre, its position having been lost when heaping up the material of the mound.

The action of some small rodent is seen upon several of the larger bones which have been gnawed in parts evidently shortly after they were deposited, and several bones of mice occurred in the cist.

Find x : Near the eastern edge of the mound remains, unfortunately much disturbed, of a large oblong cist formed chiefly of slabs of magnesian limestone were encoụntered." It lay in a N.W. and S.E. direction and measured about 2 feet 9 inches in length and 1 foot 9 inches in breadth, internal measurements, and had been evidently about a foot in depth. Cover-stones had been present, but had been largely, removed or destroyed, one of them remained but had collapsed or fallen down upon the skeleton crushing both the skull and a highly decorated food vessel which had been placed in front of the face.

Careful removal of the earth revealed a much contracted skeleton lying on its right side facing east, the skull towards the south, the hands apparently in front of the face. The skull, or the remains of it, was damaged before we were aware of the presence of a cist, when a small flint saw (fig. 16, 6) was found
which must have lain behind the skull. It is a small flake $1 \frac{3}{8}$ inches long, serrated along one edge, and has part of the crust of the nodule remaining. Another flake (fig. 16,5) occurred in the cist near the feet of a skeleton. Both these flints are bleached quite white. In front of the face, so close that several teeth were adhering to the pieces of the vessel when taken out, occurred the remains of a once elaborately decorated food vessel. Sufficient of it was recovered to show that it stood about 6 inches in height and had measured about 5 inches in diameter. It has three raised bands running round the body and all the outer surface is decorated with marks made with blunt instruments and twisted cords, giving a rough but profuse ornamentation. The inside of the rim is decorated with three concentric lines made by pressing a twisted cord into the soft clay. The material is clay very largely mixed with broken stone and the colour a dark reddish brown. The vessel seemed to be lying on its side with the opening to the north.

This deposit, occurring as it did, only a few inches under the surface of the barrow was in a very poor state of preservation, but sufficient remained to show that the body had been laid upon a bed of prepared earth and gravel and not on slabs, the bed of gravel occurring about a foot above the level of the limestone under the barrow.

Parts of the skull, the pelvis and other parts of the skeleton were kept for investigation and prove to be those of a man of considerably advanced age.

Find xi: We accidently damaged a skull resting upon the surface of the rock at the base of the barrow amongst limestone rubble about 6 feet north of the centre and slightly east of the $N$. and $S$. axis of the mound. It was covered up again until that part of the mound covering the rest of the skeleton had been removed and the whole skeleton could be uncovered at once. It proved to be an unburnt interment resting in
a shallow oval grave which had been scooped out of the limestone rock to a depth of not more than a very few inches (fig. 17).


FIG. 17. -HASTING HILL - FIND XI.
Unburnt contracted burial of a female found in a shallow grave on the limestone of the hill top.

The grave measured 4 feet in length and 3 feet in breadth and its longer axis was in a W.S.W. and E.N.E. direction, the skeleton being in the centre. The body had been surrounded
by small limestone boulders, placed in various positions, behind the head, near the feet and back, near the chin, etc., and resting upon these were slabs of limestone and sandstone which had effectually covered the body. The skeleton lay on its right side, approximately east and west, with the skull to the west and facing south; it was noticed that the face was inclined upwards as though the intention had been to face the mid-day sun. The skeleton, apparently that of a woman, was highly contracted and the hands were placed in front of the face.

Although a careful search was made, no trace of any object was found accompanying this skeleton, and if any weapon or ornament had been deposited with the body it must have perished and left no trace behind.

On the level of the limestone about 16 inches distant from the feet of this skeleton part of the rim of a very well made and highly decorated vessel was found, but it does not seem to bear any reference to this or any other interment. It seems to have formed part of a food vessel and is the best made piece of pottery found in the barrow. It is made as usual of clay largely mixed with stones and has three twisted cord lines impressed round the outer surface and three inside the rim, the intervening spaces between the lines being decorated with herring-bone pattern in the form of fine gashes, which seem to have been made with a flint or metal blade. The vase has been of a light reddish brown colour.

