On Some Diggings near Brassington, Derbyshire.

By John Ward.

ON May 31st and June 1st last, some excavations of great interest and antiquarian value were made at Harborough Rocks, near Brassington, in this county. The remains brought to light belonged to two widely separated periods; some relating to ancient dwellings—possibly a village—in the vicinity, and which may with some degree of certainty be set down as of Romano-British date; and the other set, to a ruined barrow of the "chambered" type, and, of course, of much higher antiquity. An account was recently published in the *Reliquary* (Vol. III., New Series), in which the details of the work on the spot were the chief point—a treatment of peculiar value to those who make Pre-historic Archæology their province; but in the present article many of the minutiæ of the former will be omitted, and the subject treated from a more general standpoint. But, firstly, the place and its surroundings.

"Harborough Rocks" is the name given to the steep rocky front of a long and conspicuous hill, one mile north of Brassington, and close to the High Peak Railway. This hill takes a north-west and south-east direction; it is composed of a magnesian variety (dunstone) of the Carboniferous limestone of the district, the dip of which is gentle, towards the north-east, the hill-slope on this side approximating to the dip, and continuing to sink until the Via Gellia valley is reached. The south-west side, as above stated, is somewhat precipitous;

it consists of the exposed edges of the strata, so set back, the upper beyond the lower, as to give a step-like character to this side of the hill—irregular belts of vertical rock, with intervening strips of greensward of very varying breadth. At the foot of these Rocks is a cave, known as "Harborough Hall"; on the brow above is a large block of stone, rudely hewn at no distant date into a seat (the "Arm Chair"), and which commands a wide expanse of characteristic Peak scenery; and about two hundred feet to the north, and also near the brow, is another block (the "Pulpit"), beyond which the hill rapidly attains its highest elevation—1,243 feet above the sea. The site of the barrow is between these blocks of stone; and most of the village remains came from the broadest terrace, a little nearer the south-east extremity of the hill.

The writer's assistants were Mr. Cornelius Gregory, son of the farmer who lives at the farmhouse at the foot of the Rocks near the Cave, and the two young Messrs. Rains, whose names, in connection with the Longcliffe Cave, are well known to readers of this Journal. Their intelligent appreciation of the work makes these two days' diggings a most pleasurable memory.

The writer's acquaintance with the discovery dates from April last, when he found that potsherds and bones had been turned up by Mr. C. Gregory, in the course of digging some months before; the spot being a grassy slope a little westward of the house, that formed the floor of a natural passage leading up to the broad terrace already noticed. This led to the exploratory diggings of May 31st, now to be described.

I. The Village Site.

Our first operation was to make an extension of Mr. Gregory's cutting up to and a little beyond the edge of the flat above. At a depth, varying from eighteen to twenty-four inches, we reached the subsoil of the hill—a disintegrated dunstone. Between this and the six to eight inches of vegetable mould at the surface, was a darker soil of variable character, but by no means sharply marked off from either. Most of the "finds" (consisting of

potsherds, broken bones, fragments of charcoal, burnt dunstone and sandstone, a slag-like substance, several broken whetstones, &c.) came from this dark soil; the rest being found in the subsoil. Around the upper end of our trench the surface was decidedly smoother than elsewhere on this terrace. A small trench here, as also others on this terrace, showed that the vegetable mould passed into the subsoil at a less depth, and frequently a fragment of pottery was turned up. The testimony of the spade, as well as the mole-heaps, indicated these "finds" as practically confined to the south-west parts of the hill. Our conclusion was that the dark layer of the slope was a decomposed refuse, and that it pointed to an ancient dwelling on the flat above, the smooth area being its garth. What more natural than that its primitive occupants should carry the daily refuse—ashes, broken pots, bones, &c.—across the garth, or whatever the smooth area was, and tip them over the rocks or down the slope? The process ceasing, the accumulations would in due course become covered up with a deposit of vegetable mould. But as one hut here is not competent to account for the wide distribution of potsherds along the side of the hill, we conclude that there were other dwellings; in other words, a small village. We now proceed to describe the objects.

THE POTTERY.—With the exception of one fragment of hard wheel-made pottery found by Mr. C. Gregory in his earlier work, the Harborough potsherds are imperfectly fired, and relate to rude hand-made ware. The exact depth at which this solitary wheel-made specimen was found is doubtful, so it is impossible to say whether it is contemporary with the rest. Like another fragment the writer noticed in the garden, it has a decidedly Roman appearance. The yield of hand-made potsherds of the slope was considerable, the rim-fragments alone representing from 45 to 50 different vessels: those of the other trenches and the mole-heaps were too few and small to need further remark than that they were of the same type. We may divide these Harborough potsherds into three classes, according to the character of their paste; and it is by no means unlikely that these point to

differences in source of clay and manufacture. The paste of by far the largest class is very coarse, uneven, silicious, and of a dirty grey colour. Experiments tend to prove that the clay was derived from the puzzling deposits of sand and sandy clay found in lake-like hollows of the Mountain limestone in the vicinity, and which, nearer Brassington, are largely worked for fire-bricks. This ware is undoubtedly domestic, and has several points of difference from that of the British round barrows of Derbyshire and Staffordshire, as exemplified in the valuable Bateman Collection at Weston Park Museum, Sheffield. The ornamentation of the former, when present, consists usually of one, and sometimes two bands of impressions of the tip of the finger (Figs. 3, 5, 7, and 8), or more rarely, the finger nail obliquely held (Fig. 6), or the end of a stick: while that of the barrow pottery is usually elaborate and made up of lines produced by the impression of a twisted thong or rush, or a pointed tool, and more rarely impressions of the edge of the finger nail. Again, the colour of the latter tends to red, the paste is more friable, and generally the workmanship and finish are superior. The latter three points of difference may be due to a peculiarity of the Harborough clay, and a very natural special care bestowed upon the manufacture and embellishment of vessels destined for sepulchral purposes. This, however, is scarcely adequate to account for the radical difference in the ornamentation of the two kinds; on the other hand, may not these and certain other peculiarities be collectively held to indicate a difference of age?

As a rule the rims of these Harborough vessels varied in two directions from a central type, which had the sides of the vessel at first curving inwards, thus giving rise to an external shoulder and at a higher level a constricted neck, and then the curve swept outwards to form a more or less recurved lip, as in Fig. 1 *c*. Usually these curves were not equally developed, and sometimes one or other was quite suppressed, hence the series of sections from actual examples shown in Fig. 1, the most common forms being *b*, *c* and *d*.

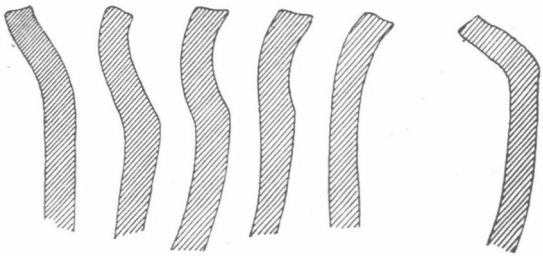

FIG. 1.*

FIG. 2.

This class, however, contains several exceptional forms: Fig. 2 belonged a large vessel with a sharply in-bent lip; Fig. 3, another,

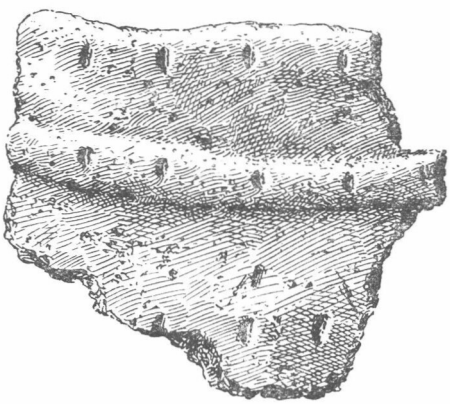

FIG. 3 ($\frac{1}{2}$).†

also large, which had a raised band (not moulded with the vessel, but trailed on afterwards), 1½ in. below the lip; Fig. 4 is a fragment of a graceful and much thinner vessel, recalling some of the Roman shapes.

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* The outside surfaces are to the right hand.

† A potsherd remarkably like this is shown on Plate LXXXVII. of "General Pitt Rivers' Excavations;" it was found in the ditch of Barrow No. 3, Rushmore.

