

XXVII.—*On the Examination of a Chambered Long-Barrow at West Kennet, Wiltshire.* By JOHN THURNAM, Esq., M.D., F.S.A.

Read 15th March, 1860.

THE investigation described in the following paper may perhaps throw some light on the nature of those remarkable sepulchral mounds, known as “long barrows,” which as yet remain the *crux* and problem of the barrow-digger and archæologist. Many of the long barrows of South Wiltshire were examined at the beginning of this century by Mr. Cunnington and Sir Richard Colt Hoare ; but with so little return for the pains bestowed on them, that, though Sir Richard was satisfied of their high antiquity, he was utterly at a loss to determine the purpose for which such immense mounds had been raised.^a In another part of his “Ancient Wiltshire,” he tells us that he and his colleague “had at length given up all researches in them, having for many years in vain looked for that information which might tend to throw some satisfactory light on their history.”^b In the various long barrows which were opened by these investigators, we find that, with very few exceptions, human skeletons were discovered on the floor of the barrow, at the broad, or east end, “lying in a confused and irregular manner, and generally covered with a pile of stones or flints.” The total absence of bronze weapons, of all personal ornaments, and of urns of pottery, such as were constantly found by them in the circular barrows of the same district, is repeatedly noticed by Sir Richard Hoare, who observes that “their original purport is still involved in obscurity, and a further explanation of them would be a great desideratum.”^c

In his second volume—“Ancient North Wiltshire”—Sir Richard points out that in this district many of the long barrows have a *cistvaen*, or stone chamber,

^a Ancient Wilts, vol. i. p. 21.

^b Ibid. p. 93. Mr. Cunnington's own observations on the Long Barrows will be found in the *Archæologia*, vol. xv. p. 345.

^c Ancient Wilts, vol. i. *loc. cit.* vol. ii. p. 110. *Modern Wilts; Hundreds of Ambresbury, Everley, &c.* 1826, pp. 54, 57. *Tumuli Wiltunenses*, 1829, p. 5.

constructed at the eastern end ; and, referring to North Wiltshire and Somersetshire, he observes, that in those counties where stone abounds we frequently find a cromlech, or cistvaen, at the east end, which, in general, is the highest part of the barrow.^b In a paper in the *Archæologia*, Sir Richard proposes to denominate this species of tumulus the “stone barrow;” observing, however, that it differs from the long barrow, “not in its external, but its internal construction. None of this kind,” he proceeds, “occurred to me during my researches in South Wiltshire, for the material of stone, of which they were partly formed, was wanting. But some I have found in North Wiltshire, and will be described in my *Ancient History of that district.*”^c In 1816 the zealous baronet assisted in

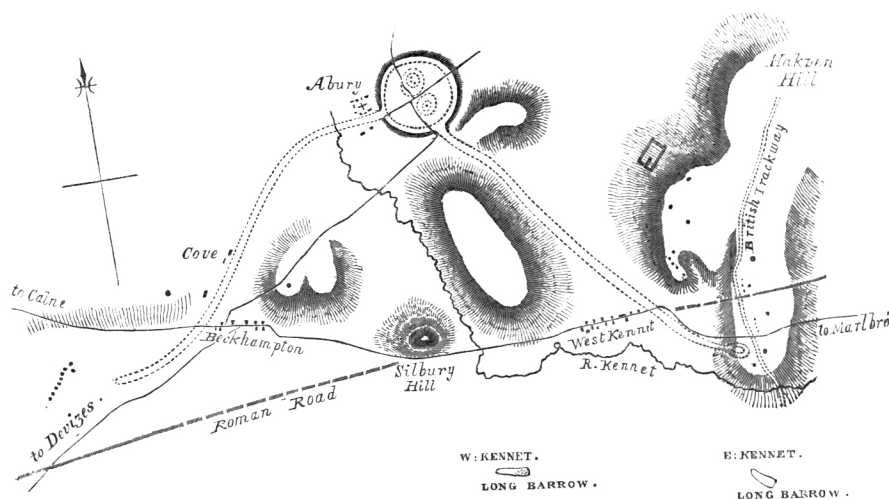


Fig 1 Plan showing the position of the Long Barrow at West Kennet, in relation to the circles at Avebury, Silbury Hill, &c

the exploration of the remarkable chambered tumulus at Stoney Littleton in Somersetshire, which elicited these remarks ; and, in 1821, of that at Littleton Drew ;^d but, with the last exception, he made no excavations in the long stone barrows of North Wiltshire.

^a *Ancient Wilts* vol. ii pp 99, 116.

^b *Ancient Wilts, Roman Era*, p. 102.

^c *Archæologia*, vol. xix. p. 43. Account of a Stone Barrow at Stoney Littleton. The Chambered Tumulus at Uley, Gloucestershire, described by the writer in the *Archæological Journal*, vol. xi. p. 315, closely resembles that at Stoney Littleton.