Find xit: $\dot{A}$ cist on the extreme N.E. edge of the mound, constructed upon and for better security, sunk a few inches into the surface of the limestone of the hill top. It lay in a S.S.E. and N.N.W. direction and measured 2 feet 2 inches in length by 1 foot 2 inches in breadth and 1 foot 1 inch in depth. The cist was undisturbed and had the coverstones in place which considerably overlapped the sides of the cist. The whole had been constructed of the favourite fissile lower magnesian limestone of
the district. The cist was filled up with limestone rubble and earth. At the bottom of the cist and resting upon the solid limestone rock was found the unburnt skeleton of a very young child laid on its right side with the head to the south and facing east. Naturally the bones were in a very friable condition and it was impossible to ascertain the position of the hands, but the

fig. 18. -hasting hill-Find Xif.
Food vessel found in a cist on the extreme N.E. edge of the mound containing the unburnt burial of a child (Height $4^{\prime \prime}$ ).
legs were contracted. Behind the head, that is in the S.W. corner of the cist was a small food vessel (fig. 18) which was recovered nearly complete. Its measurements are, height 4 inches, diameter $4 \frac{1}{2}$ inches, diameter at the base $2 \frac{1}{2}$ inches. The clay has been largely mixed with stone fragments. The decoration of the vessel consists of indentations made with a sharply pointed instrument in four lines of a rough herring-bone pattern
round the body of the vessel. Round the base there runs a rough incised zig-zag ornamentation of two or three lines. A twisted cord line runs round the shoulder of the vessel and above this a zig-zag pattern impressed with a twisted cord in two or three lines. Inside the rim are two concentric lines impressed with a twisted cord.

The only other objects found in the cist ${ }^{10}$ were an irregular splinter of fint and a calcined tooth, the left hand second molar from the lower jaw probably of an ox.

The objects found scattered through the material of the barrow included many bones, human and otherwise, pottery, and flint chippings.

The human bones include remains of at least ten distinct individuals, and of all ages. These may represent unburnt burials disturbed and scattered about when the mound was lowered. To some of these the fragments of pottery may have belonged. The mammalian bones have not been closely examined but several mammalian teeth which occurred have been determined by Professor Meek to be molars, 5 of horses and 2 of oxen. The occurrence of human bones mixed with so many animal bones suggests the idea of slaves or dependants sacrificed at funerals, or even of cannibalism, but such suggestions are, of course, in the nature of mere conjecture.

The pottery comprises the following fragments:-

1. A small, apparently semi-globular shaped vessel of red clay mixed with stones. Diameter at the rim is 4 inches. Parallel upright incised lines run round the upper half of the vessel on the outside, and on the rim are traces of a row of indentations. Several fragments of this vessel were found widely separated, and some of them have been joined together again. It may be a food vessel of abnormal form.

[^5]2. Part of the base of a smáll vessel of red clay. Upon the base beneath the vessel are two impressed dotted lines in the form of a cross. Near the base two plain incised lines pass round the vessel, and just above the lower line a series of impressed dots. It may have been a food vessel.
3. A fragment of the rim of a large vessel having somewhat the appearance of Neolithic pottery. It bears a rough ornamentation apparently of impressed thumb-nail markings.

The flint chippings and flakes found throughout the mound do not differ materially from those occurring on various presumed Neolithic chipping-sites in the county, except that they were nearly all bleached to a uniform white colour.

The barrow just described is certainly one of the most prolific, so far as number of interments is concerned, which has been explored in the north of England. No fewer than ten definite interments were met with, comprising six burnt and four unburnt burials. In addition to these the remains of several skeletons were found, probably in part representing further disturbed unburnt burials.

In contrast to the richness in number of the burials, is the poverty in workmanship and decoration of the objects found with the remains. Much of the pottery is of a somewhat inferior description, and the few flints which had been intentionally deposited with the unburnt bodies were of an unusually meagre description, in remarkable contrast to those I have found in some other barrows in the neighbourhood. $\therefore$ From these facts we may conclude that the makers of the barrow were either not-very well provided with elaborate possessions during life or that they were not disposed to deposit them with the dead. Bronze implements were entirely absent, though every fact points. to the barrow belonging to an early period of the Bronze Age.

fig. 19.
Plan and section of barrow on Batter Law to show the position of a secondary unburnt burial with a flint knife. The position of the slabs covering the skeleton is also shown.

## A SECONDARY UNBURNT BURIAL'IN A ROUND BARROW ON batter law, co. durham (see fig. 19).

This barrow occupies the highest point of a hill called Batter Law near Cold Hesledon about 3. miles north of Easington. Batter Law has an elevation of 430 feet and is situated about $2 \frac{1}{2}$ miles from the sea. It consists of a large mass of glacial gravel resting upon the magnesian limestone, of a very similar nature to Warden Law, and forms part of an elevated tract known as Hesledon moor. The area is now chiefly grazing land, but has evidently been heavily cultivated in former times and in consequence the barrow has been considerably obscured and disturbed and probably lowered and spread out during the course of ploughing and other operations. So much was this the case that it was extremely difficult to judge upon what level the original surface of the ground was to be assumed. The barrow is built up of earth and gravel with a few large boulders interspersed through it, and showed no traces of any intentional disturbance. The present barrow forms a conspicuous landmark from several directions, but more especially from the west. Its dimensions are approximately 40 feet in diameter and $4 \frac{1}{2}$ feet in height.

