as I have stated,—a supposition by no means exaggerated, when it is remembered, that these various blights impair the quality of that which they do not destroy,—we should by this apparently small improvement have added to our national income about £4,000,000 yearly.

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## MEMOIR OF THE EXAMINATION OF THREE BARROWS AT BROAD DOWN, FARWAY, NEAR HONITON.

BY THE REV. R. KIRWAN, M.A., RECTOR OF GITTISHAM.

In accordance with the terms of a resolution passed by the Council of the Devonshire Association, I propose to describe in the present memoir the results of an examination of three Tumuli, situate at Broad Down, Farway, near Honiton, and which were visited by the members of the Association on 31st July, 1868.

It is desirable on many accounts to place on record the leading facts connected with the discovery of the interesting pre-historic relics that were then brought to light; partly because, whilst the disinterment of such remains connected with primitive deposits has been of common occurrence in the adjoining counties of Cornwall on the one hand, and of Wiltshire and Dorsetshire on the other, they have hitherto been of very rare occurrence in this county. I have a further inducement to follow this course by the occasion it affords of giving illustrations of the objects thus discovered, for the benefit of those who have not had an opportunity of inspecting the originals. In addition also to their rarity, a further interest gathers around these sepulchralia, from the fact that they supply a link in the chain of the pre-historic archæology of this county. The two extremes of the series, which have been worked out with much ability, may be stated thus. The discoveries made at Brixham Cavern and Kent's Hole, near Torquay, carry back the existence of man upon the soil of Devonshire to a time cotemporaneous with the cave-men of France and Germany. Very different conditions of climate, of coast-line, of relative land and sea-level then prevailed; probably the rigour of the glacial epoch still existed, whilst the mammoth, the cave-bear, the tichorine rhinoceros, and other extinct animals roamed over the district which now forms the shores of Torbay. We

start then with this fact, that when man existed upon the continent of Europe in the glacial period (that is to say, at the most remote period of his history yet disclosed), he also existed in Devonshire. Here we have the one extreme of a series of which the other is limited by the first dawn of the historic period. Of this we have numerous examples in Devonshire; nor need I refer to any other than that of the Roman Isca (Exeter), which has yielded abundant evidence of man possessing a knowledge of the metals, and a certain amount of civilization. The intermediate period, however, so far as regards this county, has been but imperfectly worked out; and yet surely it is not from want of materials. The cromlechs, sacred circles, dolmens, maenhirs, upright stones disposed in avenues, and other antiquities of a similar character on Dartmoor, the hill-fortresses of East Devon, and the antient burial-mounds which are to be found dotting the summits of the higher ground in this and other parts of the county, are so many landmarks of the history, the national customs, the social habits, and, it may be added, testify to the warlike character of the primeval inhabitants of Devonshire. So abundantly are these time-honoured remains scattered over the hill-tops that frown down upon the vale of Honiton, that probably no district in England is richer in them. Almost every swelling prominence has its intrenched fortress, and of these some are so extensive that they would have required a small army to defend them against attack on all sides. I may cite as examples Hembury Fort, three miles distant from Honiton: it is of ovate form, and measures about 400 yards in length, and 130 yards in breadth; within a mile of Broad Down is Blackbury Castle, measuring from east to west 220 yards, and from north to south 115 yards. The same district also abounds with the sepulchral remains of its early inhabitants. And yet up to the present time, these memorials of a people, the very name of whom is lost, have attracted but little attention. Many barrows have been destroyed by the advancing plough of the agriculturist, but in no cases have the cinerary urns and other mortuary remains been preserved. Scarcely even has their discovery been recorded, or any relics of the period been figured. And yet, time was when these grave-mounds were regarded with far different feelings. So long as they were held to be the receptacles of treasure, a royal license must be obtained before their exploration was permitted, but no sooner is that illusion dispelled than they come to be regarded with indifference. The following curious document occurs in the Patent Rolls of 17th Edward II. It secures

to one Robert Beaupel the privilege of excavating six barrows in Devonshire, on condition that the search is made in the open day, and in the presence of the sheriff and other responsible officers. The instrument is as follows : *

*De terra fodenda pro thesuro abscondito quærendo* } "Rex Vicecomiti Devon, et omnibus aliis ballivis, ministris, et fidelibus suis in eodem comitatu, tam infra libertates quam extra ad quos, &c., salutem.

"Quia datum est nobis intelligi quod in sex Collibus, et aliis locis diversis in comitatu predicto, thesaurus in terra absconditus existit. Nos, super hoc plenius certiorari volentes, assignavimus dilectum et fidelem nostrum Robertum Beaupel juniorem ad quœrendum in sex Collibus et locis prædictis hujusmodi thesaurum sic absconditum. Ita quod pro eodem negotio possit terram fodere, et etiam lapides et ligna evertere suis sumptibus, pleno die et in præsentia tua præfate Vicecomes, et decenarii, ac aliorum proborum hominum de partibus, prædictis, qui inde veritatem valeant testificare. Et ideo nobis mandamus quod eidem Roberto in præmissis et ea tangentibus, intendentes sitis consulentes et auxiliantes quotiens et quando per ipsum Robertum ex parte nostra super hoc fueritis præmuniti. Proviso quod si thesaurus ibidem inventus fuerit sub sigillo prædicti Roberti et sigillo tuo præfate Vicecomes, ac sigillis aliorum fide dignorum custodiatur, quousque nos inde certiorati aliud super hoc duxerimus ordinandum. In cujus, &c.

"Teste Rege apud Westmonasterium, primo die Junii."

Leaving the town of Honiton by the Sidmouth road, the ground quickly rises, and attains an elevation of about eight hundred feet above the sea level. At a distance of three miles from the town, at a point where four roads meet, known as Hunter's Lodge, is a large flat stone which tradition says was once used as an altar for human sacrifices. It appears to be unhewn, presenting no marks of a tool on it, and may possibly have formed the cap-stone of a dolmen. Local tradition further states that the stone descends the hill every night, bathes in the stream for the purpose of washing out the stain of human blood which is still upon it, and that before morning it returns to its original position.

"They say blood will have blood,
Stones have been known to move, and trees to speak,
Augurs and understood relations have
By magot pies, and choughs, and rooks, brought forth
The secret'st man of blood." MACBETH.

* Quoted in *Warne's Celtic Tumuli of Dorsetshire*, p. 28.

If we now take the Seaton road (which is a branch of the old British and Roman Ikeneld way, that passing from Colyford over Farway Hill, through the town of Ottery St. Mary, joins the main road at Fair Mile) we observe at once, on the left, a circular mound crowned with trees. Other mounds of a similar character, though somewhat smaller in size, occur at irregular intervals; these are the first evidences of the cemetery of an extensive tribe—the outlyers of the Necropolis that we are now about to enter. As the eye travels over the undulating surface of the ridge that constitutes the boundary line of the coombes on either side, it detects here and there the swelling outlines of the tumuli which are the sepulchral remains of the early inhabitants of the district. Invariably they crown the summits of the ridge, and command a glorious panorama, presenting the finest combinations of scenery. Looking inwards you note the alternations of hill and valley, of wood and water, of heathy upland gradually merging into sunny pasture, and stretching out as far as the eye can reach; whilst if you view the prospect sea-wards it will be found to embrace the whole range of the great bay of Dorset and Devon, extending from Portland on the east to Berry Head on the west, and bounded on either side by coast scenery of the finest character. An inspection of the site of these tumuli serves to show that the position selected for them is not accidental. I have mentioned the fact that they crown the swelling summits of the hill, whilst again they are absent in the gentle hollows that occur between the undulations; and we can scarcely avoid the inference either that the brave warrior was buried on that spot which was within sight of the scene of his deeds of prowess, in order that his companions in arms, as they looked upon his memorial, might be incited to emulate his valour; or else, that the mighty hunter was laid to sleep in that resting-place, from which his friends fondly hoped that his spirit would still look down upon the wooded slopes of the vale beneath, where perhaps the wild red-deer had often yielded to his skill in the chace.