^d *Gentleman's Magazine*, vol. xcii. Feb. 1822, p. 160. See *Wilts Archæological and Natural History Magazine*, 1856, vol. iii. p 164, for the completed account, by the writer, of this long barrow, with its contained cists and the remarkable *trilith* still standing at its east end

I will now proceed to describe the results of the examination of a chambered tumulus at West Kennet, made in the autumn of last year under the auspices of the Wiltshire Archæological and Natural History Society. I hope on some future occasion to report the result of similar researches in other long barrows in this part of Wiltshire; and then to make some general observations in regard to their age and period, and to the people by whom they were probably erected.

The long barrow near West Kennet is situated on the brow of a hill which commands a view of Avebury to the north, and St. Anne's Hill and Wansdyke to the south, being about two miles distant from each. It has often been described: John Aubrey, in his "Monumenta Britannica,"^a written between 1663 and 1671, gives a rude sketch of it, accompanied by a brief and inaccurate description: "On the brow of the hill, south from West Kynnet, is this monument, but without any name: It is about the length of the former, (four perches long—*sic*), but at the end only rude grey-wether stones tumbled together. The barrow is about half a yard high." So far as it can be relied upon, Aubrey's sketch is interesting, as it shows that in his time the whole of the barrow was set round at its base with stones, which formed a complete *peristalith*.



Fig 2. The Long Barrow at West Kennet.
(From a rude sketch by John Aubrey, circa 1660).

Dr. Stukeley's description was written about 1725, in which year, probably, his sketch of the barrow, which he absurdly designates that of an Arch-Druid, was made.^b Stukeley gives it the name of South Long Barrow, from its situation in respect to Silbury Hill, and the circles of Avebury. He says: "It stands east and west, pointing to the dragon's head on Overton-hill. A very oporose congeries of huge stones upon the east end, and upon part of its back or ridge, piled one upon another, with no little labour—doubtless in order to form a sufficient chamber for the remains of the person there buried—not easily to be disturbed. The whole tumulus is an excessively large mound of earth, 180 cubits long (*i. e.* 320 feet), ridged up like a house. And we must needs conclude the

^a Since 1836, the MS of this unpublished work of Aubrey's has been preserved in the Bodleian Library at Oxford.

^b Abury, p. 46. Tab. xxxi. compare Tab. xxx. for the date; and Tab. xxi. and xxii. or distant views of the barrow. In a collection of unpublished sketches and papers of Stukeley's, which fell into the hands of Gough and are now in the Bodleian, are two or three plans and drawings of South Long Barrow, showing the position of the stones on the surface at the east end, much as they still remain.

people that made these durable *mausolea* had a very strong hope of the resurrection of their bodies, as well as souls, who thus provided against their being disturbed." Stukeley's large view, taken from the south, shows no *peribolus* of stones on that side; but in two distant views six or eight standing stones appear at the east end. The rest of these stones, figured by Aubrey sixty years previously, had probably been removed by that great depredator of the Avebury circles and avenues, "Farmer Green," who, about the year 1710, as we learn from Stukeley, removed similar stones from a neighbouring barrow, "to make mere-stones withal"—the boundaries probably of his own sheep-walks. Among the unpublished papers of Stukeley's, referred to in a previous note, is a further notice of this tumulus, as to which he says, "Dr. Took, as they call him,^a has miserably defaced South Long Barrow by digging half the length of it. It was most neatly smoothed up to a sharp ridge, to throw off the rain, and some of the stones are very large."

Sir Richard Hoare's researches in this neighbourhood were made about the year 1814. He speaks of this tumulus as one of the most remarkable of several stupendous long barrows in the neighbourhood of Abury. "According to the measurement we made," he adds, "it extends in length 344 feet; it rises, as usual, towards the east end, where several stones appear above ground; and here, if uncovered, we should probably find the interment, and perhaps a subterraneous kistvaen."^b

In 1849 it was visited and described by the late Dr. Merewether, Dean of Hereford, who very much underrated the length of the barrow, but whose description in other respects is both more full and more accurate than those of his predecessors. "At the east end," says he, "were lying in a dislodged condition at least thirty sarsen stones, in which might clearly be traced the chamber formed by the side uprights and large transom stones, and the similar but lower and smaller passage leading to it; and below, round the base of the east end, were to be seen the portion of the circle or semicircle of stones bounding it."^c

South Long Barrow has suffered much at the hands of the cultivators of the soil. Whilst the "Farmer Green" of Stukeley's days seems to have removed nearly all the stones which bounded its base, two being all which remain

^a Meaning no doubt the Doctor Toope, whose letter to Aubrey is preserved in his "Monumenta Britannica."

^b Ancient Wilts, vol. ii. p. 96.