With the kind permission of Mr. J. S. G. Pemberton, the owner of the property, I commenced operations on 16 June, 1911, by removing the turf on the south-east side of the mound near the edge. Almost immediately a large slab of sandstone set up on its edge was encountered, the planes of bedding of the rock being distinctly visible, and lying to the east of this a large oblong boulder of whinstone. Suspecting the presence of a cist I directed that the earth should be cleared away on either side of these stones when another large mass of sandstone was found to the east of these and closely adjoining them. The three stones had the appearance, at first sight, of being the covering stones of a cist, such, however, was not the case, and on lifting
the most easterly of the three stones it was found to be a thin slab which had fallen inwards crushing the feet of the skeleton, some of the small bones of which were found scattered about beneath it. The large mass of whinstone which proved to be lying diagonally across the middle of the skeleton had evidently formed part of the cist, if such a structure can be called a cist, but its original position was not apparent.

The structure lay approximately east and west, though in reality very slightly north-west and south-east. Its original dimensions were somewhat difficult to ascertain but the two end slabs had probably been 3 feet 8 inches apart when originally set up. No side slabs were present and so the construction cannot with certainty be called a cist.

The slab at the head of the skeleton was still in its upright position, supported behind by a boulder of magnesian limestone resting upon two or three small boulders of the same rock. This slab measured 2 feet by 1 foot 4 inches by 6 inches in thickness. The eastern slab which had fallen inwards over the feet measured 3 feet 5 inches by 1 foot 5 inches by 6 inches in thickness. Both these slabs were coal measure grit or sandstone slightly dressed to a rough rectangular shape. The whinstone boulder was an ordinary elongated glacial erratic and measured approximately 2 feet 9 inches, by 1 foot 4 inches, by 10 inches. It may, of course, have been intentionally laid across the body but more probably occupied some other position and was displaced during ploughing operations. In fact the ploughshare must have practically touched the skeleton as some small fragments of bone were found lying around and between the stones before they were raised.

The structure therefore can scarcely be termed a cist, the stones employed having been intended more probably simply to protect and define the position of the body.

Having removed the whinstone boulder and the slab covering
the feet we commenced to carefully dig away the earth beneath them and succeeded in uncovering the skeleton of a large and very powerfully built man, apparently of about middle age, laid

fig. 20.
Unburnt contracted burial of a large man with a flint knife laid in front of the knees. Batter Law, Co. Durham.
in an E. and W. direction on its right side facing towards the S., the crown of the head nearly touching the western slab of the cist, the knees bent up but not very strongly contracted and the
hands apparently in front of the face (fig. 20). The skeleton was in a more or less friable condition. The smaller bones of the extremities and some of the vertebrae were remarkably sound and fresh but the larger bones, especially those of the pelvic region, were very fragile. It was noticed that many bones of the right side which had lain in contact with the ground were entirely removed by solution. Those of the left or upper side, on the contrary, were well preserved. The skull was somewhat incomplete but the definition was intact. The skull was of the short type. ${ }^{11}$


FIG. 21 (ABOUT $\frac{1}{1}$ ).
A finely chipped flint knife found with an unburnt burial on Batter Law.
Approximately in front of the knees of the skeleton was found a very beautifully chipped knife of reddish mottled flint, quite sharp and unweathered (fig. 21). It measures 35 inches in length by $1 \frac{1}{8}$ inch in breadth and is very skilfully flaked over the entire upper surface while the under side shows the original surface of the flake which is untouched except for some slight secondary chipping at the base and towards the point for the purpose of removing some slight excrescences. It is a very good example of a class of implement which has been several times recorded from barrows, but not hitherto from the county of Durham.
"For a description of the diseased skeleton, by prof, Wright, see p. 174.
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They indeed form a distinct type of implement upon which the flint chipper seems to have been desirous of showing his skill to the utmost, and were probably made for purposes of interment. When they occur with cremated burials it has been noticed that they themselves are generally untouched by fire.

The only other remains found in the barrow were several flint chippings and a small fragment of hand made pottery, black inside and light brown outside, plain and unornamented, and some fragments of calcined bones which were found scattered through the mound.

The skeleton and the flint knife were photographed in situ before removal (fig. 20).

An attempt was made to locate the central primary deposit of this barrow, which, if it exists is still undiscovered, by driving a wide trench through the centre of the mound but without success.