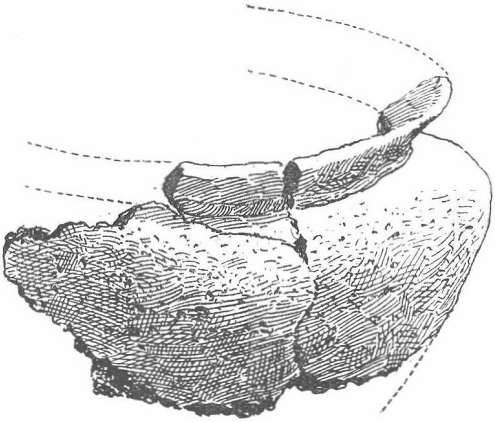


FIG. 4 ($\frac{1}{2}$).

Most of these vessels were decidedly large, some, as Fig. 5,

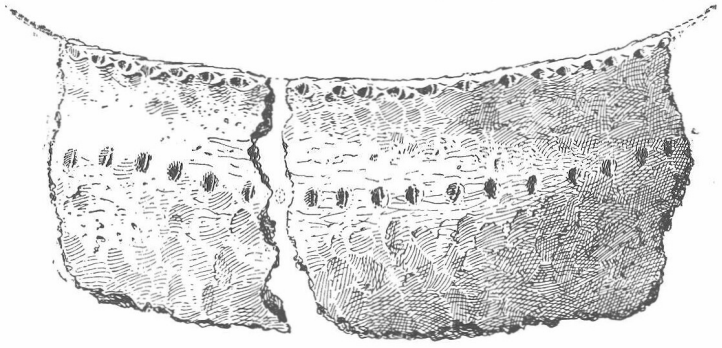


FIG. 5.

attaining a diameter across the mouth of 23 in. So far as could be ascertained, the prevailing type was broad at the shoulder, and tapering downwards to the flat bottom, the line of taper being straight or convex, and sometimes a shallow reversed ogee. Some were apparently tall, others shallow or bowl-like. Figs. 6, 7, and 8 are typical specimens of this class.

The second and third classes have each a few fragments only. The paste of the former is lighter in colour, and more even in texture and better worked than the normal ware;

and while it is impossible to ascertain the shapes of the vessels, it is clear that they were more carefully finished. The pot-sherds of the last class pertained to smaller and more delicately finished vessels, of black uneven paste but smooth surface. Two

FIG. 6 (½)

FIG. 7 (½).

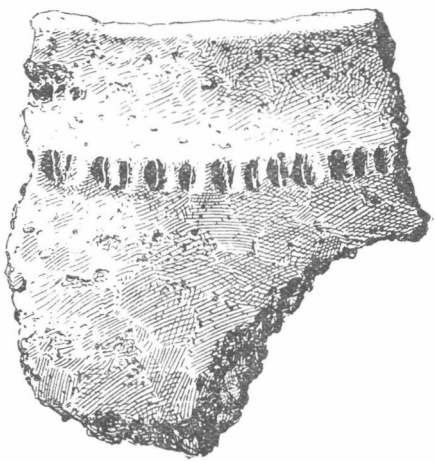


FIG. 8 (½).

of the least damaged fragments have their surface, like that of the Roman black ware, smoothed by a burnisher or other polished tool. One indicates a small vessel with rim as Fig. 1 *c*.

OTHER OBJECTS.—Two broken-off points of deer horn were

found, probably they belonged to awls; they are round in transverse section, and the larger is 1½ in. long. Two objects, Fig. 9

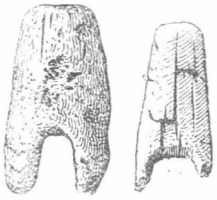


FIG. 9 (½).

(the larger of deer horn, the smaller of calcined bone or ivory), like broken-off halves of a corkscrew handle, are regarded by Mr. Boyd Dawkins as broken links. Several of similar shape were associated with Romano-British objects in Victoria Cave, Settle; and others, larger, with Bronze-age objects, in Heathery Burn Cave, Co. Durham. Several whet-stones were found, two being of a fine hard slatey stone; a piece of red ochre, having signs of much usage; two fragments of a substance that we regarded at first as polished jet, but which seems to be black bone; and a lump of unburnt clay, which, from a groove upon it, we judged to be a piece of daubing of wattle-work, used in the construction of a hut. Such lumps have been repeatedly found on the site of the Romano-British village of Cranbourne Chase, Wilts., excavated by General Pitt Rivers.

THE FAUNA.—A sack-full of animals' bones was obtained from this prolific cutting of the slope. From their broken, split, and occasionally burnt appearance, it is clear they were the remains of human food. The writer is not sufficiently versed in animals' bones to identify them with much certainty. The larger proportion belonged to the hog; then followed the ox, probably the Celtic short-horned breed, a large piece of the frontal of one indicating that the method of killing was similar to the present. The more frequent fare of pork and beef of these ancient folk was occasionally varied with horse-flesh, mutton, and venison. They were sufficiently refined to refuse dog, the skull of that animal (one about the size of a retriever) being

found *quite intact.* A fine large oyster shell and the fragment of another were associated with the above "finds," in such a way as to preclude any doubt as to their contemporaneity. The bones of domestic fowl were absent.

THE AGE.—If the above-stated points of difference between the Harborough and the British barrow-pottery is accepted as indicating a difference of age, the village cannot, of course, be regarded as contemporary with these barrows. An all-round consideration of the facts of the case will, I think, convince that the alternative that would make it earlier is untenable. All whom the writer has consulted, including Mr. Franks of the British Museum, Rev. Dr. Cox, Mr. Boyd Dawkins, and Rev. Canon Greenwell, concur in regarding these finds as belonging to the early part of the Iron Age, and as free from Roman influence—that is, they make them to be of late pre-Roman date. There are, however, several little circumstances that, when taken collectively, have some weight in favour of a Roman date. The oyster shells, for instance—the fact that they were associated with refuse indicates that the *shell* was not so novel as to be regarded as a treasure by these ancient folk; we conclude, then, that this mollusc was a well-known article of food. But surely the condition of Britain before the Roman Occupation was never such as to allow of the transit of perishable articles of food so far inland from the sea, while it is well-known that the oyster was a favourite of the Romans, and that they imported it into all parts of the country. Then the wheel-turned potsherd—in spite of the uncertainty of its position—counts for something in favour of the later date; and so also the other fragment found near the house, and a Roman coin picked up some years ago. Against this, however, may be urged the absence of the characteristic Roman forms of *amphoræ*, *ampullæ*, and *mortaria:* and this objection is, at first sight, strengthened by the results of the Romano-British excavations of General Pitt Rivers, in which, excluding certain barrows of older date, the potsherds were almost invariably of Roman type and character. But, in the case of another Romano-British

village-site at Wetton, Staffordshire, reported upon by the late Mr. Carrington in "Ten Years' Diggings" (pages 193-203), he makes mention, more than once, of the intermixture of coarse with fine potsherds, and compares the former to British sepulchral pottery. A similar intermixture was found in a well-defined class of Derbyshire-Staffordshire barrows described in that work, and in the "Vestiges." These barrows were of Romano-British origin, usually of earth, their floors ashy, and their interments unprotected deposits of burnt human bones. One peculiarity was the presence of potsherds, placed where they were found as *potsherds*, and not perfect vessels, as in the older barrows. Many, perhaps most, of these potsherds were hard and wheel-made, and, in one case, Samian; others coarse and hand-made, but Mr. Bateman unfortunately did not describe their ornamentation. Flint implements and flakes were common, and bronze and iron objects occasionally present. A similar burial and intermixture of potsherds were noticed by General Pitt Rivers in several of the Rushmore barrows, particularly in Barrow Pleck, and the shapes and ornamentation of many of the hand-made specimens are strikingly like those of Harborough. In the next case, a village site at Smerrill Grange, near Youlgrave ("Vestiges," page 129), no wheel-made ware was found, but "in all places where the soil was removed were found numerous fragments of pottery, animal bones, pieces of sandstone and slate, many of which had been subjected to heat. The pottery is of much *firmer texture* than the sepulchral vessels of the Britons, and is much coarser than the generality of Roman manufacture, but its antiquity is unquestionable." Again, the shapes and ornamentation are omitted, but the description given might be equally well applied to the Harborough ware; and Mr. Bateman, presuming that this pottery could not be of Roman date, makes it late British. There is no reason to doubt that all these are Romano-British: Roman influence having almost quite ousted native civilization in the Wiltshire villages, and partially so in the earth-barrows and at Wetton, while Harborough and Smerrill were either so early in date, or remotely situated that this influence was scarcely felt at

all. At the present moment a similar state of things obtains in India, every transition in culture being met with, from the villa of the European or wealthy native, fitted up with every Western appliance, to the hut of the rude hill-man, scarcely distinguishable in construction and contents from that of his ancestor of a thousand years ago.