In his description of the antient barrows of Denmark Worsae says:*—"The barrows of this (the bronze) period were placed, wherever it was possible, on heights which commanded an extensive prospect of the country, and from which in particular the sea could be distinguished. The principal object of this appears to have been to bestow on the mighty dead a tomb so remarkable, that it might constantly recall his memory to those living near; while, probably, the fondness

* Worsae's *Primeval Antiquities of Denmark*, p. 97.

for reposing after death on high and open places may have been founded more deeply in the character of the people." A similar peculiarity appears to have distinguished the pimeval burial-houses of Scandinavia.*

As we proceed on our journey eastwards we reach the summit of Farway Hill, where, at a short distance to the left of the road, there is a circular entrenchment, known as Farway Castle. It is about 200 feet in diameter, and is surrounded by an *agger* of low elevation, with a shallow fosse on the outside. We have here, probably, the remains of the enclosure within which resided the tribe whose sepulchralia we are about to examine, and who held this fortified position as a defensive place of refuge in case of a sudden raid by an enemy. Encircling this castle is a group of ten or twelve barrows formed of circular bowl-shaped mounds, rising gradually from the level of the ground towards the centre; they vary from 40 feet to 80 feet in diameter, and attain a perpendicular height, which ranges from four or five to ten or twelve feet. Some members of this group of barrows were partially destroyed when the high road across the hill was made at the commencement of the present century, (for up to that time a trackway only had existed,) and at the same time, tradition says, that sepulchral urns were discovered, none of which, however, were preserved. A glance at the surrounding district suffices to show that the advances of agriculture, as it has made its way up the hill slopes, has promoted a wholesale destruction of these grave-mounds. Here and there a field may be observed which has been reclaimed from the moor-land waste, the level surface of which bears no evidence of sepulchral monuments; whilst immediately contiguous to the hedges that bound the field tumuli are numerous; the conclusion seems irresistible that others were destroyed, and all traces of them obliterated, when the field was enclosed. Wherever the once verdant surface of the down has disappeared beneath the ravages of the plough, there have barrows been levelled, and the vestiges of the antient inhabitants ruthlessly destroyed.

Continuing our journey in the same direction, we arrive at that part of the hill known as Broad Down, where, by the kind permission of Sir Edmund S. Prideaux, Bart., it was resolved that excavations should be made in the presence of the members of the Association.

I will now proceed to describe three barrows in the order in which they were examined.

* Nilsson's *Primitive Inhabitants of Scandinavia;* translated by Sir John Lubbock, Bart., p. 13.

The first [A] was situated in a field to the east of the high road, overlooking the beautiful vale known as Roncombe Gurt; it measured eight feet in perpendicular height, and ninety-four feet in diameter; around it there appeared to be traces of a shallow ditch or fosse. The action of the plough had gradually worn down the surface of this barrow, so that its height had been reduced by some two or three feet, and the fosse had become well-nigh obliterated, although the mound still retained its circular form and symmetrical curvature. Since the excavations were made, I have observed that the remains of a circle of large boulders may still be traced around a neighbouring barrow; these stones are firmly bedded in the tough peaty soil, and are partially overgrown with heather and furze. They resemble in character the stones that are still to be met with in the neighbourhood, though probably collected from different places, there being grey weathered smooth stones from the surface of the moor, and which had once been exposed to the eroding influence of the atmosphere, whilst again there are angular masses of flint or chert which had been quarried in the neighbouring hill-sides. It appears probable that at least all the larger members of this group of grave-mounds were once protected by a circle of boulders placed at regular intervals around the base of them, a peculiarity that assimilates them to some tumuli in Northumberland that have been lately explored.* In most cases these stones have long since been carried away to be used for building purposes, or to be broken up for the repair of the roads.

Operations were commenced by cutting a trench four feet wide through the centre, from south-east to north-west. The mound proved to be formed of alternate layers of peat and blue clay, which the workmen said did not belong to the locality. It appeared never to have been previously disturbed. No indications of a deposit became apparent until the natural surface of the ground was reached at the centre of the barrow; a layer of charcoal, apparently the burnt remains of small sticks, or brushwood, such as the surrounding furze and heather would supply, yielded the first intimation of an approaching "*find.*" Interspersed with the charcoal were nodules of ruddle;† beneath it was a thin ferruginous seam, perfectly

* See an article entitled *Descriptions of Cairns, Cromlees, Kistvaens, and other Celtic Monuments.* By Captain Meadows Taylor. *Transactions of the Royal Irish Academy*, vol. xxiv.

† Red ochre or red Hœmatite. A stratum of this ore occurs at Peak Hill, near Sidmouth, about six miles distant from Broad Down. Mr. Bateman

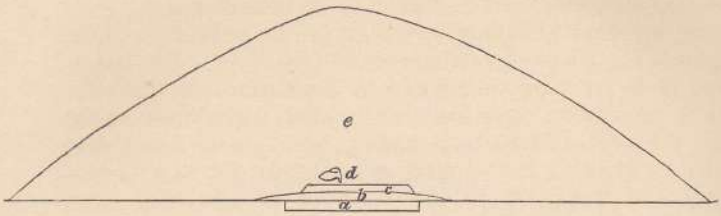



FIG. 1.—SECTION THROUGH THE CENTRE OF [A] BARROW.

*a*. Pavement of flint stones.
*b*. Deposit of charcoal.
*c*. Layer of calcined bones.
*d*. Cup.
*e*. Mound of clay and earth irregularly stratified.

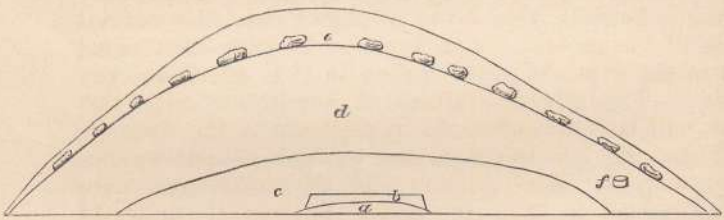



FIG. 2.—SECTION THROUGH THE CENTRE OF [B] BARROW.

*a*. Deposit of charcoal.
*b*. Layer of calcined bones.
*c*. Bed of clay and earth.
*d*. Burnt earth and charcoal.
*e*. Layer of stones capping the mound. Probable position of incense cup.

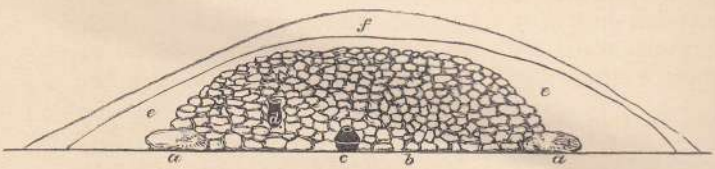



FIG. 3.—SECTION THROUGH THE CENTRE OF [C] BARROW.

*a*. *a*. Circle of large boulders.
*b*. Cairn of flints.
*c*. Urn.
*d*. Drinking Cup.
*e*. Burnt earth and charcoal.
*f*. Covering of surface earth.

R. Kirwan, del.

solid, and hard like stone, which possibly might be the result of heat. In this, and the two tumuli to be hereafter described, iron ore occurred abundantly, either in the form of a thin band, or in the shape of nodules of iron pyrites.* The latter mineral is of common occurrence on the surface of the hill, but it is present in these barrows in such abundance as to suggest the probability of its having been placed there designedly.* Possibly it was then, as now, regarded as a 'thunderbolt,' and belonged to the class of objects that was supposed to have a talismanic virtue. Beneath the bed of charcoal just mentioned was a layer of flint stones, placed with some regard to order side by side, so as to form a kind of pavement 13 feet by 9 feet.† The interstices between the stones were filled up with blue clay, which in some instances had become baked by the action of the fire when the funeral pyre was kindled; from the same cause the surface of the stones, when not protected by the clay, had been partially vitrified. Beneath this layer of stones was the natural surface of the ground, which appeared to have been pared down to the depth of a few inches, as if to afford an even surface. The general features in connection with this barrow will be best understood by reference to the diagram. (See Plate i. fig. 1.) Increased care was now used as we proceeded with the investigation; and the excavations were steadily carried on until we reached the original surface of the ground, exactly below the centre of the mound, where we discovered the interment. It consisted of a simple deposit of calcined bones resting upon the charcoal, which spread out from the bones for some distance, and covered the layer of flint stones which formed the hypocaust. Immediately contiguous to this deposit, raised slightly above it, and a few inches to the east, a drinking-cup was uncovered. Fortunately it was removed in a state of complete preservation, with the exception only of a slight indentation on the rim, which the workman made with his pick-axe. On the removal of this cup it was taken to a neighbouring cottage, and as it be-

suggests in *Ten Years' Diggings*, p. 179, that ruddle was probably used as a war-paint by the Antient Britons. He mentions the occurrence of a nodule in a barrow at Castern, "which, from its abraded appearance, must have been in much request for colouring the skin of its owner."