The writer hopes that a complete investigation of the mound may be carried out on some future occasion.

## A ROUND BARROW NEAR WARDEN LAW.

The barrow about to be described is situated on the southern slope of Warden Law in a pasture field near the road leading from Hetton and Houghton-le-Spring eastwards towards the sea. It is one of the three barrows mentioned by Dr. Greenwell in British Barrows as still remaining unopened in the neighbourhood of Hetton.

Warden Law is a large mass of glacial gravel forming a moraine heap resting upon lower magnesian limestone. In the vicinity of the barrow are two smaller conical heaps of glacial gravel covered with trees. One of these had been utilized by prehistoric man as a burial place, a cist having been found here by Dr. Greenwell many years ago inserted near the summit of this natural mound. The cist was never thoroughly exam-
ined and although I have several times searched for it I have been hitherto totally unable to locate it. Possibly it has been destroyed or obliterated.

The barrow occupies the edge of the slope facing south, the original surface of the ground beneath it being practically level. It is situated a little below the 500 feet contour line. It measured approximately 33 feet in diameter and was slightly over 3 feet high at the centre. It had a regularly rounded outline and showed no sign of ever having been disturbed in recent times, so far as could be ascertained from the outside. At the N.W. side two or three large boulders were seen, which had some appearance of having formed part of a surrounding ring of large stones. One of these was dug oùt and found to have been artificially dressed to a rounded outline.

The opening was commenced on 12th May, 1911, by trenching across the mound from south to north. The material of the barrow was found to be mainly stones of various sizes mixed with earth. The stones were chiefly large boulders of coal measure sandstone and grit, with whinstone boulders, and masses of magnesian limestone. A considerable quantity of gravel was noticed in places, amongst which snail shells occurred plentifully, having apparently been introduced when the primary interment was disturbed. Care was taken during the excavation to keep down upon the original surface-level of the ground beneath the barrow which was in this instance easily recognized by its gravelly nature and the absence of boulders of any size.

Shortly after commencing excavation a small hoard of flint implements was encountered (fig. 22, 1-5 and 8). Fortunately they occurred just at the side of the first trench and thus avoided being broken to pieces by the pickaxes. They occupied a position about 3 feet from the edge of the mound, slightly east of its $N$. and S . axis, and had been buried among the smaller stones about

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FIG. 22. - l lint implements $\left(\frac{1}{1}\right)$ tound in a barrow on Warden Law, Co. Durham.

9 inches below the surface. They consist of two arrowheads, a chipped lance head or knife, and three flakes.

The larger of the two arrowheads is an extremely beautiful leaf shaped example most delicately flaked and very thin. It is not quite flat but is very slightly concave on one side where part of the surface of the original flake is apparent. The smaller one is thicker and less delicately chipped. Part of the original crust of the nodule is apparent. The central figure is apparently a lance head, although it may have been used also as a cutting instrument.

Of the three flakes shown in the illustration that in the left hand lower corner has been trimmed at the end to a square scraping edge, which edge has been subsequently worn away and rounded off.

All the implements are uniformly bleached to a white porcellaneous surface from lying in the porous soil under the influence of percolating water containing weak acids in solution. The material of which they are made seems to have been a grey or blackish flint and has certainly been imported into the district. They are all useful implements and flakes and occurring all together as they did must be regarded as a hoard definitely placed where they were found, although with what purpose was not ascertainable. A careful search was made around the place where they occurred but neither any more of them nor any trace of an interment were met with.

The first indication of bones occurred slightly S.E. of the centre of the mound. A second lot of bones was met with immediately south of the centre. All were unburnt and in a very friable condition. They had every appearance of having been disturbed and the stones having been roughly thrown in upon them again.

Towards the centre of the mound the sandstone boulders became larger and apparently more regularly laid. The only
artificially trimmed block found in the barrow occurred about one foot N.W. of the centre and lay at an angle over the other boulders with its longer axis nearly north and south. It measured 3 feet 6 inches in length, 1 foot 6 inches in breadth, and was 10 inches in thickness. It was a slab of sandstone and had every appearance of having formed the covering stone of a cist.

The bones found were presumed but with some considerable doubt to be those which had originally been deposited in the cist. The surface of the ground beneath the barrow was trenched but nothing was detected under the centre, except that it was noticed that the first lot of bones met with lay partly in a shallow hole dug in the original surface level. Two flint cores or nuclei illustrated (fig. 22, 6 and 7) were found in proximity to the bones.