^c Proceedings Arch. Inst. at Salisbury, 1849, p. 97. A very similar description is that by Mr. Long, in his paper on Abury in the Wilts Arch. and Nat. Hist. Mag. vol. iv. p. 342. Mr. Long's measurements, however, are much more accurate than those of the Dean.

standing, later tenants, even in the present century, have stripped it of its verdant turf, cut a waggon-road through its centre, and dug for flints and chalk rubble in its sides, by which its form and proportions have been much injured. In spite of all this, however, the great old mound, with its grey, time-stained stones, among which bushes of the blackthorn maintain a stunted growth, commanding as it does a view of a great part of the sacred site of Avebury, has still a charm in its wild solitude, disturbed only by the tinkling of the sheep-bell, or perhaps the cry of the hounds. Shade, too, is not wanting; for on the north side of the barrow, occupying the places once filled by the encircling upright stones, are, what are rarely seen on these downs, several ash and elm trees, of from fifty to seventy years' growth. At the foot of the hill, half a mile away to the east, lies one of those long combs or valleys, where the thickly scattered masses of hard silicious grit, or *sarsen* stone, still simulate a flock of "grey wethers," which, as Aubrey says, "one might fancy to have been the scene where the giants fought with huge stones against the gods." From this valley there can be little doubt were derived the natural slab-like blocks, of which our "giant's chamber" and its appendages were formed.

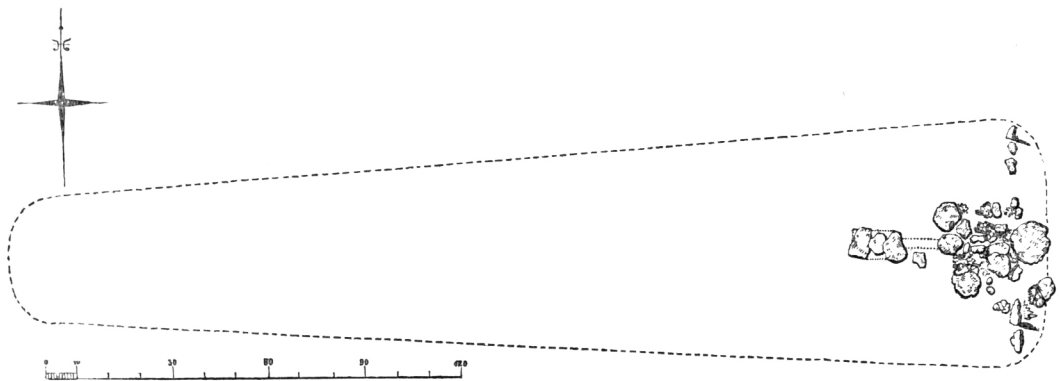


Fig. 3. Plan of the Chambered Long Barrow at West Kennet. (Scale, 60 feet to an inch.)

On proceeding to examine the barrow we found it to be 336 feet long, 40 feet wide at the west end,^a and 75 at the east. Its elevation was somewhat less at the west than at the east end, which at the highest point was about eight feet.^b The stones projecting from and scattered over the mound, are all within 60 feet from its eastern end. Three large flat stones, those most to the west, and lying in a row,

^a A considerable excavation was made near the West end of the Barrow, but without discovering any trace of interment.

^b In taking these measurements and in the accompanying plans, the writer had the valuable assistance of Mr. W. Hillier, Mr. J. Robinson, architect, and the Rev. W. C. Lukis, F.S.A.

appeared to form the covering of a chamber, the uprights of which jugged up below them. To the east of these was a space, whence the cap-stones seemed to have been removed,—two or three, of large size, perhaps these very stones, lying on the mound at some distance. Nearer to the east the stones were scattered in a confused heap, but beneath them appeared the tops of two projecting uprights, separated by little more than a foot's space, and probably indicating the narrowest part of the gallery leading to the chamber. At the very end of the barrow, scarcely, if at all, raised above the natural level, was a large flat slab, nearly twelve feet square, partly buried in the turf. Near the north-east and south-east angles of the tumulus two stones remain standing, and we found traces of two or three others, which had fallen or been broken away, and were partially buried in the turf. These stones, doubtless, formed part of a peristalith, by which the entire barrow was originally surrounded, just as was the great chambered cairn of New Grange in Ireland. Some of the chambered long barrows of the West of England, such as those of Stoney Littleton and Uley, have been inclosed by a dry walling of stone in horizontal courses, carried to a height of from two to three feet.^a The peristalith of the long barrow at West Kennet, as the writer has found was the case with similar tumuli in the same district, seems to have united both methods, and to have been formed by a combination of ortholithic and horizontal masonry. This was ascertained by digging between the stones at the north-east angle of the tumulus. Here, at one spot, were several tile-like oolitic stones, the remains, no doubt, of a dry walling, by which the spaces between the sarsen ortholiths had been filled up, after the manner shown in the accompanying wood-cut, (fig. 4.) though



Fig. 4. Peristalith. (Scale 10 feet to an inch.)

carried, probably, to a greater height. In the present year the writer made an excavation in a long barrow on Walker's Hill (Alton Down), about three miles to the south of West Kennet. At the base of this large mound, near the east end, is an upright of sarsen, and below the turf, at a little distance on each side, another fallen ortholith was uncovered. Between these, on each side of the remaining upright, was a horizontal walling of oolitic stones, neatly faced on the outside, five or six courses of which remained undisturbed. Long barrows of the large proportions of those near Avebury, finished with a peristalith of this description, must in their original condition have possessed a certain barbaric grandeur. Though apparently more important monuments, they call to mind the tumuli of ancient Greece, such

^a *Ante*, p. 406, note c. For a description of the inclosing wall of the tumulus at Stoney Littleton, see the Rev. H. M. Scarth's paper, in *Proceedings of Somerset Archaeological Society*, vol. viii. p. 52.