* In a list of the *Vestiges of the Antiquities of Derbyshire*, tabulated by Sir John Lubbock in his work on *Prehistoric Times*, several instances are mentioned in which nodules of iron pyrites were found in barrows.

† A barrow opened at Tenby, and described as paved with stones, is mentioned in *Arch. Journ.* vol. x. p. 76. See also Warne's *Celtic Tumuli of Dorset*, p. 41, wherein the author, in describing the excavation of a barrow, says, "A portion of the base of this mound was rudely paved."

gan to crack and warp by exposure to the atmosphere, it was immersed in water. This very rare and curious relic measures $3\frac{5}{8}$ inches in height, and attains at its greatest diameter, which is at the mouth, a width of 3 inches; its capacity is about a gill. (See Plate ii. fig 1.) The form of the bowl is ovate or bell-shaped, tapering downwards from the rim, and terminating in a cone; originally the periphery was circular, but it has become in a slight degree distorted by the post-mortuary pressure of the earth beneath which it lay. The ornamentation consists externally of four series of hoop-like rings that encircle the bowl in a plane parallel to the rim; of these the first, consisting of three rings, occurs immediately beneath the lip; a second course, consisting of four rings, is found round the centre of the bowl, which thereby is divided into an upper and lower section; a third course, consisting of three incised lines, is situate at about the centre of the lower section of the bowl, whilst at the apex of the cone is a terminal ornament of three concentric circles. (See Plate ii. fig. 2.) The border of the cup is ornamented along its interior margin by a simple pattern of two parallel chevrony zigzags, that run beneath a single horizontal incised line. The handle, which is of one piece with the bowl, is too small to admit of the insertion of a finger, and was probably intended to be used for a string-hole, as a means of suspending the cup from the shoulder or waist of its owner. It measures $1\frac{3}{4}$ inches in length, attains a mean breath of $\frac{3}{4}$ inch, and is about a $\frac{1}{4}$ inch in thickness; its ornamentation consists of two upright bands, each of which is formed of two parallel lines that are continued along either edge upon its exterior surface.

A curious and interesting question arises as to whether this cup is hand-made or lathe-made.* The difficulty of forming such a vessel on the lathe, so as to leave the projecting handle (which, it will be remembered, is of one piece with the bowl) would at first sight appear to be almost insurmountable, and would suggest that it is hand-made. And yet, upon a close examination of the bowl of the cup, the incised lines that form its ornamentation occur with such regularity as almost to preclude the possibility of their having been carved by hand; moreover also, marks similar to those which a rotating tool would produce may, I think, be traced within the interior

* In Wilde's *Catalogue of the Museum of the Royal Irish Academy*, pp. 217 and *sq.*, there occurs a description of several antient wooden methers or circular drinking-cups; they are mentioned as "of a single piece, most of which are turned on a pole-lathe, and of various sizes from those capable of holding about a quart of fluid measure, to others not larger than a wine-glass."

Fig. 1.—DRINKING-CUP, FOUND IN A BARROW AT BROAD DOWN, FARWAY, NEAR HONITON.

(Orig. size. Albert Memorial Museum, Exeter.)

Fig. 2.—BOTTOM OF THE CUP, SHOWING THE TERMINAL ORNAMENT.

of the vessel. This latter opinion is confirmed by that of a skilful practical turner, to whom I took an opportunity of submitting the cup. He expressed himself satisfied that it had been made on a pole-lathe, and added that there would be no difficulty in turning the upper part so as to leave a projection that would admit of being afterwards fashioned by the chisel, and cut through into a handle.*

The excavations had reached this point when the members of the Association arrived on the morning of 31st July. Naturally, the cup was an object of great interest, and speculation was rife as to the material of which it was composed. At first it was thought to be made of pottery ; when it had become dry by exposure to the atmosphere, it presented the appearance of wood or of bog-oak. On testing with nitric acid, a very small fragment that had become detached from the cup, it was observed to blacken in the presence of the acid ; this was a proof that carbon entered largely into the combination of the material, and that it had an organic origin. A few days after its disinterment, I availed myself of an opportunity that offered of sending the cup to London with a view to obtaining from the authorities at the British Museum an opinion as to its material. It was submitted to the inspection of Doctor Birch and Mr. Franks, by both of whom it was considered to be formed of Kimmeridge shale. Subsequently it was exhibited at the International Congress of pre-historic Archæology, by the members of which it was pronounced to be quite unique of its kind, although some doubts were expressed as to the material of which it was made. Afterwards it was submitted to Professor Tennant, and also to Mr. Etheridge, one of the curators of the Museum of Economic Geology in Jermyn Street, by both of whom an opinion was expressed to the effect that it was formed from a lump of Bovey Tracey lignite. Under these circumstances, I referred the question to W. Pengelly, Esq., F.R.S., of Torquay, who has devoted much attention to the beds of Bovey lignite, and who contributed a monograph thereon to the transactions of the Royal Society. Mr. Pengelly writes as follows :—"I was present when the Broad Down tumuli were opened in July last, and saw the vase in question very soon after it was found. I confess that I am very sceptical about its being formed of Bovey lignite ; and this, partly because of my recollection of the vase, and partly on account of the provoking tendency of the lignite to crack and break into pieces on exposure to the

* The history of the lathe in pre-historic times is an interesting subject for research.

air. This, however, I hope to test very soon, by getting a vessel turned of lignite, if possible." The opinion thus expressed by Mr. Pengelly is confirmed by that of John Divett, Esq., proprietor of the Bovey lignite beds. He writes as follows:—"With regard to the little vase that you mention, I do not for a moment believe that it was turned from Bovey coal. That the Bovey coal is '*torno rasile*' I doubt not; but I know not the conditions under which a vessel turned out of Bovey coal could hold together for many years. I have seen a piece, well varnished, remain in shape for some time, but even that protection does not last long."

It may not seem irrelavent to the subject under consideration to notice the singular little cup described as of oak, found in 1767 in the King Barrow, Stowborough, near Wareham, Dorset. The interment was in this instance in a large hollow trunk of an oak; several human bones, unburnt, lay in this depository, wrapped in deer-skin. No weapon or traces of metal were found, with the exception of a small portion (as stated) of gold lace. The cup measured about 2 inches in depth; the mouth was elliptical in form, the major axis measuring 3 inches, and the minor 2 inches; it was ovate or bowl-shaped, and had probably been placed at the head of the corpse; the exterior surface was engraved with horizontal and oblique lines. Although described by Mr. Hutchins as formed of oak, it is more probable, as suggested by Dr. Wake Smart, that it may have been of the Kimmeridge shale of the district.* Worsae† describes an interment very similar in character, that occurred in a barrow in Denmark: it was laid in the stem of an oak that was very thick, about ten feet in length, and split in two; several remains of garments were found, a lock of brown human hair, a bronze dagger, palstave, &c., and "a small round wooden vessel, with two handles at the sides, in which was found something which had the appearance of ashes."