II.—The Ruined Barrow.

The writer had observed that the ground between the "Arm Chair" and the "Pulpit" was much broken, and especially noteworthy were some semi-connected low mounds, so disposed as to suggest the fosse of a so-called "Druid's Circle," shorn of its standing stones, or the periphery of a demolished round barrow. This broken ground forms part of a strip of land, about 150 by 78 feet, having the brow of the hill for its western boundary, and a line of protruding weather-beaten rocks for its eastern. Both line and strip come to an abrupt termination northwards in the highest point of the hill—the site of the "Jubilee" beacon, and at the opposite end, a low artificial mound extends from the rocks to the brow. This mound is 56 feet long, with an average width of 7 feet, and height of 18 in.; and is constructed of stones thrown together without any arrangement. It is impossible to say how old it is; but it has probably no connection with the remains about to be described.

On June 1st, we commenced operations on the "Circle" (about 46 feet in diameter from crest to crest), by making two small trenches to determine the nature of the mounds—one on the north-west side, and the other on the south-west. In each case a 6 in. layer of vegetable mould covered a rubble of half decayed dunstone, which at a further depth of 2 feet (under the summit) gave place to the natural marly soil. In the north-west trench a small fragment of the usual type of Harborough pottery was picked up from just below the turf.

Trench A.—Our next trench took a north-and-south direction in the centre of the enclosed area of the "Circle." A similar sequence of deposits was observed. Midway, there was a depres-

sion in the natural soil, about 3 ft. across and 1 ft. deep, and extending in an east-and-west direction beyond the sides of our cutting. The filling-in of rubble furnished nothing to indicate its use. At all levels in the rubble were broken and scattered human bones, representing at least six or seven skeletons, but no inference could be made as to what brought them there. Similarly scattered were a few fragments of pottery, most of which were more friable than those of the village site, and of decidedly ruddy tint; and several teeth of oxen, fragments of stag's horn, &c. More interesting were five or six neatly trimmed flint flakes, one

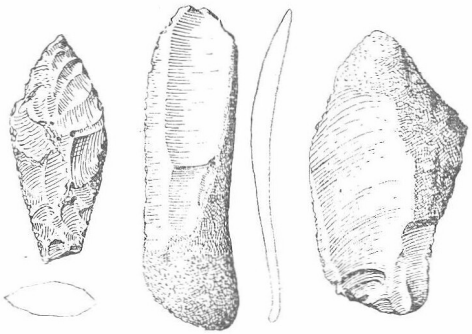


FIG. 10. FIG. 11. FIG. 12 (all ½).

larger than the rest (Fig. 11), having signs of wear on its cutting edge. A well finished leaf-shaped arrow head came from the south end, shown full size in Fig. 10: it is an unusual form. None of these flint implements are burnt, but several, including the latter two, are superficially flecked with white, due probably to the soil.

Trench B.—A small trench to the west of this presented the same sequence of turf, rubble and marl. Nothing more interesting was turned up than a few much-broken bones.

Trench C.—A spot towards the south side was more promising, in that it consisted of stones rudely laid in courses: but a foot further to the south they gave place to rubble again. Here we found the natural soil at a depth of 2 feet, and the stony part

now presented a wall-like surface (a, Fig. 13). In pushing our trench southwards, the edge of a large and almost horizontal limestone slab was exposed on the east side, at a slightly higher

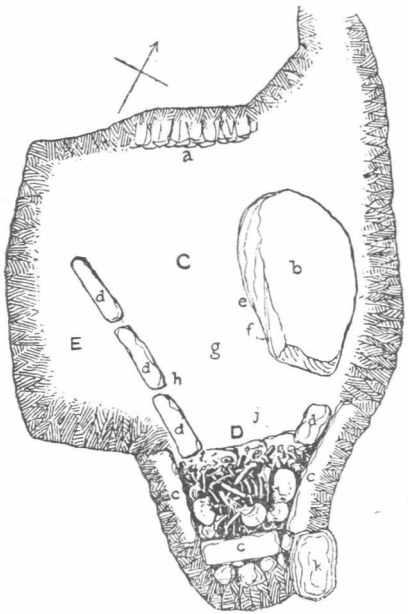


FIG. 13 (¼ in. to 1 ft.)

level than the natural surface (b), and on the opposite side a line of three smaller stones (d, d, d) set on edge. The natural surface was discoloured, as by particles of charcoal and ash trodden into it, and upon, or just below, were picked up a beautifully chipped point of a flint arrow head (e), close by the slab, and near it the base of a most elaborate leaf-shaped javelin head (f), and then another point which we took to belong to the latter (Fig. 15.) More central (g), and at the same level, was a leaf-shaped arrow head (Fig. 14), a beautiful and delicate specimen of flint chipping. It is, in its present state, 1·6 in. in length, 0·75 in. in breadth, flat, and scarcely more than 1-16th in. thick at the thickest point, and weighing only 21 grains.

Its outline is perfect, and both sides are *chipped* into shape. Nearer the west side (h), and still upon the same level, was another leaf-shaped arrow head (Fig. 16), apparently of less elaborate

FIG. 14.

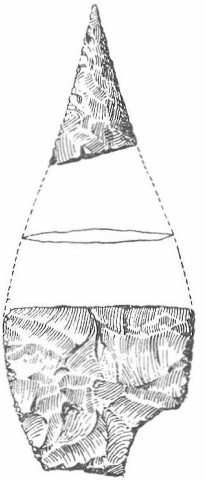


FIG. 15.

FIG. 16 (all $\frac{1}{1}$).

workmanship, but so much calcined that it is difficult to decide. The others found in this cutting, including several indifferent flakes, are more or less calcined, and in this respect are unlike those of Trench A. The large slab was removed, but no interment was found underneath ; so we continued to push southwards. At various levels in the made-ground were broken human bones —the number of lower-jaw fragments indicating three or four individuals ; a cow's tooth ; two fellow fragments of pottery with a yellowish-green glaze, and found at opposite ends of the trench, and a fragment or two of the ordinary ware ; and near the surface, a much rusted piece of iron about 1 in. long.

Trench D.—When our cutting reached the central portion of the enclosing-mound, three large and nearly upright slabs were exposed (c, c, c, Fig. 12), forming a recess. After clearing away the earth, stones, and fragments of bones in this recess to a depth of about 18 in., a partially disturbed youth's skull was found near the south-east corner, and mixed up with it were a few

pieces of an adult skull (Skulls D, 1 and 2). Immediately afterwards two more were discovered, one in contact with each side slab (Skulls D, 3 and 4); they were apparently intact, but they collapsed when the attempt was made to remove them. That on the east side was in contact with two immediately below, lying on the floor of the recess, one being in a fair state of preservation (Skulls D, 5 and 6). The intermediate space was taken up with a confused mass of human limb and trunk bones, mostly broken; the pelvic bones, however, being associated with the skulls. Apart from the narrow dimensions of the recess, the position of the skulls and pelvic bones *at the sides*, indicate that the skeletons lay in a contracted or "doubled up" attitude. No implements of any kind, pottery, or recognisable animals' bones were found in the recess. When cleared of its contents the recess was found to be about 26 in. deep, trapeziform in plan, being 47 in. across at the entrance, 26 in. at the back, and the east and west sides respectively 22 and 31 in. long, the floor rudely paved, and the side slabs inclining towards each other.

Trench E.—This cutting was merely an extension of Trench C. south of the line of the stones d, d, d. From it many fragments of human bones were obtained; the noteworthy feature, however, was that it furnished portions of Skulls D 1 and 2.

The true nature of this recess was now obvious; it was not a *cist*, *i.e.*, the usually small and completely enclosed receptacle prepared for one burial only of an ordinary round barrow, but a *chamber*, the usually much larger and more carefully and strongly constructed receptacle of a long barrow.

In order to make this and other details to follow, plain to the reader to whom this branch of archæology is new, a paragraph or two will now be devoted to barrow-burial.

The larger number of British barrows (98 per cent. at least in Derbyshire and Staffordshire) are circular in plan, or, if not actually so, the digression is due to additions to the parent mound made at later burials. Their interments show that simple inhumation and cremation were practised throughout their era, often side by side: when the former, the corpse was usually laid

on its side in a contracted attitude, and in the later, or Anglo-Saxon interments, it was at full length with the head to the west; when the latter, the ashes were frequently buried in an urn. These interments were either simply placed in the earth without any protection, or were laid in wooden coffins, or, and more frequently, fenced around with stone flags set on end, and which, when roofed with similar stones, formed a box-like receptacle or cist. Although these receptacles sometimes contain the remains of several individuals, circumstances point to their contents as having been buried at the same time. These "round" barrows have a range in time from the earlier part of the Bronze Age to as recently as the conversion of the Anglo-Saxons to Christianity.