as that on Mount Sepia in Arcadia, in Homer's time regarded as the burial-place of Æpytus, and which is described by Pausanias as a tumulus of earth, inclosed at the base by a stone wall set round it in a circle.^a

Permission had not been given to move any of the stones on the surface, and our operations were confined to the neighbourhood of the presumed chamber, and to digging on the east and west sides of the three large cap-stones.^b Westward of these was a considerable hollow in the mound, marking the site of some ancient digging, which the discovery of a bit of well-fired pottery, the foot of a small vessel, seemed to connect with the Roman period. The west wall of the chamber was soon exposed, formed by four large sarsen stones, each about a ton in weight, placed horizontally; below these were two larger uprights, one of which had been split, perhaps by the weight of the covering stone. Entrance to the chamber was obtained by the removal of the upper flat stones, by the use of



Fig. 5. View in the Gallery looking towards the Chamber.



Fig. 6. View in the Chamber looking through the entrance.

“screw-jacks” and rollers of timber; a process afterwards applied with great

^a Homer, II. lib. ii. 604. Pausan. lib. viii. c. 16., λίθου κρηπίδι ἐν κύκλῳ περιεχόμενον.

^b For the sanction to excavate, the writer must express his obligation to the proprietor, the Rev. R. M. Ashe, of Langley Burrell, near Chippenham.

dexterity by our men to the removal from the chamber, and subsequent replacement, of the second cap-stone, weighing more than three tons, which had fallen in during the excavations. By the opening thus obtained, the chamber was in part cleared, and two days later another party of men entered it from the opposite side, having successfully tunneled under the large eastern cap-stone. The portion of the gallery which was cleared out was nearly fifteen feet in length, and averaged three feet six inches in width. Its walls are formed of rude upright blocks, four or five feet in height, and above these by smaller blocks placed horizontally, giving an additional height of from two to three feet. The entrance to the chamber is formed by two large uprights, that on the south, which projects most into the gallery, being nearly eight feet in height, whilst that on the north, being of less elevation, is made up at the top by two horizontal stones, somewhat overhanging the whole, forming with the large incumbent stone a perfect but narrow doorway. This opens into a chamber of nearly quadrangular form, measuring about eight feet in length from east to west, and nine feet in breadth. It is about seven feet nine inches in clear height: the construction of its east and west ends has already been described. The north and south sides are each formed of one large upright slab, about nine feet in full height, and somewhat more than five feet wide. The angles between the uprights are completed above by flat overhanging blocks, below which the chalk rubble, of which the barrow consists, fills up the interspaces. At two points, however, within the chamber, on its very floor, and at two in the gallery, just without the entrance, these angles, to the height of one foot, are filled up with dry walling, of tile-like stones of calcareous grit, a stone not to be found within a less distance than the neighbourhood of Calne, about seven miles to the west. A bit of the coarse oolitic stone called coral rag, probably from the same locality, was also found. The floor of the chamber and gallery consisted of the gravelly clay, which here forms the natural subsoil; and the upright stones, which had been sunk a foot or two in the earth, were supported by small blocks of sarsen stone, closely rammed down in the floor.

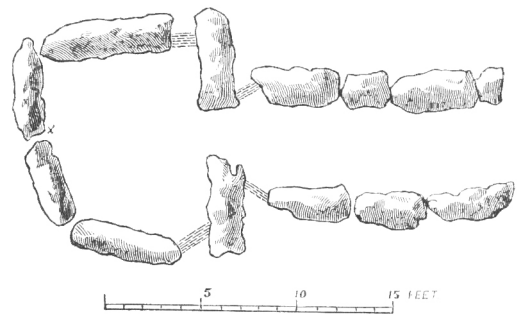


Fig. 7. Ground-plan of the Chamber and Gallery in the Long Barrow at West Kennet. (Scale 10 feet to an inch.)

Both the gallery and chamber were filled with chalk rubble, covered at the top, to the depth of about a foot, with recent rubbish, which had found its way under the cap-stones. In clearing out the gallery, a few scattered bones of animals,

flakes and knives of flints, and fragments of British pottery, of various patterns, were picked up. There were also part of a rude bone pin, and a single bead of Kimmeridge shale, roughly made by hand. At the depth of five feet in the chamber, and extending slightly into the gallery, was a layer, three to nine inches in thickness, of a blackish, sooty, and greasy-looking matter, mixed with the rubble, and most marked on the south side of the chamber. This blackish stratum, the nature and origin of which are by no means clear, was so defined that it could never have been disturbed since its original formation or deposit. At this level the flint flakes and implements and bones of animals were much more numerous than above. The bones were nearly all those of animals likely to have been used for food,—the sheep or goat, ox of a large size, roebuck (of which there was part of a horn), swine of various ages, including boars with tusks of large size. There were also some of the bones of a badger^b, an animal still sometimes eaten by the peasantry.

Beneath the black stratum, the chalk rubble, of a dirty white colour, extended to a depth of two feet; and in this were found four human skeletons, and parts of two others, all resting on the floor of the chamber. The exact position in which the bodies had been deposited was by no means evident; the bones, without being scattered, were further apart than usual, as if the chalk rubble had fallen down gradually on the decaying bodies and separated the bones.