- The barrow showed absolutely no trace of recent disturbance. The possibility of its having been disturbed in recent times is further removed by the condition of many of the boulders composing it. Some of the large whinstone masses when exposed immediately scaled off in concave and cup-shaped fragments, as in the characteristic spheroidal weathering of that rock, and none of the scaled off fragments was noticed lying loose in the mound. One large elongated whinstone mass was noticed to be split through the centre with the tivo pieces still adjoining. Some of the magnesian limestone boulders had become rotten enough to be dug out with a spade. I am therefore of the opinion that the barrow was disturbed in ancient, possibly in nearly contemporary times, the bones roughly redeposited, the stones thrown in and the barrow made up again.

No trace of secondary interments was met with, so the reason for the disturbance remains unknown.

A single fragment of undecorated pottery of the usual type was found among the soil near the centre. Flakes and cores of flint occurred in some quantity scattered through the mound.

Several flakes, cores and chippings of flint, together with a fragment from the cutting edge of a polished greenstone axe were found on the original surface level of the ground beneath the barrow on its'S.E. side. They may have lain on the old land surface previous to the erection of the mound. The bones were identified as those of two individuals, one between 18 and 25 years of age and the other not more than 6 years of age.

A ROUND BARROW NEAR MURTON MOOR.
This barrew is built on a rise in the ground and has been much weathered and ploughed down and consequently, as it is made of approximately the same material as the surrounding ground, it was very difficult to ascertain where the original ground-level was. It is still a conspicuous object. It is about 36 feet in diameter and about $3 \frac{1}{2}$ feet high at the centre. It is made of earth and stones.

Approximately at the centre there occurred an enormous massive boulder of sandstone about $3 \frac{1}{2}$ feet in diameter, roughly spherical in shape. It reached from the top to the base of the barrow but as far as could be ascertained did not cover any interment. About 3 feet south of the centre of the barrow a deposit of calcined bones mixed with charcoal was found, laid in a hole a few inches above the ground-level and $2 \frac{1}{2}$ feet below the surface of the mound. A flint knife, a calcined scraper, and two rough chippings of flint occurred mixed with the bones. The knife is a flake of dark translucent flint $1 \frac{3}{4}$ inches long and slightly dressed along both edges.

## A BARROW AT LOW HILLS NEAR EASINGTON.

This barrow is situated in a grass field occupying the highest point in the surrounding country and is a conspicuous object from the main road. It measures 64 feet from west to east and

46 feet from north to south. At the east end it has a height of $6 \frac{1}{2}$ feet. It had been originally a round barrow of clay, its lengthened shape having been acquired later by an addition to its western edge of a quantity of black earthy soil mixed with stones. With what object this addition was made was not discovered. The edges of the original mound were made of clay and stones intermingled, largely of small sandstone boulders. The central part was chiefly formed of tenacious yellow clay which had taken on a prismatic structure like many beds of glacial clay.

About 10 feet south of the centre a deposit of burnt bones occurred, mixed with which was found a calcined flint knife and a rough flint chip. The bones were found amongst boulders of sandstone loosely arranged in the form of a rough cist a few inches above the original ground-level and about 3 feet under the surface of the mound. No coverstone of any sort occurred but the boulders had evidently been covered with a layer of tenacious yellow clay. Beneath the bones there was a quantity of oak-wood charcoal. About 10 feet south of the centre and approximately beneath the last find, a number of large stones apparently in the form of a rough cist had been let into the surface of the ground beneath the barrow. Two cover-stones, dressed at the edges, lay over the structure. The cist was filled with a quantity of very greasy yellow clay mixed with pieces of oakwood charcoal, but no trace of bones was seen. It may have. been the remains of an unburnt burial gone completely to decay. Slightly south of the centre of the mound near its summit and a few inches below the surface was a disturbed box-shaped cist made of slabs of magnesian limestone. Nothing was found in it.

One flint scraper and many rough chippings and flakes of flint, burnt and unburnt, occurred during the digging over of the barrow, with one fragment of pottery. The burnt knife
found with the calcined bones is a flake of flint 21 inches in length dressed along one edge and having part of the crust of the nodule on the other edge.

THREE CISTS WITH UNBURNT BURIALS AT FATFIELD.
These burials occurred on the north bank of the Wear, 7 miles west of Sunderland, 3 miles north-east of Chester-le-Street, and one mile from Penshaw railway station. The land here is a. gradual slope from the river to the N.W. culminating in a high ridge. The burials were situated 240 yards from the river and 150 yards from the ridge, and were all found within a few yards of one another.

At this spot the ground rises rather suddenly for a few feet, the prominence probably representing the remains of a barrow. This inequality of the ground, which was composed mainly of sand had to be removed to make a road, during which operation the burials were found.