But, sparsely scattered throughout Europe, North Africa, and Asia are a class of burial mounds of an earlier type, and which in west and north-west Europe are undoubtedly more ancient than the former kind. These barrows are subject to much variation, and it is impossible to lay down a hard and fast distinction between the two classes. But, looked at as a class, their more elaborate and massive construction and their peculiar internal arrangements suggest the idea that they were erected and finished before receiving their dead, and that their great end was to preserve their contents indefinitely; while, in the "round" class, the mound was piled up *over* the interment, and frequently no provision was made for its preservation, the Anglo-Saxons, indeed, often adopting means for its rapid decomposition. These peculiarities are related more probably to a once wide-spread phase of religious belief, than to a particular race—and they seem to have reached their culmination in the funeral customs, embalmings, and catacombs of the ancient Egyptians—the great Pyramid itself being but a development of this type of barrow. It is, however, more to our point to confine ourselves to the prevailing forms of north-western Europe. In these, the receptacle for the dead was similarly constructed to the cist of a "round" barrow, and was usually larger, but it differed in having an entrance, which generally took the form of an underground tunnel or gallery of similar construction. Even

if the gallery is not found, this "chamber"* (for thus these receptacles are termed) can still be distinguished from a cist by having one of its sides open or otherwise imperfect, but it is possible that in such cases the gallery has been destroyed. The cover-mound was oval, heart-shaped, or occasionally quite circular (as those of Mininglow, in the vicinity, and New Grange, Co. Meath), and its base was usually protected by a retaining-wall, defined by a circle of standing stones. A reference to Fig. 17, which gives a section and plan of the New Grange barrow, and enlarged ones of its chamber and gallery, will make the above clearer. Fig. 18 is the plan of a Scandinavian chamber, that of Uby. It has frequently happened that the mound has disappeared, leaving the larger stones standing exposed as a "dolmen." Fig. 19 is an excellent example from Herrestrup, Zeeland; the finest English ones are Kitt's Cotty House, in Kent, and that of Lanyon, Cornwall. The half-exposed Mininglow chambers, and two at Five Wells, near Taddington, are good examples nearer our doors.

The Scandinavian chambers (they put ours into the shade in point of size and elaborateness) furnish a clue to the motive of this peculiar mode of sepulture. The researches of Nillson and other Northern antiquaries have proved that there is a similarity between them and the half underground huts of some Boreal races, as the Eskimo. In size, shape, in the direction of the gallery—invariably to the south or east—and even in the construction of stalls around the sides of the interior (used by living sleepers in the one case, and occupied by skeletons in the other), the identity is too close to be the result of chance; these chambers are veritable houses of the dead. And, in some cases,

* The indefinite usage of the words "cist," "chamber," and "vault," is detrimental to science. In *Bateman*, for instance, a cist may be a mere roofless fencing-in of the interment by a surrounding wall, or a box-like receptacle. It seems to the writer that the *protection* of the interment might be thus conveniently classified :—as *guarded*, when placed by a large stone, or with a head and a footstone; as *enclosed*, when fenced in by a wall; *encysted*, when in a box-like receptacle; and *vaulted*, when the receptacle is cut into the rock and roofed over as a cist. The term *chamber* being used exclusively for the receptacle of a long barrow.

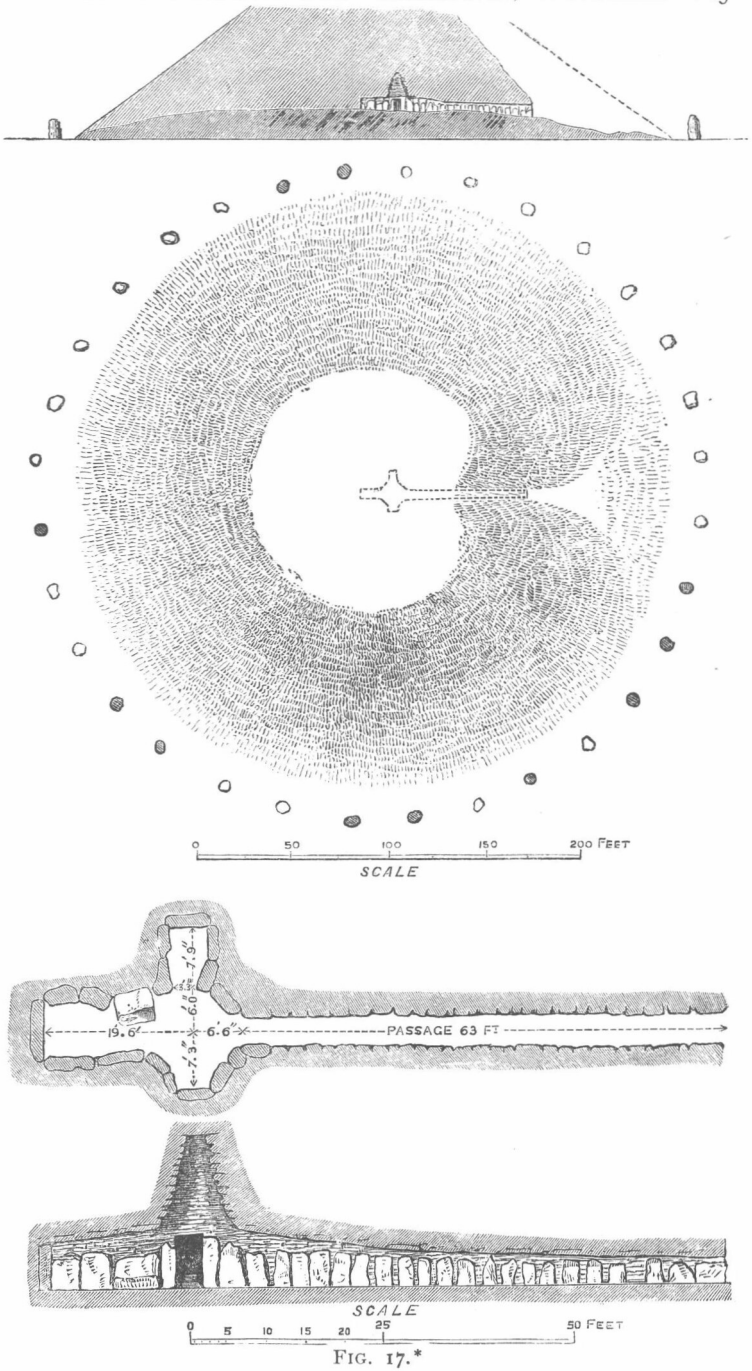


FIG. 17.*

* This and the following two blocks have been kindly lent by Mr. J. Murray, Albemarle Street.

they appear to have been used as dwellings before they were devoted to the dead.

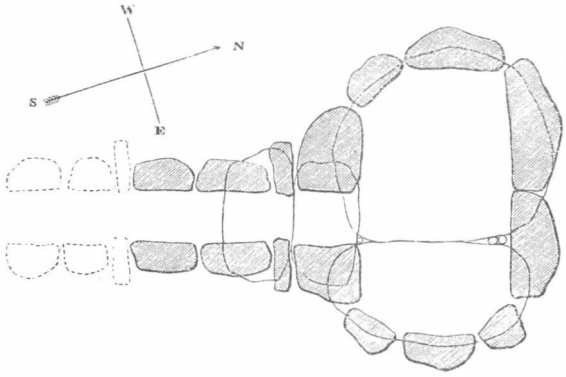


FIG. 18.