In a paper entitled "*The Kimmeridge Coal-money*," contributed to the Purbeck Society in 1857, by the Rev. John H. Austen, there occurs a description of vessels composed of Kimmeridge coal or shale that have been already discovered. The author inserts an extract from a communication made by

* This cup is figured in Hutchins's *Hist. Dorset*, vol. i. p. 26, first edition, 1774; Camden's *Britannia*, vol. i. plate 11, p. 76, *edit.* Gough. See also the account by Mr. Hutchins, *Gent. Mag.*, vol. xxxvii. p. 53; Warne's *Celtic Tumuli of Dorset: Tumuli opened at various periods*, p. 4. This remarkable relic came into the possession of Gough; it is not known whether it still exists.

† Worsae's *Primeval Antiquities of Denmark*, p. 96.

(the late) Professor Henslow to the Cambridge Antiquarian Society in the year 1846, on the materials of two sepulchral vessels which were found at Warden, in Bedfordshire. He says, "Upon looking over some fragments of Romano-British pottery from the neighbourhood of Colchester, I met what appears to have been part of a large *patera*, or at least some vessel with a flat surface and a shallow projecting rim. This fragment is of the same material as the Kimmeridge 'Coal-money;' and bears the impression of a fossil ammonite (?) distinctly marked upon its surface. Upon drying, it has become cracked and *warped*, precisely in the same manner as we see specimens of the 'Coal-money.'"* The same author describes two vessels which were found at Warden, in Bedfordshire, now in the possession of the Cambridge Antiquarian Society, and which, he says, are "composed of a bituminous shale, in all respects similar to that which occurs in the Kimmeridge clay, and from which the coal-money has been turned."

An account of the discovery of two other vessels formed of Kimmeridge coal is thus given by Albert Way, Esq., F.S.A.: "In December 1856 two remarkable vessels, formed of Kimmeridge coal or shale, were discovered in immediate proximity to Roman remains at Great Chesterford, Essex, and are now preserved in the museum at Audley End. The vessels are so perfect, and the condition of the material so compact, that they were for some time concluded to be of wood. By exposure to the air the coal has cracked and exfoliated, precisely as the 'Coal-money' usually does. No doubt can exist of the identity of the material. The vessels have been carefully compared, by many persons who have seen them, with the 'Coal-money,' for which we are indebted to Mr. Austen. The material is precisely the same. . . . . The vessels of shale are remarkable as having been turned out of blocks of such large dimensions, whereas the vases found at Warden, in Bedfordshire, were formed of several pieces rabbeted together."†

Mr. Way also informed me that in the museum at Boulogne is a covered box, of about four and a half inches in diameter, which he believes to be made of Kimmeridge coal, from the exact identity of material with that of the vessels found at Great Chesterford.

By the friendly assistance of the same excellent authority, who speaks *ex cathedra* on this and kindred subjects, I am

* *Papers read before the Purbeck Society*, by the Rev. John H. Austen, p. 93.
† *Archæological Journal*, vol. xiv.

enabled to supplement this list of vessels formed of Kimmeridge shale by other examples, that may afford the means of suggestive comparison with the cup before us. In draining a withy-bed at Rempston, near Corfe Castle, in the year 1845, the workmen came upon a deposit of Kimmeridge coal-money (so called) that occurred beneath a bed of peat; and with it was a vessel, described as "like the bowl of a large glass or rummer, and with the bottom or stand broken off." Here we have an unrecorded instance of a cup, similar to that found at Broad Down, indubitably of Kimmeridge shale. Now as the 'Coal-money' with which this cup was associated is an undeniable proof of turning craft,* it is reasonable to suppose that the cup here alluded to was an imperfect or damaged object, thrown aside with the refuse of the lathe. The remark that "the stand was broken off" may probably refer to the portion of the shale that pivoted on the lathe, and which would have been turned off, or cleared away smooth, had the vessel not been rejected as a failure before its completion. In explanation of the use of this material in the manufacture of cups, *paterœ*, and personal ornaments, for which it appears to present no peculiar advantages, Mr. Austen suggests that possibly a superstitious value attached to it. This opinion is based on the fact that amulets of Kimmeridge coal, *armillæ*, beads and other such ornaments have been frequently found on the floor of barrows.† A large slab of this material has occasionally occurred as the covering of an interment in a tumulus: and the same writer quotes the authority of Pliny, who mentions that the *gagates* of Britain, a mineral to which the lignites and shales of the Dorsetshire coast and of Devon bear a certain family resemblance, possess amongst other medicinal or magic virtues, that of driving away serpents.‡

In noticing other objects which appear to present features of analogy with the drinking cup found at Broad Down, and that by comparison may assist us in arriving at a knowledge of the relative date to which it should be referred, I may allude to the remarkable discovery of a cup of gold that was disinterred from a barrow at Rillaton, in Cornwall, in the

* Kimmeridge Coal-money is now known to be the central part that was turned out of rings, amulets, *armillæ* and other circular ornaments that were lathe-made. It was thrown away as refuse.—Rev. J. H. Austen, *l.c.*, p. 92.

† Some of these ornaments are figured in Sir R. C. Hoare's *Antient Wilts*, vol. i. plate 34. See also *Transactions of the Archæological Association*, 1845, in which occurs a description of two ornaments of Kimmeridge coal found in a barrow on Alsop Moor, and which, the author suggests, "were attached to the dagger as charms."

‡ Pliny, *Nat. Hist.* lib. xxxvi. cap. 19.

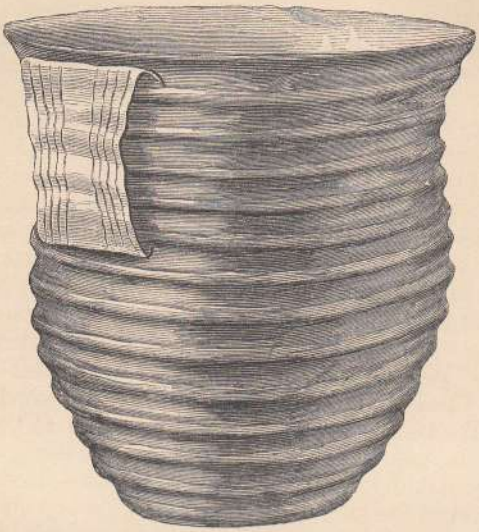


FIG. 1.—GOLD CUP, FOUND IN A BARROW IN RILLATON MANOR, CORNWALL.

(⅔ Actual size. Now preserved at Osborne.)

FIG. 2.—BOTTOM OF THE CUP, SHOWING THE TERMINAL CORRUGATIONS.

Exhibited by permission of the Queen, and of the Prince of Wales, at a meeting of the Royal Archæological Institute. June 7, 1867.

year 1837. It is thus described by E. Smirke, Esq., Vice-warden of the Stannaries:*—"The mound or barrow was about thirty yards in diameter. After removing part of the superincumbent earth and stones, they (some labourers in search of stone for building) came upon a vault or cist of rough masonry, forming an oblong four-sided cavity, consisting of three vertical stones on each of the longer sides, of one stone at each end, a large flat one below, and a large flat covering stone above. . . . . Within the vault, and about 3½ feet from the north end were found two vessels lying near each other, one being of earthenware, the other and smaller being the gold cup before us. . . . . This highly curious cup, —so far as I am aware, unique—measures in height 3¼ in.; diameter at the mouth 3⅜ in.; at the widest part of the bowl 3½ in. The handle measures 1½ in. by ⅞ in., greatest width. The weight of the cup is 2 oz. 10 dwts.; its bullion value about £10. The handle, which has been a little crushed, is attached by six rivets, three at the top and three at the bottom, secured by small lozenge-shaped nuts or collars. This appendage, it should be observed, seems, at least in its present state, fit only for means of suspension, barely affording sufficient space for the smallest finger to be passed through it. Indeed, the cup does not stand firmly on its base, and I have doubts whether it was intended to do so. On the bottom of the cup there are concentric rings or corrugations, like those on the rest of it, around a little central knob about ¼ in. diameter."

By the courteous permission of the Society of Antiquaries, I am enabled to append an illustration of the gold cup found at Rillaton (Plate iii. fig. 1), and also a figure of the bottom of the cup showing the terminal corrugations. (Plate iii. fig. 2.) Many points of resemblance between this cup and that of Broad Down will be readily observed; as, for instance, the general outline, which in both cases is ovate or conical; the rounded base, and also the character of the ornamentation; these and other pecularities which will be suggested by a comparison of the illustrations are indicative of a certain general resemblance between the two examples before us.