No. 1. In the south-east angle of the chamber, to the left of the entrance, was the skeleton of a youth of about seventeen years of age, apparently in a sitting posture. The skull was extensively fractured at the summit by what appeared to have been the death-blow. The thigh-bones measured about sixteen and a half inches. The crowns of the large teeth were slightly eroded. The wisdom teeth

^a A layer of black earth was very commonly found at or near the bottom of the long barrows without chambers which were examined by Sir R. C. Hoare, and gave rise to various conjectures. Some of the black earth was analysed by Mr. Hatchett and Dr. Gibbes, eminent chemists of that day. Dr. Gibbes was of opinion that "it arose from the decomposition of vegetable matter; if," it was said, "it had undergone the process of fire, the colour would have been converted into red, and not black." Sir Richard conjectured that it consisted of the decayed turf on which these mounds had been raised; though, if this were the case, it would be difficult to explain the absence of such a stratum in the circular barrows. *Ancient Wilts*, vol. i. p. 92. Mr. Cunnington appears to have regarded it as consisting of "charred wood and ashes," with which, he says, the floor of the long barrow which he opened at Sherrington was covered. *Archæologia*, vol. xv. p. 344. *Ancient Wilts*, vol. i. p. 100.

^b Bones of the badger have been previously found in barrows. See *Archæologia*, vol. xxxii. pp. 358, 361. As, however, the badger is a burrowing animal, it is not always easy to determine whether its remains, so found, formed part of the original deposit. They, perhaps, rarely if ever do so.

had not penetrated the gums. Behind this skeleton, and in the very angle of the chamber, was a pile of fragments of pottery.

No. 2. Almost in the centre of the floor was the skeleton of a man of about fifty years of age, of large and powerful frame, the humerus thirteen inches and the thigh-bone twenty inches in length. The teeth were very much eroded, the bones thick and heavy. A fracture, probably the death-wound, extended from one temple to the other, through the forehead into the right cheek, entirely severing the malar bone, which had fallen off below the skull, and was preserved by the clay in which it was embedded, of an ivory-like hardness, contrasting strongly with the light friable character of the bones from which it had been separated.^a The skull, somewhat large and flat, was of an elongated oval form.

No. 3. Behind the last, and near the south-west corner of the chamber, was the skeleton of a man of medium stature, from thirty to thirty-five years of age. The skull, which bears no marks of injury, is of a beautifully regular and somewhat lengthened oval form. The lower jaw was found at the distance of a foot or more from the skull, and at a lower level.

No. 4. In the north-west angle of the chamber was the skeleton of a man of middle size, about the same age as the last. The legs were flexed against the north wall. The thigh-bone measured seventeen and three-quarter inches. The skull faced the west, and the lower jaw was found about a foot nearer to the centre of the chamber, as if it had fallen from the skull in the process of decay. Being imbedded in the clayey floor, the jaw was singularly well preserved, of an ivory whiteness and density, and even retained distinct traces of the natural oil or medulla. The form of the skull is a decidedly elongated and narrow oval, differing much from that usual in ancient British skulls from the circular barrows of Wilts and Dorset. All its characteristics are more marked; but it bears a singular resemblance, especially in the face, to skull No. 3; and, like that, presents no marks of violence. Lying over this skull was a small slab of sarsen stone, and beneath this two fragments of a fine and peculiar black pottery, (see wood-cut, fig. 8,) neatly marked with lattice lines, corresponding fragments of which were found in a distant part of the chamber. Near the skull, was a curious implement of black flint, a sort of circular knife with a short projecting handle, the edges elaborately chipped.^b (wood-cut, fig. 11.) This skeleton was perhaps that of the chief for

^a That the malar bone had really been severed before burial, and probably during life, is curiously proved by an angular fragment of this bone, which remains attached to the superior maxillary, and has the same yellow colour and friable character as the rest of the skull.

^b This implement is that referred to in the *Archæological Journal*, vol. xvii. p. 170. It is slightly concave

whose burial this chamber and tumulus were erected, and in honour of whom certain slaves and dependants were immolated.

No. 5. Between and behind the two last skeletons, close to the middle of the west wall of the chamber, were parts of the skeleton of a man of middle age, consisting of the occiput, temporal bones, lower jaw, cervical vertebræ, sternum, and bones of the arm. Close to these was a portion of a curious saucer of coarse pottery, perforated with a series of holes at the bottom, so as to form a kind of strainer (see woodcut, fig. 9.) and with a hole at each side by which it might have been suspended: another fragment of the same vessel was found at the opposite side of the chamber.

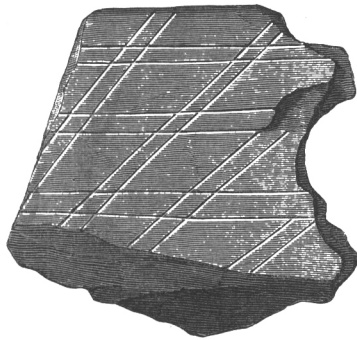


Fig. 8. Fragment of Black Pottery. (Actual size.)