In the mode of burial, the long barrow still further contrasts with the later type. It is now universally acknowledged that the chamber was used for *successive* interments (hence the need of easy access), and there is a wide-spread opinion that these interments

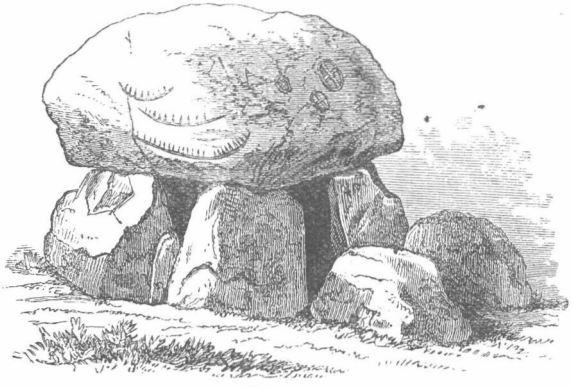


FIG. 19.

were introduced as *skeletons*, having been previously buried or exposed elsewhere; in this respect the chamber had an analogy to the modern *Reliquaire* of the Breton churchyards. So far

as Great Britain is concerned, the builders of these barrows were a "long-head," or dolicho-cephalic race, of small stature and rather delicate physique. The face was oval and orthognathic, the forehead vertical and rather low, the nose aquiline, the curves of the head gentle, and to judge from the survivals of this people in Western Europe, of dark complexion. In the latter barrows this race is still found, but in addition, another—a tall and powerful "round-head," or brachy-cephalic race, with massive lower jaw, prognathic face, broad forehead, and rugged, short, and square head—these new comers having in the meanwhile overrun Western Europe and mingled with the earlier population. In the long-barrow period, a certain social order was already established, and so were cattle-rearing and agriculture; but from the uniform absence of metals from the original interments of these barrows, it is concluded that their use was unknown, hence this stage of culture has been termed *Lithic*, stone (flint) being the best available and most used material for cutting and other implements, and *Neolithic*, in contradistinction from the *older* culture of the Pleistocene. In the round barrows, on the other hand, bronze and iron implements are repeatedly found in addition to flint ones. To discuss the age of the long barrows is little else than speculation; but it is scarcely probable that less than 3,000 years have elapsed since the close of their era.

We now return to Harborough. The line of stones, marked d, d, d, on the plan, is unquestionably a fragment of the gallery. The stones are certainly small, and if they represent the height of the gallery, it must have been too low to allow of easy access to the chamber. Moreover, we found them deeply set in the earth, protruding only about eight inches above the natural surface and the level of the chamber pavement, but they may have sunk to this extent, or have been built upon to the required level. That one or other is the case has some support from the fact that the stone, also marked d, on the opposite side was found to be considerably higher.* The chamber-floor, as frequently

* Compare with the New Grange gallery. Dry masonry and stacked stone were much used in these barrows, and the blending of slab-construction with masonry is characteristic of this period.

is the case, was rudely paved, like those of Ringham Low and Long Low, Wetton. The coverstone, with little doubt, was the large slab (b), pushed off on some former occasion. We know little of the original mound. If the circle represents its outline, its arrangement must have been peculiar, for the chamber, instead of being within would be at the edge, and the gallery pointing towards the centre. There are indications of, at least, one more chamber, and its position, with regard to the ring, is perplexing, and suggests a barrow of the type of Mule Hill, Man, or that of St. Helier, Jersey, rather than Mininglow, in which the chambers were placed around the centre, about midway between it and the circumference, and the galleries entered from the side, which was finished off with a retaining-wall. It is quite possible that the circle is accidental, and that the wall-like structure at *a*, is a fragment of such a podium. The bones, representing sixteen or more individuals, both within and without the chamber, were in the usual condition of barrow-bones—friable and porous through the disappearance of their gelatinous matters. The skulls,* as will be seen in the measurements to follow, were typically dolicho-cephalic, and the skeletons, as already noticed, were laid on their sides, in a contracted attitude, across the chamber. They afforded no direct evidence as to whether they were placed there, as anatomically arranged skeletons, for the minor displacements of lower jaw bones, &c., could well have been caused by subsequent interments of corpses. It was clear, however, that the central portion of the chamber had been disarranged at some comparatively recent date In no case could a perfect limb bone be built up out of the fragments—hence we cannot ascertain the stature. The total number of teeth found, whether free or attached, was 148; many of these were very much

* The disparity of the skulls as to size has been frequently observed before in barrows of this era. Compare, for instance, the adult female and male skulls (D, 5 and 6). This disproportion is held to indicate a hard and miserable life, where the weakest were overworked and constantly stinted of their food. If D, 6 be a female skull (some long barrows, as that of Nether-Swell, Gloucestershire, had a similar disproportion among the female skulls) it corroborates the late Prof. Rolleston's surmise, that there was a privileged class of women, better fed and less hard-worked.

worn, some, indeed, must have been brought down almost to the level of the gums. But what is surprising is the small number (only 5 or 6) that show any signs of caries.*

Some of the leg bones have the peculiar flattening (platycnemism), often observed in skeletons of this era, as well as those of the cave men of an earlier period, and which seems to be due to the greater freedom of the muscles where the feet are untrammelled with rigid soles or sandals. Sections of two are given, Fig. 17 B, C : B is probably 2 inches below the level of the

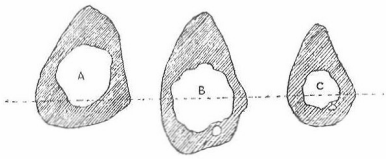


FIG. 17 ($\frac{1}{2}$).

nutritive foramen, C is more uncertain. A is the section of a normal *tibia* from "Cave Digging," p. 170. The flint implements are well worthy of attention. Leaf-shaped arrow-heads have been frequently found in long barrows,† but never barbed ones; hence Dr. Thurnam's surmise, that the latter were unknown at this period, has further support. The extreme delicacy and thinness of these weapons (including the Harborough specimens, except the unburnt one, Fig. 10, which is thicker, smaller, and ruder), render it most unlikely that they were made for use. They are usually broken and burnt; this, coupled with the fact that on the Continent the chambers of this era frequently contain small amber and jet models of implements, make it probable that objects of use to the living were burnt, under the impression that with the

* This immunity from dental decay is quite usual in long-barrow interments: 68 long-barrow skulls from Wiltshire had only two cases of decay; 24 from the Park Cwm barrow, two cases; 10 lower jaws from Eyford, Gloucestershire, and 6 lower jaws from Upper Swell, in the same county, had one case each.—*British Barrows.*

† One found at Fyfield, Wiltshire, is ·85 by 2 inches, and weighs 43 grains; the Ringham Low specimen is 1 by 2·75 inches, and weighs 48 grains. Others have been found in long barrows at Alton Down, Rodmarton, Walker's Hill, Wetton, &c.

flame their spirits would pass away to the world of spirits; the unconsumed flint implements being broken to prevent them being used again. Such customs are wide-spread; the Chinese habit of burning imitation cardboard money to enrich the soul of the dead is obviously a survival. It is curious that the implements were found only in the gallery, and none in the chamber.

It is plain enough that this barrow was at some former date almost demolished, and at the same time the chamber and its contents were much disturbed. Some of the details of this work can be made out. North and north-west of the chamber, the despoilers removed the barrow almost to the natural surface, and then pushed off the capstone of the chamber into this excavation, and rudely tossed a number of its bones (including two, at least, of the skulls) into the western portion of the hollow (Trenches B and E), subjecting, at the same time, the lower central contents of the chamber to much disturbance. Lastly, all were covered up again, apparently with the smaller debris of the mound; the filling-in including sundry potsherds of the Romano-British village or of a secondary burial in the barrow, and several of a later date (the glazed pieces), and a fragment of iron. It is improbable that the human remains of Trench A came from this chamber; there are indications of another chamber on the east side of the area. How long it is since this event took place, it is impossible to say. In Derbyshire, the barrows were extensively demolished at the close of the last, and beginning of the present centuries—the era of commons-enclosing—their stone being much used for fences. The condition of the turf and filling-in points to this as the minimum length of time; the maximum being the date of the glazed pottery and iron, probably the Middle ages. The much more decayed condition of the bones outside the chamber and those of its central portion, compared with the skulls, which on account of the inward sloping of the sides of the chamber were less exposed to the action of rain, indicates, however, a much longer time than the minimum above. Whenever it was, it is clear that the skulls were in the same fractured condition as we found them. And it is equally clear, that if these remains were

placed in the chamber *as skeletons*, the skulls were sound. Although they offered no direct evidence as to whether they were introduced as skeletons or as corpses, one circumstance tells against the latter; the fact that some of the skulls were *in contact*, and that the quantity of earth and bones mixed up with the trunk bones—sufficient to fill up the interstices of a skeleton so as to make a suitable floor upon which to arrange the bones of a succeeding skeleton—was quite insufficient to cover the *corpses*, point to a condition of things which would render burials impossible except at long intervals, on account of the intolerable effluvia during the process of decomposition. In fact, no more inconvenient mode of interment of corpses can be imagined.