In searching for other examples of cups or vessels which in character are not dissimilar, we must not fail to notice the amber cup that was found in a barrow at Hove near Brighton, in the year 1856. (See Plate iv. fig. 1.) It is thus described by Barclay Phillips, Esq.:† "On reaching the centre

* *Journal of the Royal Institution of Cornwall*, No. ix., 1868.
† *Archæological Journal*, vol. xiii. p. 183.

of the tumulus, about 6 feet east of the road to Hove station, and about 9 feet below the surface, in stiff clay, the labourers struck upon a rude wooden coffin, 6 or 7 feet in length, deposited east and west, and formed with boards apparently rudely shaped with the axe. The wood soon crumbled to dust; a knot, however, or gnarled knob was preserved, and ascertained to be of oak. In the earth with which the coffin was filled many fragments of bone were found, seemingly charred. About the centre the following objects were discovered:—

"(1.) A cup or bowl, supposed to be of amber, with one small handle near the rim, sufficiently large to pass a finger through it. A band of five lines runs round the rim, interrupted by the handle. The height of the cup is $2\frac{1}{2}$ inches, diameter $3\frac{1}{2}$ inches, average thickness $\frac{1}{5}$ inch. The interior surface is smooth, and the appearance would indicate that the cup had been formed on a lathe, which, however, seems scarcely possible when the position of the handle is considered. The cup would hold rather more than half a pint.

"(2.) A stone axe perforated for the haft. It is of an unusual type, and is wrought with much skill; the length of it is 5 inches.

"(3.) A small hone (?) of stone, measuring $2\frac{7}{10}$ inches in length, perforated at one end.

"(4.) A bronze blade of a type which has frequently occurred in Wiltshire, and in other parts of England. The labourers state that the coffin rested on the natural soil—stiff yellow clay, whilst the barrow seemed to have been formed of the surface mould of the locality and rubbish heaped together, with considerable quantities of charred wood."

If the reader will refer to Plate iv. fig. 1,* which represents this amber cup, and also to fig. 2, which represents its handle, it will be seen at once that we have here again a certain constructive resemblance with the treasure trove of Broad Down. The rounded base, the ovate form, the smallness of the handle, and the character of ornamentation, all concur in pointing to a general approximation of type.

Among other relics that claim notice in connection with the subject before us two small urns, of a shape that has been regarded as peculiarly Irish, deserve attention, as presenting certain features of analogy with the peculiar cup found at Broad Down, and also with other vessels that have been mentioned. These Irish *fictilia* are formed with a pointed base, so that, like the antique *rhytium*, or the fox's head

* Contributed through the kindness of the Rev. T. Powell, Honorary Secretary of the Sussex Archæological Society.

FIG. 1.—AMBER CUP, FOUND IN A BARROW AT HOVE, NEAR BRIGHTON.

(½ Orig. size. Brighton Museum.)

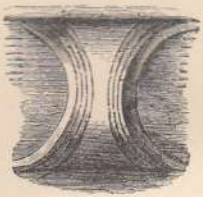


FIG. 2.—FRONT VIEW OF THE HANDLE OF THE CUP.

Reproduced by permission of the Hon. Secretary of the Sussex Archæological Society.

drinking-cup of modern times, they could not stand erect. A similar fashion appears in some drinking vessels of glass of the Anglo-Saxon period. Of one of the little vessels to which allusion has been made a representation is given by kind permission of the Archæological Institute.* (Plate iv. fig. 3.) It was found near Castlecomor, Kilkenny, in quarrying stones; it had been deposited in a small circular cist formed of stones, resting upon a slab about 2 feet square; another slab covered the top. Within this cist there was an earthen cylinder, described as without a bottom; this part may possibly have perished, or have been broken away. This urn was rudely scored with a chevrony pattern, and within it had been placed the small vessel that rested on its mouth. It is of hard gray or ash-coloured ware, and even in its present broken state shows considerable elegance in form. The lip is unusually broad, and projects so as to render the little vase apparently ill-suited for the purpose of a drinking-cup. There is no handle. The lower part, ribbed like a melon, tapers to a point at its base. Around it and within the cylinder there were many calcined fragments of bones, of which also a quantity were found outside the cist. The Rev. James Graves, Secretary of the Kilkenny Archæological Society, by whom this discovery was made known to the Institute in London, observed that this specimen bears close resemblance in size and shape to that found near Bagnalstown, county of Carlow, a figure of which was published by the Royal Irish Academy.† This object is now in their Museum. Mr. Graves remarked that the small funeral vases of this type seem intended to have been placed inverted, perhaps over the ashes of the heart, and within larger vessels containing the other relics of the body. The fragments of the large urn are of red imperfectly-baked ware; the bones enclosed within it comprised fragments of the rib of an adult, with the phalangial bones of an adult; the whole had been exposed to cremation. This little urn may have measured in its perfect state about 3 inches in height.

The vessel referred to by Mr. Graves as having been discovered at Bagnalstown is thus described by Sir R. Wilde: "When reversed, the bowl (which is rounded at the base) presents, both in shape and ornamentation, all the characteristics of the Echinus, so strongly marked that one is led to believe the artist took the shell of that animal for his model. . . . .

* Reproduced from the *Journal Arch. Institute*, vol. viii. p. 200.

† *Proceedings*, vol. iv. p. 36.

It possesses the rare addition of a handle,* which has been tooled over like the rest of the vessel. This beautiful little urn stands but $2\frac{1}{8}$ inches in height, and is $3\frac{3}{4}$ inches across the outer margin of the lip, which is the widest portion. Its decoration consists of nine sets of upright marks, each containing three cross-barred elevations, narrowing towards the base which is slightly hollowed; the intervals between these are filled with more elaborately worked and minute impressions, each alternate space being further ornamented by a different pattern. A rope-like ornament, surmounted by an accurately-cut chevron, surrounds the neck. The lip, which is nearly flat, is one of the most beautifully ornamented portions of the whole; a number of small curved spaces, such as might be made by the point of the nail of the forefinger, surround the outer edge, and also form a similar decoration on the inner margin; upon the flat space between these, somewhat more than half an inch broad, radiate a number of very delicately cut lines."†

Such then are the particulars that I have been enabled to collect concerning cups or vessels associated with antient interments, and which afford materials for useful comparison with the specimen from Broad Down. At the conclusion of the memoir I will briefly summarise these facts, and point out the inferences as to the relative age of this barrow and its contents which these notices tend to establish.

It is worthy of remark that the tumulus from which this cup was taken was entirely barren of any further results. Subsequently we extended laterally the trench that had been originally cut through the barrow, and also carried out a careful examination for a considerable distance around the centre, but without finding another deposit. Not a vestige of pottery, no flint flake, worked flint, or weapon of any kind was discovered, which could afford a further clue to the people by whom this tumulus was built, or to the relative age in which they lived.

We next proceeded to examine a barrow [B], which lay about one hundred yards to the south-west of that which we have just described. It was about ninety feet in diameter, had been originally surrounded by a shallow fosse, and was eight feet in perpendicular height at the apex of the mound. Owing to the land being under cultivation, the height of this tumulus

* This is small and agrees in typical character with that of many of the cups already described.

† *Catalogue of the Museum of Antiquities of the Royal Irish Academy*, p. 179.

FIG. 1.—SMALL OVATE VESSEL, FOUND IN A CIST AT CASTLE COMER, KILKENNY, AND A FRAGMENT OF A CYLINDRICAL URN, IN WHICH IT WAS ENCLOSED.

(Orig. size.)

FIG. 2.—INCENSE CUP, FOUND IN A BARROW AT BROAD DOWN, FARWAY, NEAR HONITON.