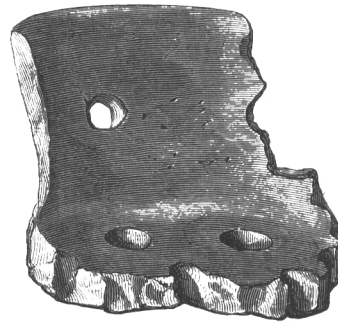


Fig. 9. Fragment of Perforated Vessel. (Two-thirds size.)

No. 6. Very near the last, and between the sides of the two upright stones forming the west wall, was the chief part of the skull of an infant about a year old, with no other part of the skeleton, but which perhaps might have been found outside the chamber. With the skull-bones were three sharp flint flakes, and a large heap of fragments of pottery.

A third heap of pottery was found in the north-east angle of the chamber. A morsel of decayed wood was picked up near this part of the floor, which two skilled microscopic observers have ascertained to be oak, as Professor Queckett believes, of the now less common species, *Quercus sessiliflora*. In the south-west corner, between the two adjacent uprights, was a curious ovoid sarsen stone (hard silicious grit) weighing $4\frac{3}{4}$ lbs.; it was tinged of a red colour, from

on one side, and has some resemblance to the objects of flint found in Ireland and Denmark, which have been compared to spoons by Professor Worsaae (Afbildninger, 1854, p. 15, No. 60), and by Mr. Wilde (Catalogue of Antiquities, 1857, p. 16, fig. 8), who describes them as "of a very unusual shape, presenting the appearance of a circular disc, with a prolonged handle, not unlike a short spoon." Like other less perfect objects of a similar kind, (see wood-cut, p. 416, fig. 12,) they are probably knives, the prolonged thick ends of which were intended for handles, to be held between the finger and thumb, or possibly for attachment to a short wooden shaft.

exposure to fire, was broken at one end, and chipped and battered at the other. It had obviously been used as a mallet, perhaps for breaking the flints of which the numerous flakes and knives found in the chamber were formed. A globular nodule of flint, one pound in weight, chipped all over, appeared to have been used for the same purpose. A very large number of flint flakes, with sharp cutting edges, were obtained from the black stratum, and from near the floor of the chamber. Nearly three hundred were collected; but of these perhaps two-thirds might be regarded as refuse, but clearly not as accidental. Some flint nodules, such as abound in the chalk, appeared to have been broken and the resulting flakes used as knives, probably at a funeral feast on the spot. Three or four cores, from which such flakes had obviously been broken off, were found. The surfaces

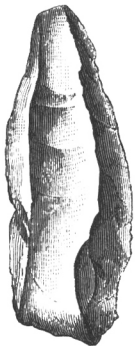


Fig. 10.

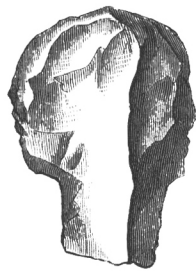


Fig. 11.

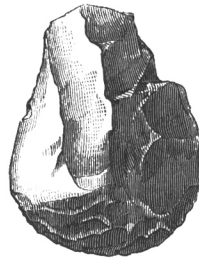


Fig. 12.

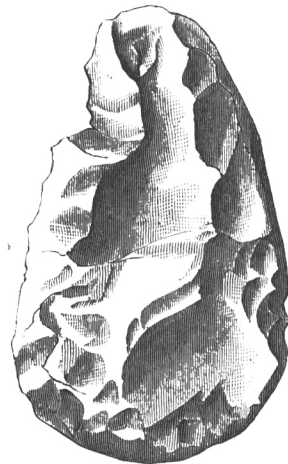


Fig. 13.

Flint Implements (knives, &c.) from the Chambered Long Barrow, West Kennet. (Two-thirds size.)

of the flakes are almost all stained of a milky white; some throughout, others only in patches, perhaps from having parted with much of their water of crystallization.* These white stains do not extend very deep into the substance of the flakes. Some of them retain their original black surfaces almost unchanged; and one in particular, found with the skull of the infant (No. 6), near shards of black pottery, and among clean chalk rubble, is actually transparent. Most of

* "It is a peculiarity of fractured chalk flints to become deeply and permanently stained and coloured, or to be left unchanged, according to the nature of the matrix in which they are imbedded. In most clay beds they become outside of a bright opaque white or porcelainic; in white calcareous or silicious sand their fractured black surfaces remain almost unchanged; whilst in beds of ochreous and ferruginous sands the flints are stained of a light yellow or deep brown colour."—Prestwich, *On Flint Implements, &c.* Proceedings Royal Society, 1859, vol. x. p. 55.

them are as struck from the nodules, having the sharp smooth edges resulting from the original conchoidal fracture; and these have mostly an elongated or blade-like shape (see woodcut, fig. 10). Ten or twelve of a round form have been carefully chipped by repeated blows at the edges, by which means a serrated edge has been obtained;^a more useful, perhaps, than a smooth edge for dividing the coarse and gristly fibres of the food.^b The regularly serrated edge of one of the oblong flakes may be compared to that of a saw, very similar to one figured in the Proceedings of the Society;^c the chief difference being that the teeth of the saw in our example are not so deep or defined. Only one of the flint implements had been ground at the edges; and this is a beautiful thin ovoidal knife, three and a half inches long, which may have been used for flaying the animals slaughtered for the funeral feast (see woodcut, fig. 13). A portion of a whetstone, on which it may have been ground, was found at no great distance from skeleton No. 4. It was of Pennant or coal-measure sandstone, probably from the valley of the Somersetshire Avon.