Details of Skulls.—The broken condition of the skulls of the chamber is usual in long barrows, and is generally attributed to unequal subsidence of the soil. This, however, would result in displacement, which was not the case at Harborough—the fractures being invisible and the skulls apparently sound until the attempt was made to move them. It is not unlikely that these fractures originated in the skulls themselves. The removal of the gelatinous matters is probably associated with *shrinkage*, as well as brittleness, and as the rate of removal would never be uniform throughout a skull, it is easy to see that it would be in a state of stress; and this state of stress, aided by the ever-varying conditions of temperature and moisture, must, in a material of increasing brittleness, at length spend itself in fracture. The writer has been able to reconstruct to some extent each of the skulls—four sufficiently so as to warrant plates. The plates give the skulls in perspective; the general outline at the points of greatest length and width being to scale. As the views were in the first instance traced as projected upon glass, the eye has been relied upon for the smallest details only. Shading is only used where absolutely necessary, and the numerous lines of fracture are withheld, so as to avoid confusion.*

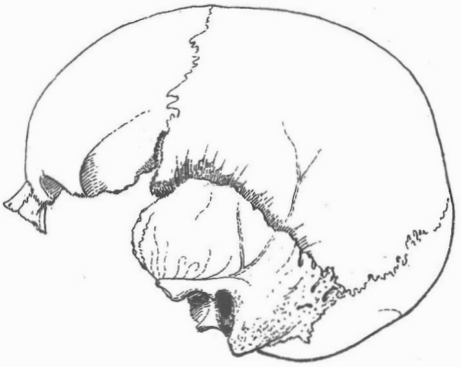
In the accompanying table, the modes of measurement are

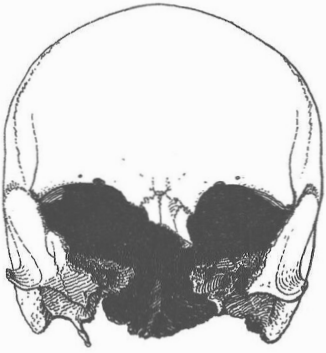
* It was intended that the plates should show the skulls exactly ⅓ their actual size, instead of which they are a trifle less than this proportion.

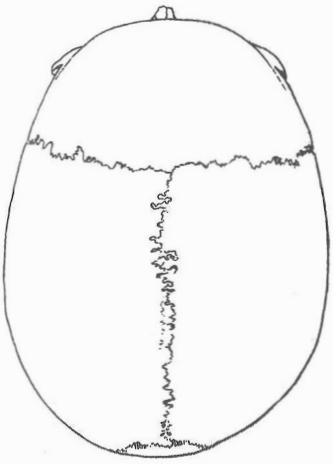
those of the late Prof. Rolleston in *British Barrows*, and a few others are added. The "extreme length" is taken from the frontal immediately above the glabella, as indicated in the above work, page 560. When the measurement is *extremely uncertain* on account of the broken condition of the skull, it is followed by ?; when it can be relied upon as *approximately* correct, by *. They are given in inches, and have been checked off by Mr. G. Fletcher, Science Demonstrator to the Derby School Board.

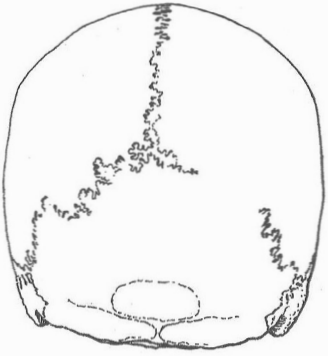
	Skull D 1.	Skull D 2.	Skull D 3.	Skull D 4.	Skull D 5.	Skull D 6.
I. Measurements of Calvaria (in inches).						
Extreme length		7·11 ?	7· 1*	7 07	7·75	7·55
Do. from glabella		7·11 ?	7·09*	7·07	7·96	7· 6
Extreme breadth		5·63 ?	5· 2*	5·16	7·55	5·56
Vertical height			5·66 ?	5·55*	6·08	5·72*
Basi-cranial axis				3·85*	4·16	3·96
Circumference		20·15 ?	19· 8*	19· 5	21·27	21·05
Frontal arc	5· 0	4· 6	4·57	4· 8	5· 1	4·85
Parietal arc		5· 3	5·12	4· 9	5· 8	5·68
Occipital arc			4·52	4· 6	5· 0	4·46
Total longitudinal arc			14· 3	14· 3	16· 0	15· 0
Base line			5· 2	5·24	5·65	5·42
Least frontal width	3·82*	3·75*	3· 7	3·45	3· 9	4·05
Greatest frontal width	4· 3	4· 7*	4· 4	4·20	4· 6	4· 9
Greatest occipital width		4· 5	4·36*	4. 0*	4·36	4·37
Measurements from auditory meati:—						
Radius to nasal suture		3·57 ?	3·55	3· 5	3·76	3·92
Bregmal radius		4·71 ?	4·66	4·43	4·85	4·82
Parietal radius		4·75*	4· 8	4·82	5· 3	5· 0
Bregmal arc		12· 4	12· 4	11· 9	13·05	12· 9
Parietal arc		12· 8	13· 0	12· 9	13· 7	14·05
II. Measurements of Face.						
Length of face (naso-alveolar line)		2·33			2·83	2· 7
Basi-subnasal line					3·85	3·67*
Basi-alveolar line					3·96	3·63*
Radius from auditory meati to alveolar edge					4·02	3·81*
III. Indices.						
Cephalic index		79· 1 ?	73·23*	79·20	71·61	73·6*
Do. from Glabella		79· 1 ?	73·34*	79·20	69·72	73·15
Facial angle to nasal spine					67· 5	67· 4
Facial angle to alveolar edge					66· 0	63·80

SKULL D 1. *Position.*—Much of the frontal associated with D 2 (*q. v.*); other fragments scattered with other bones in Trench E.









Skull D.3.

Marborough Rocks

Barrow.

Derbyshire.

J. W.

BEMROSE & SONS, PHOTO-LITHO. DERBY & LONDON.

Condition.—As restored, it is an imperfect calvaria, consisting of frontal and portions of the left side.

Description.—Thick, rough and the sagittal suture quite obliterated, and the coronal almost so. In general contour, the large confluent superciliary ridges, the sagittal carination and relative proportions it closely resembles D 5, being, however, of smaller size. = an old man.

SKULL D 2. *Position.*—Near the south-east wall, lying on its right side and face slightly downwards. *In situ*, the upper parts were fallen in, with portions of D 1 resting upon them. One fragment of this skull was in Trench E.

Condition.—Much broken and many portions of calvaria missing. The maxillaries cannot be inserted into restored skull, owing to missing basilar parts.

Description.—Thin, smooth, and glossy on inner surface. The sutures are patent, and the sagittal and lambdoidal are gaping on account of absent Wormian bones. The lateral fissures of the occipital squama are not ossified. The calvarial contour, well rounded and filled. The rear-slope, more precipitous than in the other skulls, or in "long" skulls generally; but this may be correlated with a certain fulness of the sides (giving the skull in the behind view a decided globular appearance) and due to posthumous compression of the occipital region, or possibly to faulty reconstruction. The horizontal outline is a broad oval with well-filled ends. The sagittal carination well marked. The forehead, moderately full and upright. Superciliary ridges, incipient and tending to be confluent as in D 1 and 5. The points of maximum width, far back on the squamous suture. Teeth, sound and but little worn; wisdom teeth, half erupted. Lower jaw, D 7 (which was found near this skull and undoubtedly belongs to it), is small and thick, being 1·1 in. deep at symphysis, and 1·3 in. wide at narrowest part of ramus, which is very short. Placed upon a flat surface, both chin and angles touch it; the alveolar border (external) is parallel to it; and the condylar surface is 1·9 in. vertically above it. = youth, probably a male.

SKULL D 3. *Position.*—Near north-east wall; face downwards.

Condition.—Calvaria more perfect than D 2. The maxillaries not inserted for similar reason as above. No lower jaw.

Description.—Thin, smooth, glossy on inner surface. In its measurements and general appearance, this calvaria bears a close resemblance to D 2; it is, however, more rounded and delicate, the rear-slope less precipitous, the frontal fuller and the forehead more upright. The superciliary ridges and sagittal carination are scarcely noticeable. The parietal eminences are well developed, but not sufficiently so as to transfer the maximum width from points corresponding to those of D 2. In the back view the sides are flattish, and parallel to each other. The maxillaries are a shade larger than those of D 2,

and the teeth decidedly so. The front teeth are subject to an irregularity—the canines having grown behind and pushed forward the lateral incisors; this, apparently, is due to persistent milk canines. The wisdom teeth, judging from the sockets, were fully formed. = a somewhat older individual than D 2, and certainly a female.

SKULL D 4. *Position.*—In contact with south-west wall, and lying on the left side. Lower jaw (D 8) displaced, but lying near.