(Orig. size. Albert Memorial Museum, Exeter.)

was much reduced. As in the former barrow [A], we commenced by cutting a section three feet wide from the south towards the north through the centre, and afterwards extended it towards the east and west, for two feet on each side of our first section, so as to make the trench seven feet wide. As the mound was explored, we came upon signs of burning, at first slight, but gradually increasing in abundance, until at the centre burnt earth and charcoal, with a few calcined flints at intervals, formed almost the entire mass, and presented a beautiful section. After passing beyond the centre, when we approached the periphery towards the north, we again came upon the surface earth with which the barrow had originally been capped. We also observed a layer of large flat stones overlying the burnt materials of the mound. For further particulars concerning the structure of this barrow, the reader is referred to the diagram, Plate i. fig. 2.

Thus far the preliminary exploration had been made when the members of the Association visited the tumulus, and up to this time the excavations were barren of result; no trace of interment either by cremation or inhumation, no implement of any kind had been found in this barrow. However, whilst one of the visitors, Mr. Blackmore, of Torquay, was walking around the tumulus inspecting the works in operation, he discovered amongst the *débris* thrown out by the workmen from the trench a very perfect example of the so-called "incense-cup." It is 2 inches high, 3 inches wide at the mouth, and averages in thickness about $\frac{1}{2}$ an inch. In colour it is pale brown, formed of finer and better clay than any of the other *fictilia* to be hereafter described, and, though hand-made, shows a certain degree of skill in the ceramic art, and in some measure approaches the Roman terra-cotta. (Plate v. fig. 1.) On the external surface it is decorated with straight lines arranged in a pattern. The ornamentation is divided into compartments by incised perpendicular lines, between which there occasionally occur herring-bone markings, made by some narrow tool, perhaps a pointed flint, or bone, which has been pressed into the soft clay. The perpendicular lines are terminated by a horizontal band, encircling the vessel above and below, parallel to the rim; the irregularity of these hoops points to the conclusion that they were not formed on the wheel. This is well represented in the illustration, Plate v. fig. 1. The rim is ornamented by a single row of incised angular markings arranged herring-bone fashion. Additional interest attaches to this beautiful specimen of early British mortuary vessels, from the fact that the under surface of it

is curiously wrought with incised lines, arranged in four quadrants of the circle, which again are formed by lines radiating from the centre towards the circumference, and constitute an imperfect cruciform ornament.

Attention has lately been called by Mr. Way* to the fact that these mysterious little sepulchral vessels, when found at all, which is rare, are occasionally ornamented on the under surface with a decoration that is characterised by the cruciform type.† Such is the case with the specimen from Broad Down now under consideration. By reference to Plate vi. fig. 1, which gives an illustration of the under side of this "incense-cup," it will be observed, that of the radiating lines with which it is scored, the four principal lines meeting in the centre form a cruciform ornament. It should be added that on one side of this vessel are two small perforations. (Plate vi. fig. 2.) This peculiarity is common with vessels of this particular type; in most cases they occur on one side only, although in many examples they are found on both sides.

The question has often been asked as to what use the "incense-cup" was put. It was suggested by Sir R. Hoare that it was intended to contain perfumes or unguents suspended over the funeral pyre at the time of cremation, so as to disguise the disagreeable odour of the burning corpse.‡ From the circumstance that vessels of this particular type are generally provided with single or double lateral perforations, and also that they are more or less elaborately ornamented on the under surface—a peculiarity shared, I believe, by scarcely any sepulchral pottery of other classes, it appears very probable that they were intended to be suspended above the level of the line of sight, possibly at the funeral rites and feasts that accompanied the cremation of the body upon the pyre. But that they served the purpose of "thuribles" or "unguentaries" appears to be more than doubtful; for where, it may be asked, could our forefathers have obtained a perfume sufficiently powerful that, if concentrated within a vessel so small as the incense-cup, would have served the purpose intended? No one claims for these cups that they were "*Assyria nardo uncti*,"

* *Archæologiæ Cambrensis*, third series, vol. xiv.

† For further particulars concerning these vessels the reader is referred to an article on "*The Antient Interments and Sepulchral Urns found in Anglesea and North Wales*," by the Hon. W. Stanley, M.P.; with additional observations by Albert Way, M.A., F.S.A., *Archæol. Journal*, vol. xxiv. p. 22, See also Sir R. C. Hoare's *Antient Wilts*, vol. i. plates 24 and 25; also *Arch. Journ.* vol. vi. p. 319. Warne's *Celtic Tumuli*, plates 1 and 3; *Intellect. Obs.* vol. xii. p. 263.

‡ *Antient Wilts*, vol. i. p. 209.

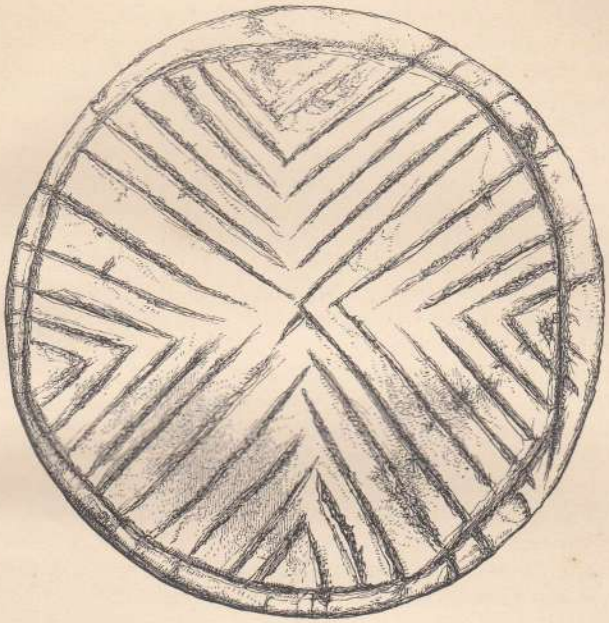


FIG. 1.—INCISED ORNAMENT ON THE BOTTOM OF AN INCENSE CUP, FOUND IN A BARROW AT BROAD DOWN.

(Orig. size.)

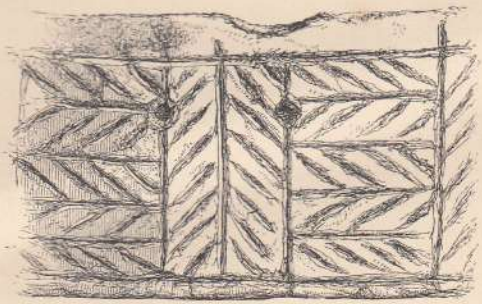


FIG. 2.—REPRESENTING THE TWO PERFORATIONS ON THE SIDE OF THE INCENSE CUP.

and yet surely the *flora* of Broad Down must have greatly degenerated, if it were possible, in those far off days when cremation was practised, and war-paint was the only personal decoration, to distil a "*nardi onyx*" from the vegetation of the moor. At present heather, furze, and bracken are its staple products ;—

"Vix humiles apibus casias roremque ministrat."

To revert, however, to the particular example of the "incense-cup" before us. In this case we are not left to conjecture the use to which it may have been placed, inasmuch as when it was discovered it was partially filled with calcined bones. These were so closely compacted together, that it were idle to conjecture that they became located in their present receptacle by accident. Apparently—almost certainly—they are the calcined bones of an infant, which *possibly* was buried along with its mother, that it might follow her to that land to which she was gone before, and there enjoy that maternal care of which it was deprived here.

Mr. Bateman observes "that the critical examination of all deposits of burnt bones would lead to much curious information respecting the statistics of suttee and infanticide, both which abominations we are unwillingly compelled by accumulated evidence to believe were practised in Pagan Britain." In reference to this quotation, Sir J. Lubbock observes,* "From the numerous cases in which the bones of an infant and a woman have been found together in one grave, it seems probable that, if any woman died in childbirth or while nursing, the baby was buried alive with her, as is still the practice among some of the Esquimaux tribes."