The quantity of coarse native pottery was very remarkable. At first it was thought that the heaps in the angles of the chamber would prove to be the fragments of vases, deposited entire when the funeral rites were completed. This, however, was not the case, and whence the fragments came, and why here deposited, must be matter of conjecture. They at least remind us of the "shards, flints, and pebbles," which our great dramatist connects with the graves of suicides (Hamlet, v. 1), and the use of which in mediæval times may have been a relic of paganism. That the fragments found in the chamber were those of domestic vessels required for the funeral feast, is by no means clear; for in such case, had the mass of fragments been deposited, it would have been possible to have recon-

^a These are the implements referred to in a preceding note, p. 413. In excavating what was probably a hut-circle, about two miles from Kennet, Dean Merewether, in 1849, found numerous flint objects of this description, two of which he has figured in the Salisbury Volume of the Archæological Institute, p. 106. He describes them as "pieces of flint of about 1½ inch across, evidently chipped into form, as if to be held in the hand or fastened to some handle."

^b Knives were but little used for this purpose by the rude Celtic tribes, down to a late period. In the century before our era, Posidonius describes those of South Gaul, in their feasts, as "taking up whole joints, like lions, biting off portions, and if any part proved too hard to be torn off by the teeth, they cut it with a small knife, which they had beside them in a sheath."—Athenæus, lib. iv. c. 36. The knife, *μαχαίριον*, referred to by Posidonius, was probably of bronze; but at an earlier period, and by the ruder tribes, knives of flint would doubtless be those employed. Rough flakes and implements of this material, Worsaae tells us, are found in Denmark among heaps of the broken bones of animals, shells of oysters, &c, the remains, no doubt, of the feasts of the primitive Scandinavian people.—Athenæum, Dec. 31, 1859.

^c Found at Brighthampton, Oxon. See Proceedings, vol. iv. p. 233.

structed at least some of the vessels. As it is, the variety of form and ornament, of colour and texture displayed by them is even more remarkable than their number. In hardly more than three cases were two or more fragments of the same vessel met with. In stating that there were parts of not fewer than fifty different vessels, we shall probably be very much within the truth. They have been of every size, from that of a small salt-cellar to a vase holding a couple of gallons. That the pottery had been formed of the "plastic clay" of the district,

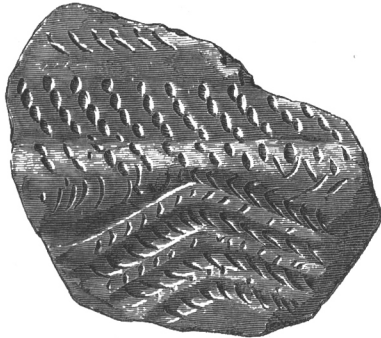


Fig. 14.

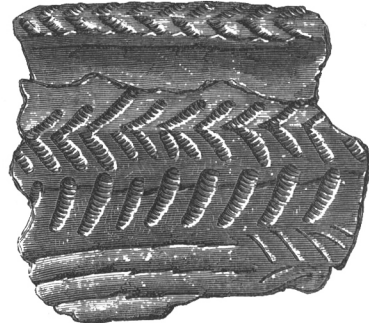


Fig. 15.



Fig. 16.



Fig. 17.

Fragments of British Pottery from the Chambered Long Barrow, West Kennet. (Fig. 14, actual size; figs. 15, 16, 17, two-thirds size.)

of which bricks are still made, appears from the amount of flint, in the shape of angular fragments white from the fire, which the black or red paste contains. It is needless minutely to describe the character of the pottery, which is unequivocally hand-made, and of the British or Celtic type. It appears, however, to have been more profusely covered with ornament, impressed or scored, than the cinerary urns in the barrows of South Britain usually are. In this respect it assimilates more to the style of the "drinking cups" of these barrows, and to that of the

vases found in the Celtic barrows of North Britain and Ireland. There are parts only of one small vessel found in the chamber, respecting which it may be questioned whether it is strictly British and Celtic. These are the pieces found on the skull No. 4, corresponding fragments of which were met with in another part of the chamber (fig. 8) : they were composed of a fine black paste, which has been imperfectly baked, and is easily cut with a knife, contrasting in this respect with the fragment of undoubted Roman pottery found on the outside of the chamber. The scored, lattice-like lines with which the exterior is ornamented are not parallel ; but, on the other hand, are not in the prevailing British taste. Still, as somewhat obscure traces on the inner surface appear to show, the vessel itself was perhaps formed on the wheel ; and, on the whole, we think it must be referred to the Roman period. If this be admitted, the conclusion that the chamber had been opened during the same period, seems necessarily to follow. The piece of Roman pottery found to the west of the chamber is probably an indication of the same fact, and also that it had been entered from that end.^a By whomsoever it was opened, its contents were but partially disturbed, as is proved by the condition and order of the skeletons, and by the defined character of the layer of black matter immediately above them.