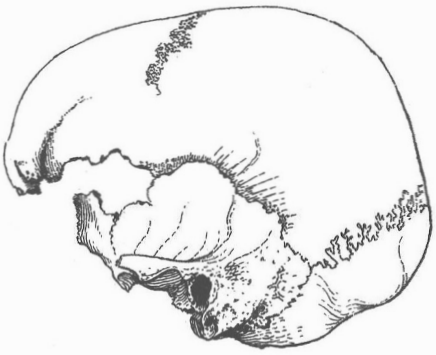
Condition.—Calvaria tolerably perfect; maxillaries missing. Lower jaw imperfect; left and portion of right ramus gone.

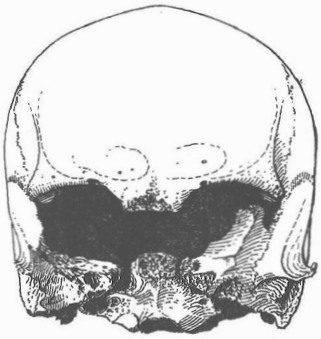
Description.—This is the smallest calvaria of the series. It is thin, but not so smooth and glossy as D 2 and 3. The sagittal suture is extensively obliterated; the lambdoidal intricate, and like the coronal, open only on the external table. The contour in the side view contrasts with D 2 and 3, having a sub-angular tendency—see Plate III. (noting, however, that as there shown, the skull is a trifle tilted forwards, the long flat portion of the crown should be more horizontal). The prominent parietal eminences and frontal angular processes give a wedge-like character to the anterior portion of the horizontal outline, and there is a more rapid taper to the prominent occiput. The forehead is low and somewhat sloping; the prominent temporal ridges, angular processes and supra-orbital borders giving rise to an ill-filled appearance to this part of the skull, which may be due to senile retreat of the tabular portion of the frontal. The condition of the lower jaw and the absence of glossiness, both point to the age of the original owner of the skull as considerably advanced, in spite of the condition of the sutures. The lower jaw is remarkably small and feeble: the molar and pre-molar alveolar portions are quite absorbed; the incisor and canine sockets remain, and several show signs of having been shorn of their teeth before death. The symphisal depth of the body, 1 in., and where the alveolar portion has gone, only 0·35 in. The angle is sharply everted; the ramus thin, and only 1·1 in. wide. The sides of the skull are flat and parallel to each other. The superciliary ridges and mastoid processes, but little developed. = an elderly person, female.

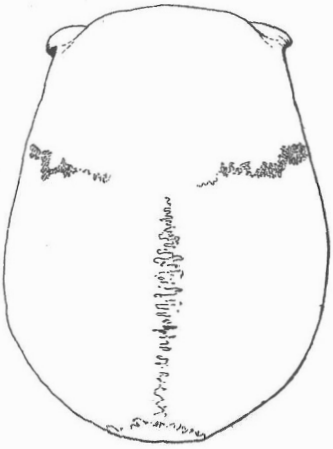
SKULL D 5. *Position.*—In contact with the north-east wall; lying on the left side, and almost, if not quite, in contact with the pavement.

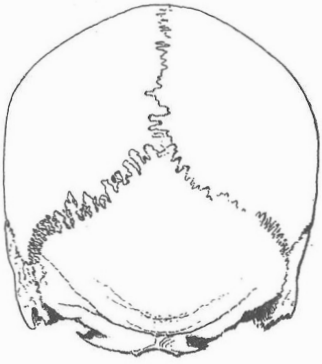
Condition.—It is the least damaged skull of the series. Externally, the restored skull may be regarded as perfect, except for the missing lower jaw.

Description.—This is the largest of the series, and, as already observed, it bears a close resemblance of D 1. The calvaria is moderately thick and slightly rough on both surfaces. The sutures throughout are moderately intricate, and partially obliterated (almost entirely so on the internal table). In the side view, the curve is moderately even; the occiput is full, the rear-slope moderately precipitous; and the frontal curve, if produced downwards, would pass a little behind the foremost point of the nasal suture—and thus the









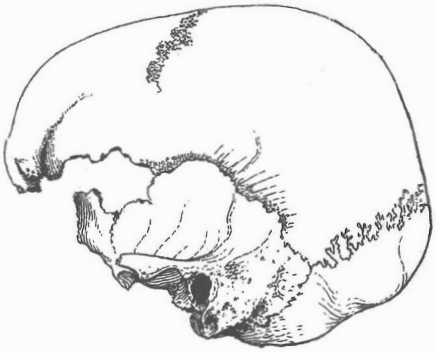
Skull D.4.

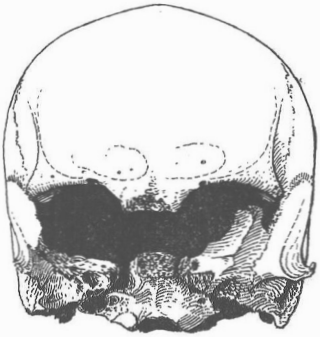
Harborough Rocks Barrow.

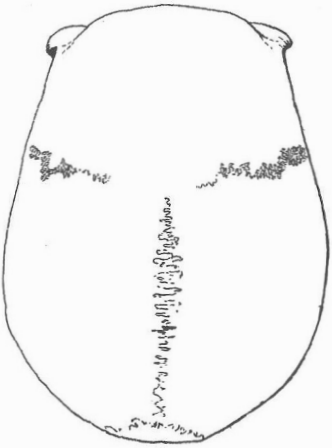
Derbyshire.

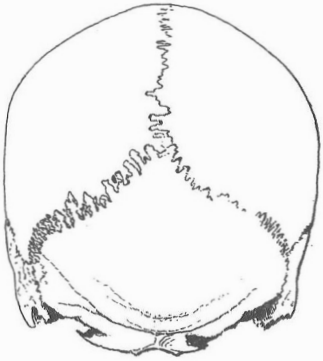
J. W.

BEMROSE & SONS, PHOTO-LITHO., DERBY & LONDON.









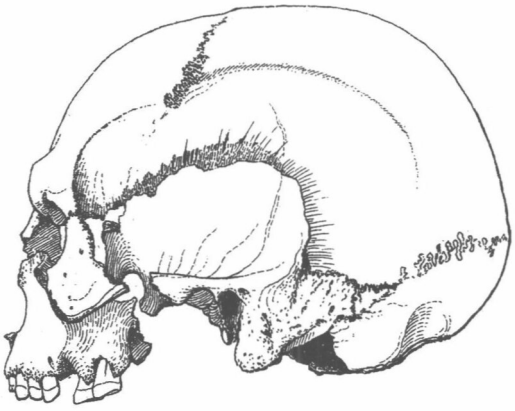
Skull D.4.

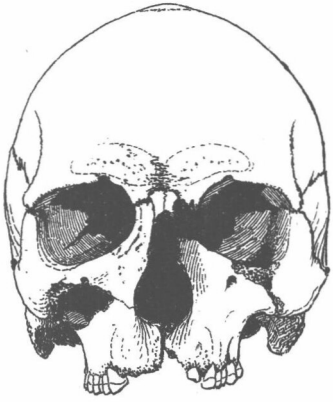
Marborough Rocks
Barrow.

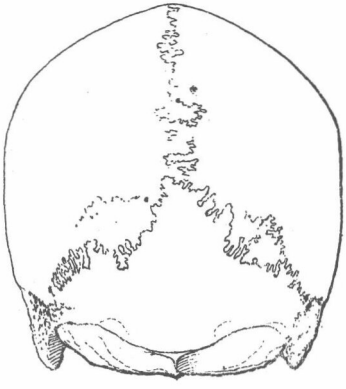
Derbyshire.

J. W.

BEMROSE & SONS, PHOTO-LITHO., DERBY & LONDON.







Skull D.5.

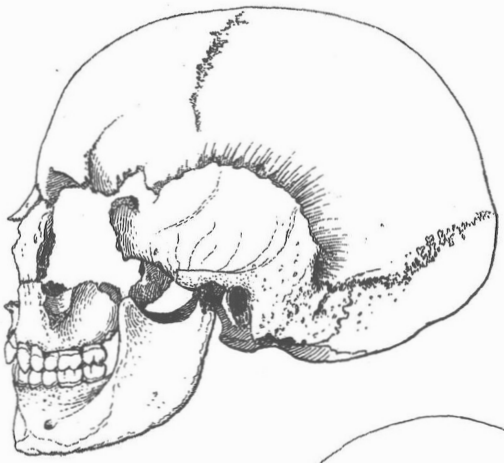
Harborough Rocks

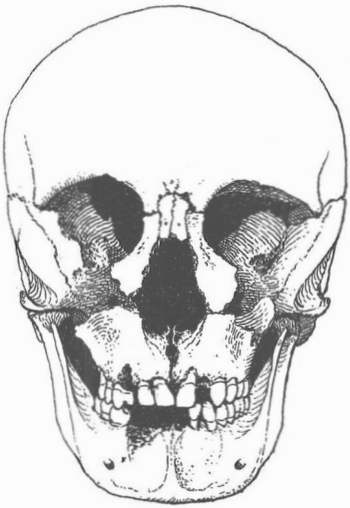
Barrow.