At the time of the discovery of this "incense-cup," it was suggested that the bones were probably not human, but were rather those of some small animal which had been sacrificed at the time of the cremation of the corpse. Unless the bones were removed from their receptacle—which cannot be thought of—it is scarcely possible to determine their character with certainty. It is true that many instances occur in which the bones of animals are found mingled with human bones amongst the contents of tumuli. In a work, before quoted, entitled *Ten Years' Diggings in Celtic and Saxon Grave-hills*, the author gives the results of the opening of no less than 237 barrows ; and although the remains of animals very commonly occurred, including those of the mole, wolf, dog, fox, polecat, stoat, weasel, badger, wild boar, horse, fallow-deer, rat, goat,

* *Pre-historic Times*, p. 116.

sheep, and cow, yet I find but one instance in which it is stated that these remains were burnt; nor can I find any instance, either in the work quoted or in any other work bearing upon this subject, in which the remains of animals after being burnt were preserved in sepulchral urns.* What Schoolcraft says of the North American Indians is true of our Keltic forefathers:—"Nothing that the dead possessed was deemed too valuable to be interred with the body. The most costly dress, arms, ornaments and implements are deposited in the grave, which is always placed in the choicest scenic situations—on some crowning hill, or gentle eminence in a secluded valley." They imagined a future world not altogether unlike the present, and in token of their affection for the dead, they laid by their side those things which in life they had valued most. The same pious feelings prompted them to place food within the grave, and also to sacrifice those animals which had been their companions here, in the hope that they would accompany their owners, and be of use to them in the life which they were thought to continue after death.

The author of *The Primitive Inhabitants of Scandinavia* informs us that the missionary Cranz mentions that the Greenlanders, even in his day, used to lay the head of a dog beside the grave of a child, in order that the soul of the dog, which can always find its way home, may show the helpless child the road to the country of souls. Whether this beautiful idea belonged to the Esquimaux or to the missionary is not stated; but, the author adds, it is at all events certain that the skulls of dogs have been found in Esquimaux graves, and also in other places. "The rude child of nature has a kind of presentiment, although dim and confused, of a continuation of life after death. But unable to soar to a purer and nobler conception thereof, he believes that the departed are destined to continue after death the same activity which marked their life in this world. Therefore he builds the same kind of dwelling for the dead as for the living; therefore he places them in the grave, in the same position which they were wont to take while alive in their hut, and therefore he hangs up or places beside them the implements of daily use."†

Whilst the experience gathered from the exploration of

* "We have numerous instances where a horse, ox, deer, boar, or dog, has been buried with a man."—*Notices of the Examination of Antient Grave-hills in the North Riding of Yorkshire*, by the Rev. Canon Greenwell. *Arch. Journ.*, vol. xxiii. p. 110.

† Sven Nilsson, *l.c.* p. 142.

sepulchral mounds in all parts of the world would thus lead to the expectation that the bones of animals may be expected to occur, associated in the tomb with those of men, yet the instances upon record of animal bones having been subjected to cremation are rare, and I can find no instance in which such bones were deposited in sepulchral vessels; these I believe were devoted exclusively to human remains. Of the few instances in which these "incense-cups" have been discovered containing bones, in each case it is suggested that the contents are the ashes of an infant.

Mr. Stanley describes an interment that was accidentally brought to light, on the sea-shore at Porth Dafarch, Holyhead Island. Beneath a large stone situate upon a hillock, an urn, described as resembling a bee-hive, was exposed to view; this unfortunately crumbled to pieces. Associated with it was a small vessel of the incense-cup type which contained ashes, and was fortunately preserved. The contents of this vessel were submitted to the late Mr. Queckett, the eminent microscopist, by whom they were unhesitatingly pronounced to be portions of the skeleton of a very young infant.*

Attention has already been called to the small Irish cup (p. 633) as presenting points of analogy with the drinking cup found in barrow [A]. Its diminutive size approximates it to the "incense-cup" type; and that it was a mortuary vessel appears from the circumstance that it contained bones, which are described as being those "*of an infant* or very young child. It was embedded in a much larger and ruder urn, filled with fragments of adult human bones: possibly they may have been the remains of mother and child."†

I have already mentioned that this incense-cup was thrown out by the workmen from the trench in which they were excavating without being noticed by them, and that it was afterwards accidentally recovered from among the *débris*. These little cups are usually found associated with or enclosed within larger sepulchral vessels; search was therefore made for the containing urn, but without avail. It was unlikely that so large an object as an urn should have escaped the notice of the workmen, and had it been accidentally broken by them the pieces would have remained. Two or three small fragments of pottery were afterwards found, but as they bore no signs of recent fracture we concluded that they were shards thrown in upon the grave at the time of burial.‡

* *Arch. Camb.*, vol. xiv.

† Wilde, *l.c.* p. 180. See also *Intellect. Obs.*, vol. xii. p. 265.

‡ Compare on this subject *Arch. Journ.*, vol. xxiv. p. 117.

From the position in which the incense-cup occurred I infer that it was originally deposited, along with its containing-urn, upon one side of the tumulus, far away from the centre, and probably at an inconsiderable depth below the surface. On the conversion of the Down from pasture into arable, the altitude of the barrow was greatly reduced by the action of the plough; thereby the urn, being thus exposed to the vicissitudes of the atmosphere, and to the alternations of drought, damp, and frost, would soon become disintegrated, even if it escaped destruction by the ploughshare; whilst the little treasure that was placed within it, being smaller, and also compacted of better material, was preserved, although its more bulky protector entirely perished. On a consideration of the facts here narrated, I was led to conclude that this interment, buried near the surface, far away from the centre of the mound, and partially destroyed by cultivation, was of a later date, and constituted a secondary interment; and although we had excavated the presumed centre of the barrow down to the natural surface of the ground, yet that we had not discovered the primary interment. We therefore commenced our excavations anew by removing all the soil that lay on the north-east side of the centre of the mound. Much time and an immensity of labour was necessarily expended in the execution of the work, but at length, after many days, we had the satisfaction of discovering upon the natural and undisturbed surface of the ground, a deposit of charcoal so abundant as to form a layer several inches thick, and more than three feet in diameter; fragments of charred oak were plainly discernible, the grain of the wood perfectly retaining its specific character; there also occurred a few pieces of ruddle mixed with fragments of calcined flint and chert, in many cases reduced to powder by the action of the fire. Resting upon this was a compact mass of incinerated bones, forming a deposit about 18 inches in djameter and an inch in thickness. Careful search was made, but no weapon of stone or metal, no fragment of pottery occurred—nothing, in fact, was found to reward us for our labour. A few flints and flint-flakes were brought to light, but I considered that none of them bore unequivocal marks of having been wrought or used by the hand of man. However, we had the satisfaction of knowing that we had at last solved the enigma, and arrived at the original interment. Doubtless it was intended to be in the centre of the barrow; that, however, had been lost in heaping up so large a mass of material, and hence our original section through the mound had missed the interment

and proved barren of result. The conclusion seems also perfectly obvious, that this tumulus covered at least two distinct burials; and inasmuch as the primary interment was entirely destitute of pottery, whilst the secondary interment had this accompaniment, it is quite possible that a long interval may have elapsed between the two burials, and that this mound may have been a time-honoured monument of antiquity when the secondary interment took place.

Our researches were once more resumed, when we discovered at a distance of about six feet south of the centre of the mound, within a few inches of the surface, and resting upon the layer of capping-stones, two large fragments of pottery. As they were devoid of ornamentation, we regarded them as portions of an urn—perhaps that within which the incense-cup was originally placed.

Here ended our exploration of tumulus B.