It is worthy of remark that not a bit of burnt bone or other sign of cremation was met with ; that there were no traces of metal, either bronze or iron ; or of any arts for the practice of which a knowledge of metallurgy is essential.

It has been already suggested that some of the skeletons in the chamber, on the skulls of which marks of violence are evident, are those of slaves or dependants, immolated on the occasion of the burial of their chief. That this was the custom of the Celtic tribes at one period, cannot be doubted ; as Cæsar tells us that, only a little before his time, the Gauls devoted to the funeral pile the favourite slaves and retainers of the dead. Mela even speaks of these immolations as being voluntarily performed, with the hope of joining the dead in a future life.^b These remarks apply to cremation, the usual though perhaps not universal concomitant of burial among the Gauls in the times of Cæsar and Mela. There can, however, be little doubt that they are equally applicable to burial unaccompanied by combustion of the body. It may likewise be inferred that, as in the case of cremation the devoted persons would be burnt with the body of their dead lord, so, where burning was not practised, they would be simply slaughtered, and consigned with

^a If not at that end, it had probably been entered by raising the central cap-stone, which is much smaller than the two others, and appears to have been broken at one side.

^b B. G. lib. vi. c. 19 ; Mela, lib. iii. c. 2.

him to a common grave. Such, at least, is probable, from the description, by Herodotus, of the funerals of the kings of the Scythians, who by modern critics are regarded as an Indo-European people,^a and perhaps as nearly allied to the Celtic as to the Teutonic races. From this passage, also, we may perhaps derive some light as to the mode of burial among those rude Celtic tribes, by whom probably the long-chambered barrows of Western Britain were raised. This applies not merely to the immolation of victims, practised alike by both people, but also to the thatched roof erected by the Scythians over the body of the king, a similar structure to which, when decayed, may have given rise to the black stratum of earth observed in the chambered barrow at Kennet, and in most of the long barrows of Wiltshire.^b From the same historian it is known that among some of the Thracian tribes, the wife supposed to have been most loved by the deceased was slain on the sepulchral mound, and buried in it with her husband. In what manner the Thracian widows were slain is not described. Those of the Scythian chiefs were strangled; whilst the condition of at least two skulls in the Kennet tumulus makes it probable that among these Western Celts death was caused by cleaving the skull with a sword^d or hatchet, perhaps of stone. Evidence had been previously obtained from the barrows of Wiltshire of this mode of immolation of funereal victims; and it is remarkable that two out of three instances which may be cited are in the case of long barrows. In 1801 Mr. Cunnington opened the long barrow near Heytesbury, called "Bowls' Barrow," in which he found several skeletons crowded together at the east end, the skull of one of which "appeared to have been cut in two by a sword."^e In a circular

^a Rawlinson's Herodotus, 1858, vol. iii. Essay 2, Ethnography of the European Scyths.

^b The passage in Herodotus (lib. iv. c. 71), though often quoted, deserves to be here given. After describing the rough embalmment of the body, and the savage cutting and maiming practised by the Scythians in token of mourning, the historian thus proceeds: "The body of the dead king is laid in the grave prepared for it, stretched upon a mattress; spears are fixed in the ground on either side of the corpse, and rafters stretched across above it to form a roof, which is covered with a thatching of osier twigs. In the open space around the body of the king, they bury one of his concubines, first killing her by strangling her, and also his cup-bearer, his cook, his groom, his lacquey, his messenger, some of his horses, firstlings of all his other possessions, and some golden cups, for they use neither silver nor brass. After this they set to work and raise a vast mound above the grave, all of them vying with each other, and seeking to make it as high as possible."

^c Herod. lib. v. c. 5.

^d The human victims of the Gauls, from the observation of whose death-throes future events were predicted, were slaughtered by striking with a sword on the back, above the diaphragm.—Diodorus, lib. v. c. 31; Strabo, lib. iv. c. 4, s. 5.

^e Hoare, Ancient Wilts, vol. i. p. 87.

barrow near Stonehenge, Sir R. C. Hoare found "a skull, which appeared to have been cut in two by some very sharp instrument, and as nicely as any instrument of Savigny could have effected."^a In 1855 the writer found in a cist in the curious long barrow near Littleton Drew, the fragments of a skull, "the fractured edges of which were very sharp, suggesting the idea of having been cleft during life."^b Attention having been directed to the subject, other instances of skulls thus cleft and fractured may perhaps be observed and described. Such appearances may easily be overlooked, or, if noticed, misinterpreted; but it will be admitted that their occurrence is curious, and has an important bearing on the estimate to be formed of the general grade of civilization of those who must be regarded as our remote ancestors.

^a *Archæologia*, vol. xix. p. 48; *Ancient Wilts*, vol. i. p. 163.

^b *Crania Brit.* No. 24, p. 3. *Wilts Arch. & Nat. Hist. Mag.* vol. iii. p. 172.