The first two cists were opened by workmen on 8th and 9th October, 1907, and the contents were broken. In one, however, a well preserved skull occurred, and the bodies in both graves are stated to have been found with the heads to the S.W. by S., and facing towards the S. In one of the cists a vessel of pottery also occurred, but it was broken and only a portion of it was preserved. It wwas a food vessel of very rough workmanship and poor ornamentation. It was $7 \frac{1}{4}$ inches high, $4 \frac{3}{4}$ inches in diameter with the walls $\frac{1}{2}$ inch thick. The ornamentation consisted of thin parallel lines running round the vessel, with indented thumb marks in between them but the marks do not produce any definite design except that they are arranged in lines.

The two cists just described were similar to the one more recently opened, except that the sides were each formed of one large stone instead of two. They were both covered by one very large slab which was met with about a foot beneath the surface,
and both of the cists were filled with fine sand. No weapon or implement was found with the bodies. The third cist was opened on 7th November, 1907 in the presence of Mr. Parker Brewis, F.S.A. The top slab was 10 inches below the surface, and was $3 \frac{1}{2}$ feet long, $2 \frac{1}{2}$ feet wide, and 4 inches thick. It covered a cist, the internal dimensions of which were as follows:-length 3 feet 6 inches, width 2 feet 4 inches, depth 2 feet. There was no basal slab. The sides were lined with slabs, each side being formed by two slabs, a short and a long one, so arranged as to cause the grave to be wider at the foot than at the head end. The ends were closed by narrower slabs. The skeleton lay with the skull facing upwards, on its right side with the head in a direction S.W. by S. It was tightly contracted, with the legs doubled up to the chin and the hands placed by the sides. It was in a bad state of preservation but was apparently that of a man about 5 feet 4 inches in height. No object of any kind occurred with the skeleton.

## A CREMATED URN BURIAL AT STONE BRIDGE NEAR DURHAM.

This find occurred some yeans ago in a market garden in the corner of a field by the road from Duriham to Brancepeth and Lowburn near the stone bridge which crosses the Browney about a mile or rather more to the south of Durham. Unfortunately no record seems to have been kept either of the depth at which the find was made, or whether any trace of a barrow existed on the site.

Nothing was found among the bones, but the finders may possibly have overlooked small objects if there were any.

The pottery consists of the following objects:-

1. A small cinerary urn, 9 inches in height, with an oval shaped body. It has an overhanging rim. decorated with 5 or 6 lines of horizontally arranged thong impressions. The colour is a reddish brown (fig. 25).

figs. 23 and 25 . -CINERARY URNS FROM Stone bridge (height 14 $\frac{1}{2}^{\prime \prime}$ and $9^{\prime \prime}$ ).
2. A small plain vessel of pale brown ware. Height $2 \frac{1}{2}$ inches. It partakes to some extent of the nature of an 'incense cup' but is without the usual perforations (fig. 24).
3. A large cinerary urn.

fig. 24.
A small vessel found with two cinerary urns at Stone Bridge ( $2 \frac{1}{2}^{\prime \prime}$ high). Height $14 \frac{1}{2}$ inches. It has an overhanging rim decorated with cross-hatched thong impressions. The body tapers gradually to the base and is partly decorated with cross-hatched incised scratches (fig. 23).

The smaller cinerary urn (25) was found inside the larger one (23). It was inverted over the calcined bones found in the larger urn. The position of the small vessel is not recorded but it probably occurred inside both cinerary urns amongst the burnt bones. The three vessels are in the British Museum, and I am enabled to figure them, by permission of the authorities of the Museum.

DESCRIPTION OF A SKULL FOUND IN A CIST NEAR RYTON, 8TH MARCH, 1911.
By Professor William Wright, M.D., F.R.C.S.
The skull is that of an adult male of a powerful robust build. In general shape it belongs to the group named by Sergi 'Sphenoides Latus.' In other words it has the form of a wedge when viewed from the Norma Verticalis or Norma Lateralis, the base being in the Occipital region. The Superciliary eminences, temporal ridges, mastoid processes, molar eminences and jaws, are all strongly developed. The teeth are much worn exposing the secondary dentine: the only sign of decay is a small perforation of the outer table of the mandible due to a small abscess at the root of the first left lower molar tooth. The accompanying (figs. 7, 8 and 9 ) will convey a better idea of the skull than can be obtained from a written description. It may be regarded in
every way as a typical example of that type which is found so frequently with the drinking cup and with primitive bronze weapons. I have recently had the opportunity of comparing it point by point with a specimen obtained by Professor Reid from one of the cists in Aberdeenshire. Professor Reid and I have no hesitation in stating that the two skulls belong to the same type. It was indeed difficult to imagine two skulls more alike.