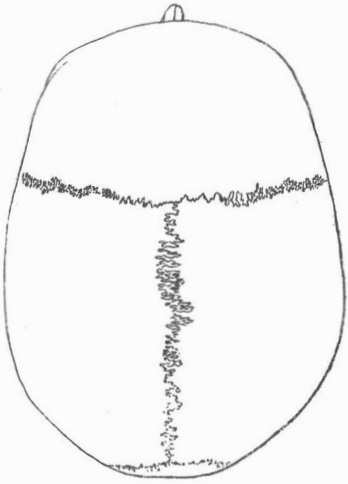
Derbyshire.

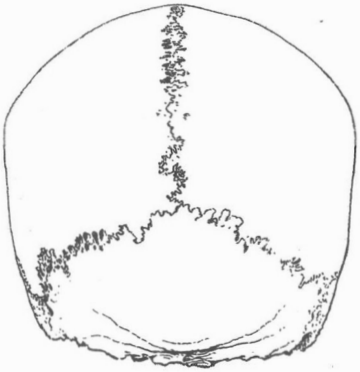
J. W.

BEMROSE & SONS, PHOTO-LITHO., DERBY & LONDON.









Skull D.6.

Marborough Rocks

Barrow.

Derbyshire.

J.W.

BEMROSE & SONS, PHOTO-LITHO, DERBY & LONDON.

forehead wants fulness. The superciliary ridges are well developed and confluent. The mastoid processes are large. The horizontal outline has a character midway between those of D 3 and 4. The sagittal carination is strongly marked. The sides, as viewed from behind, moderately full; and the points of maximum width, far back on the squamous suture. The teeth are very considerably worn. = a man in later middle life.

SKULL E 6. *Position.*—In contact with north-east wall near the east corner; lying on the pavement on left side.

Condition.—Much broken, but more fully re-constructed than the rest. Many of the smaller face-bones lost.

Description.—This skull has strongly marked characters of its own, and it is the second largest of the series. The calvaria is thin, smooth externally, and glossy internally; well-rounded, symmetrical, and for its breadth, low. The side-view curve is most equable, the forehead and rear-slopes corresponding to each other—agreeing in being gradual and not precipitous. The occipital is prominent. The eminences give a fulness to the somewhat retreating forehead. The superciliary ridges undeveloped. Supra-orbital borders thin. Mastoid processes very small. Sutures, finely intricate, and freely open. No sagittal carination. Viewed from behind, the skull is decidedly broad for its height; parietal eminences well developed, and the sides somewhat convening downwards. Except for the prominent occiput, the horizontal outline would be a broad and well-filled oval, approximating to an ellipse. The lower jaw has a more rounded contour than D 7, and the ramus is taller; the deepest part of the body is at the symphysis (1·2 in.), from which the lower surface is rounded off towards and at the angle. The ramal width is 1·4 in. Both upper and lower teeth are well formed, sound and but little worn; the upper wisdom teeth are just appearing, none in the lower jaw. = a young person, probably under 20 years of age; the sex is difficult to make out, female characters, however, preponderate.

SKULL E 1.—This, as restored, consists only of an imperfect frontal with adjacent portions of parietals. It has decided male characteristics, closely resembling D 1 and 5, but more especially the former, in size, also, as well as shape; the forehead, however, is a little more upright. The superciliary ridges are bold, and the sutures freely open. The bone is moderately thick, and much decayed. There is little doubt that it was originally in the chamber. = a young man.

III.—Waterlow.

Mr. J. Rains and his brother recently dug into the site of a small round barrow of the above name, on the opposite side of the railway, and nearer Brassington. The name is not marked

on the Ordnance Survey County Map, nor is it in Bateman's list of Derbyshire place-names ending in *low*. This barrow, as usual, seems to have been demolished when the neighbouring moor was enclosed, and when our young friends brought their spades to bear upon the site there was nothing to indicate its origin except the stony and gravelly character of the ground. They confined themselves to the central portion, where they found a human skeleton lying upon the rock, at a depth of only seven or eight inches. It had been disturbed and much broken —perhaps at the time the mound was removed, but not so much so as to prevent it being determined that it lay on the right side in the usual contracted attitude, and with the head pointing southwards. No other relics were found, nor any trace of cist or other protection. The skull was in so many fragments and so decayed, that the writer has been able to restore only the calvarial part and the lower jaw; the measurements to follow must, therefore, be accepted as only approximately correct.

Allowing for sexual differences, this dolicho-cephalic skull bears a close resemblance to the Haddon Fields specimen, illustrated in Vol. X. (Plate I.) of this *Journal*. Like it, the occiput is very prominent, much more so than is the case with any of the Harborough skulls; this together with the well-marked parietal eminences gives a tapering character to the posterior portion of the horizontal outline (which is symmetrical), and owing to the small development of the frontal eminences, the anterior portion is beautifully rounded, in this slightly contrasting with the Haddon Fields skull. Sideways, the most noticeable feature is the gentle parietal slope and prominent occiput; the forehead retreats, and the contour from the scarcely marked superciliary ridges, to a point a little beyond the coronal suture, almost exactly corresponds to the curve beyond the lambdoidal suture. Viewed from the back, the points of greatest width are seen to be a little below the parietal eminences, beneath which the skull-walls slightly converge. The mastoid processes are small. The sutures, half obliterated. The bone is moderately thick, except at the

occiput where it is extremely thick. The eye-sockets seem to have been small, and tending to squareness. The lower jaw is slender and feeble, except the chin which, although attenuated, is somewhat bold and deep (1·3 in.). The angle is obtuse and rounded and the ramus moderately high, the condylar surface being 2·4 in. in vertical height from the horizontal surface upon which the jaw is allowed to rest. The teeth, of which 25 were found, are small and moderately worn, and three have dental caries. The wisdom teeth are fully erupted and a little worn. Unfortunately none of the trunk and limb bones were reserved, so that nothing can be said of the general build and stature; but it is clear that the skeleton was that of a woman in the middle-period of life.

Extreme length	7·5 in.
Ditto from glabella	7·54 ,,
Extreme breadth	5·3 ,,
Circumference	20·4 ,,
Frontal arc	5·36 ,,
Parietal arc	4·25 ,,
Least frontal width	3·9 ,,
Greatest frontal width	4·56 ,,
Greatest occipital width	4·1 ,,
Radius from auditory meatus to nasal suture	3·63 ,,
,, to bregma	4·74 ,,
,, to extreme point of parietal suture	4.87 ,,
Arc from ditto to bregma parietal suture	12·6 ,,
,, ,, ,, ,, parietal suture ...	13·0 ,,
Cephalic index	70·66
Ditto from glabella	70·29

In conclusion, it would be most unjust not to acknowledge the great services of Messrs. Rains and their cousin, to the writer, and indirectly to our Society, not only in these Harborough operations, but in tracing out Roman and other ancient roads in the district, and particularly in the discovery of

a Roman site, which when more fully examined will, no doubt, throw new light on the history of this interesting region. The value of the Harborough finds is unquestionable; but it should not be forgotten that no relic—not even the site and broken skeleton of a small barrow as that at Waterlow—of these by-gone times is worthless. With the disappearance of each, a link with the past is gone, and if not scientifically examined and placed on permanent record, its testimony is irrevocably lost. There is good reason to think that this is more frequently the case than is generally supposed; and if only all farmers' sons were as Mr. Rains's, what a fund of evidence would accumulate relating to our county before written history. It cannot be too widely known amongst our Peak neighbours that there is such a society as ours, and that whenever a discovery as above is made, a communication to the Honorary Secretary will bring early help, or to say the least, advice.

The Harborough "finds" have been handed over to the Whitworth Committee, who, it is satisfactory to learn, intend to resume the work of excavation. It is to be hoped that our Council will not be passive in the matter, but will, at least, endeavour to secure a continuation of this report in the next volume of this Journal.