I append a list of measurements and indices:-maximum length, 169 mms.; maximum width, 146 mms ; cephalic index, 87.34 ; minimum frontal width, 98 mms . ; basibregmatic height, 132 mms ; cephalic index of height, 78 ; basialveolár length, 99 mms . ; basinasal length, 101 mms ; gnathic index, 98; bidacryl measurement, 21 mms . orbital width, 43 mms . orbital height, 31.5 mms . ; orbital index, 73.8 ; nasal height, 50 mms . ; nasal width, 27 mms ; nasal index, 54 ; width of ramus of mandible, 35 mms .

## description of the human remains found in hasting hill barrow.

By T. Coke Squance, Esq., M.D., F.R.S.(Ed.), F.S.A.(Scot).
The unburnt burials.
Find no. ix.-The skeleton in the primary grave. The remains are those of a male about 50 years old. His height was 5 feet 4 inches. The skull is brachy-cephalic and well proportioned. Cephalic index 85.7 and cranial capacity 1360 cc. He has been extremely muscular, very broad shouldered, and had very long forearms. He had suffered from a fractured rib and rheumatism.

Find no. x.-Secondary cist burial near the eastern edge of the barrow. The remains are those of a male. Approximate height, 5 feet 2 inches. The arms have been long.

Find no. xi.-Shallow grave on the limestone rock. The skeleton is that of a woman whose height was about 4 feet 9 inches. The skull is asymmetrical and slightly twisted to the right. Cephalic index is 80.5 , the skull being brachy-cephalic. The pelvis is very large.

Find no. xir.-Infant in cist near N.E. corner of the mound. The remains are fragmentary, the age of the child being about $1 \frac{1}{2}$ years. There are signs in the tibiae that it had suffered from ' rickets.'

The calcined burials.
Find no. v.-Cist of unusual form constructed upon the limestone. The contents of this cist are identified as consisting of portions of occipital bone, portions of ribs and tibiae which are largely split longitudinally; fragments of frontal and parietal bones and inferior maxilla. It is impossible to identify many of the fragments but the greater part are human.

In the large inverted cinerary urn.
Find no. vr.-These bones are very fragmentary. These can be identified : portions of tibiae which have been split, spongy part of lower end of femurs, some portions of bones of wrist and metacarpal bones and cuboid bones of the foot, and other fragments.

The unburnt remains found scattered through the mound.
1.-Inferior maxilla. The first molar and bicuspid are present but not ground down. Age about 7 years.
2.-Small portion of right half of inferior maxilla with 2 nd and 3 rd molars, slightly ground down. Age about 30 .
3.-Right half of inferior maxilla with 1st, 2nd, and 3rd molars, the latter not fully erupted and somewhat misplaced, the cusps well marked. Age about 18. The peculiarity of this example is that the 3rd molar (wisdom) is larger than either the 1 st or 2 nd. It is the only instance of this amongst all the remains.
4.-Portion of right inferior maxilla containing 1st molar tooth somewhat ground down.
5.-Inferior maxilla containing two central incisors, left lateral incisor, left canine, right canine and right bicuspid. The teeth are very much worn and the incisors show evidence of having been filed. The jaw, with the exception of where the teeth are, has entire absorption of alveolar process. The chin is well marked and prominent and the tubercle for the attachment of genio-glossal muscle is very evident. The jaw is probably that of a man about 70 years old.
6.-Fragment of left inferior maxilla with 2 nd and 3rd molars.
7.-Another with 2nd molar tooth ground down and one bicuspid. All the molar teeth have four cusps.

> description of the batter law skeleton.
> By Professor William Wright, M.D., F.R.C.S.

The prehistoric skeleton is that of a strongly built man. The 1 st sacral vertebra was not united to the 2nd suggesting that the age of the individual was not more than thirty-five, although the worn condition of the teeth made a higher age more probable. It is impossible from the fragments to estimate the cephalic index, but from what is left I should say the skull was. mesaticepbalic with a nearer approach to brachycephaly than to dolichocephaly. The teeth were sound and regular except for the 2nd left upper bicuspid tooth which had undergone a rotation in its socket whereby the long axis of its crown was auteroposterior instead of transverse. There was very distinct evidence of advanced osteo-arthritis. While many joints were affected with this disease, the hip and the joints between the occiput and vertebral column were the best marked sites. To the margin of the socket of the left hip joint, for example, a thin rim of new bone had been added which had enormously increased the capacity of the socket. With this was associated a proportionate enlargement of the head of the femur. There was strong ossfic union between the upper ends of the left tibia and fibula.

DURHAM PREHISTORIC BURIALS.
Neolithic.
Copt Hill. Several bodies, too completely burnt for identification.
Bronze Age.

|  | $\begin{aligned} & \mathbf{P}=\text { Primary } \\ & \mathbf{S}=\text { Secondary } . \\ & \mathbf{G}=\text { In Grave. } \\ & \mathbf{C}=\text { In Cist. } \\ & \mathbf{B}=\text { Burnt. } \\ & \mathbf{U}=\text { Unburnt. } \end{aligned}$ | $\begin{aligned} & \text { Side } \\ & \text { on which } \\ & \text { Body was } \\ & \text { Laid. } \end{aligned}$ | Direction of Head. | Weapons and Implements. | Vessels of Pottery. | Sundry Objects. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Copt Hill ... | S.B. | Right <br> Left ? <br> ? | $\left\|\begin{array}{c} \text { N.N.W. } \\ ? \\ \text { W.S. W. } \\ ? \end{array}\right\|$ | Calcined Flint <br> Flint Scraper |  |  |
|  | S.U.C. Child |  |  |  |  | . |
|  | S.U. |  |  |  |  |  |
|  | S.U. Male |  |  |  | Food Vessel |  |
|  | S.B. |  |  |  | Food Vessel |  |
|  | S.B. |  |  |  |  |  |
|  | S.B. |  |  |  | In Cinerary |  |
|  |  |  |  |  | Urn |  |
| Brandon | P.C. | Left | East |  | Beaker |  |
| Ryton ... | P.C. | Left | East |  | Beaker |  |
| Sacriston | P.C. | ? | ? |  | Beaker |  |
| Hasting Hill.. | S.B.C. |  |  |  | Fragments of |  |
|  |  |  |  |  | Food Vessel \& Incense Cup |  |
|  | S.B. |  |  |  | In Cinerary Urn |  |
|  | S.B. |  |  |  |  |  |
|  | S.B. Adult |  |  |  | Piece of Food, | Molar of Sheep |
|  | in rough cist |  |  |  | , Vessel |  |
|  | S.B. |  |  |  | InCinerary Urn |  |
|  | P.U.G. Male | Right | West | Flint Knife | Vessel | Bone P |
|  | S.U.C. Male |  | South | Flint Saw and | Food Vessel | ains of Food) |
|  | S.U.C. Male | Right | South | Flake | yood Vessel |  |
|  | S.U. Female | Right | West |  |  |  |
|  | in shallow |  |  |  |  |  |
|  | - grave |  |  |  |  |  |
|  | S. U.C. Child | Right? | S.E. | Flint Chip | Food Vessel | Calcined Tooth |
| Warden Law.. | S. U. Man | Right | West | Flint Knite |  |  |
|  | P. ? U. Child | ? | ? |  | , |  |
| Murton Moor. | S.B. |  |  | Flint Knife, |  |  |
|  |  |  |  | Scraper \& Chips |  |  |
| Easington .. | S ? B. |  |  | Calcined Flint, |  |  |
|  |  |  |  | Knife \& Chips |  |  |
| Fat Field ... | S. ? U. |  |  |  | Food Vessel |  |
|  | S. ? U. |  |  |  | Food Vessel |  |
|  | P. ? U. Male | Right | S. W. |  |  |  |
| Stone Bridge.. | P. ? B. |  |  |  | Two Cinerary |  |
|  |  |  |  |  | Urns and Incense Cup |  |
| Humbledon | P. ? B. |  |  |  | Cinerary Urn |  |
| Hill | P. ? B. |  |  |  | Cinerary Urn |  |
| - | P. ? B. |  |  |  | Cinerary Urn |  |



BEAKER FROM UNBURNT CIST BURIAL, SACRISTON. (See page 134.)


[^0]:    ${ }^{5}$ W. Greenwell, British Barrows, p. 484 et seq.

[^1]:    ${ }^{6}$ Now in the British Museum together with the other finds from this barrow.

[^2]:    7 'A proposed Chronological Arrangement of the Beaker Class of Fictilia in Britain,' Proceedings of the Society of Antiquaries of Scotland, xxxviII, vessel no. 112, p. 396. The Society has kindly lent the block.

[^3]:    ${ }^{8}$ This fragment is illustrated on page 149 (fig. 16, 4).

[^4]:    ${ }^{9}$ Some notes on mollusca from British Barrows in East Yorkshire occur in The Naturalist for November, 1908. Pages 417-419.

[^5]:    ${ }^{10}$ Both this cist and that of the primary interment Find Ix were secured entire and reconstructed in the Sunderland museum, where they can now be seen.