We now proceeded with the examination of a third tumulus [C], forming one of a group of nine, situate at a distance of about two hundred yards to the east of those already described, and occupying a part of the moor that has not yet been brought under cultivation. It is 70 feet in diameter and 6 feet high. On taking a careful survey of the ground, and preparing for operations, our attention was directed by the workmen to the fact that the summit of the mound appeared to "sound hollow." We therefore commenced by cutting a trench four feet wide in the direction indicated by the men, who worked with great energy in the expectation that their long-deferred hopes were about to be realized, and that the "crock of gold" with which these barrows are universally associated in the rustic mind was at length within their grasp. The periphery of the barrow proved to be formed of burnt earth, extending to a distance of about 6 feet laterally, and which, being soft and friable, allowed of rapid progress in the work of excavation. There occurred in it a few amorphous fragments of pottery which appeared not to have formed a part of any fictile vessel. We then came in contact with a central mass or cairn of flints, which rendered the work of examination most laborious, and the day being now far advanced, operations were soon afterwards discontinued. An early opportunity was taken of resuming the work, when we carried our trench through the central part of the mound, whereby we arrived at a knowledge of the plan on which it was constructed. (See Plate i. fig. 3.) The spot to be occupied by the tumulus was marked out by a circle of large boulders that apparently had been brought from the bed of the stream

which flows through the neighbouring valley of Farway. These boulders, (some of them so large that they were computed to weigh half a ton) were placed at intervals about three feet apart. Within this enclosure the interments were deposited, and a mass of stones was loosely piled upon them until the mound reached the required height; the whole was then covered with burnt earth to the depth of about a foot on the summit, and more abundantly on the sides, and was finally capped with a layer of surface earth, so as to give to the barrow a rounded outline, and conceal from view the cairn of stones beneath. The material thus employed in the construction of the barrow rendered its exploration both difficult and dangerous. Owing to the loose manner in which the stones were aggregated it was necessary to remove them by hand, one at a time, and much care had to be used lest the sides should fall in and crush those engaged in the work. In this instance again a great expenditure of time and labour occurred. As we approached the middle of the cairn indications of a "*find*" became apparent. Some large flakes of charcoal were observed between the interstices of the stones, and by proceeding cautiously with their displacement we came upon the fragments of an urn that had been crushed by the weight of the superincumbent mass. Probably this occurred at the time of the original deposition of the urn, for no provision had been made for its preservation; the surrounding stones had been heaped together without any regard to order, and were too small to admit of their being built into a protecting arch or cist. Around the urn were fragments of charcoal and patches of black unctuous mould, whilst underneath it was a deposit of burnt bones, free from ashes or any extraneous matter. Much care seemed to have been exercised in separating the human remains from the *débris* of the funeral pyre. But although the urn was thus mutilated when disentombed from its long hiding-place, yet sufficient remained to indicate its shape, size, and ornamentation. The fragments admitted of being put together so as to form a vessel that would be, if complete, 7 inches high, 6 inches wide at the mouth, and 7 inches wide at the base of the rim, which is overhanging, and is $\frac{5}{8}$ inch wide. The overhanging rim is characteristic of Keltic urns. (See Plate vii. fig. 1.) Below the rim the vessel swells out for 2 inches, and here it is nearly 8 inches in diameter; it then contracts towards the base, which is 3 inches in diameter. The ornamentation of the urn—if that term is admissible—is of the rudest character; the exterior is quite plain with the excep-

FIG. 1.—CINERARY URN (RESTORED), FOUND IN A BARROW AT BROAD DOWN.
(¼ Orig. size. Albert Memorial Museum, Exeter.

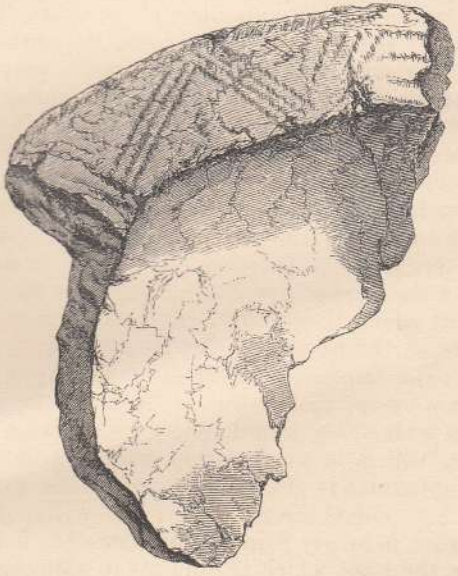


FIG. 2.—FRAGMENT OF URN, SHOWING THE ORNAMENTATION OF THE RIM.
(Orig. size.)

R. Kirwan, del.

tion of a single horizontal line of impressed cord or thong, which encircles it at that point where it attains its greatest diameter; the surface of the rim is filled in with diagonal and horizontal lines, that form an approach to the zig-zag pattern so common in the earlier examples of British mortuary pottery. (Plate vii. fig. 2.) The exterior edge of the rim is punctured by large dots or indentations at irregular distances, which appear to have been made with the point of a stick. The material of this vessel is in harmony with the rude character of its decorations. The paste of which it is compacted consists of red friable clay, without any intermixture of coarse sand or gravel, and is very imperfectly baked.* The fragments are brown or light red externally, and black within. The walls are rough and clumsy, whilst the base of it is nearly an inch in thickness. The irregularity of the form of the vessel would also betoken that it is hand-made, and was not moulded on the potter's wheel. Scattered among the materials of this barrow we afterwards found several other fragments of pottery, which exhibited a remarkable diversity in quality of workmanship; for whilst some were as rude and clumsy as the vessel just described, others were thinner, well tempered, and of fine texture. Some pieces of these were rough upon the surface, and of a dark brown colour; others were of a dingy black hue, as if begrimed with the smoke and soot of the funeral pyre; others again were of reddish hue, and were well baked, being almost as thin and light as modern pottery. In many cases the edges of the fragments exhibit numerous small pebbles or dark-coloured gravel, which was mixed with the clay to give it consistency. Some particles are still adherent to the surface in different places. In almost all cases the interior of the material, as shown by the fractured portions, is black.† Our work now proceeded for some days without interruption until the mass of stones was removed from the whole of the interior of the mound, so as to form a clear space about 20 feet in diameter. No indications of a further deposit were arrived at until, on the east side of the barrow, near the edge of the cairn,

* It is a mistake to suppose that the pottery which we find in antient grave-mounds is under any circumstances *sun-baked*. Unless the clay is previously hardened by exposure to the action of fire it would soon revert to its original unctuousness.

† "The paste (of which the cinerary urns found in Keltic barrows is compacted) consists of the clay found on the spot, prepared without irrigation, consequently coarse, and sometimes mixed with small pebbles, which appear to have been added to mould it compactly together."—*Birch's Antient Pottery*, vol. ii. p. 379.

about 18 feet distant from the centre, and as we approached the circle of boulders the presence of an interment was again indicated in the shape of a layer of burnt bones, resting upon the flints, two feet above the natural surface of the ground, and unaccompanied by ashes or any foreign material. At a short distance to the east of the bones, and protected by a rude dome of flints, was an earthen vessel belonging to the class known as "food-vessels," and apparently almost perfect in form.* Aware of the destructive influence that a sudden exposure to the atmosphere exerts upon these ill-baked vessels, and knowing the difficulties that would attend the endeavour to remove the example before us, I proceeded at once to take measurements, and to make a sketch of it as it lay *in situ*. Nor were our precautions in vain; for in the course of a few minutes, before we had even time completely to uncover the vessel, we had the mortification of observing it crumble into fragments. The general character of this vessel may be ascertained by reference to Plate viii. fig. 1, whilst a fragment of it exhibiting the style of ornamentation is represented in Plate viii. fig. 2. It seems to have measured about 7½ inches in height, is 4½ inches in diameter at the mouth, and 5 inches in diameter at the part where it bulges out; it is of a pale red colour, compacted of a paste that is of a closer texture than that of the urn, and has some approach to gracefulness of form and contour. The edge of the lip of this vessel is slightly bevelled on the outside, and is ornamented with a single row of incised perpendicular markings or notches at regular intervals. (Plate viii. fig. 2.) The style of ornament peculiar to this example of the "food-vessel" is very simple, consisting of horizontal rings or bands parallel to the rim, and encircling the vessel at regular intervals like a series of hoops. These markings appear to have been incised upon the clay whilst it was soft, and were wrought by some narrow grooved instrument, probably of wood; the scoring is uneven. In several instances the two ends of the encircling hoop overlap one another without quite completing the circle, whence we may infer that the ornamentation is the handiwork of an artist who had not the assistance of a potter's wheel. I have termed this a "food vessel" rather than an urn, both because it contained no calcined remains, and also because the projecting rim, which has been mentioned as characteristic of the urn that contains burnt remains, was absent in the case of this vessel. Another dis-

* See Bateman's classification of vessels exhumed from Keltic tumuli in *Ten Years' Diggings*, appendix, p. 281.

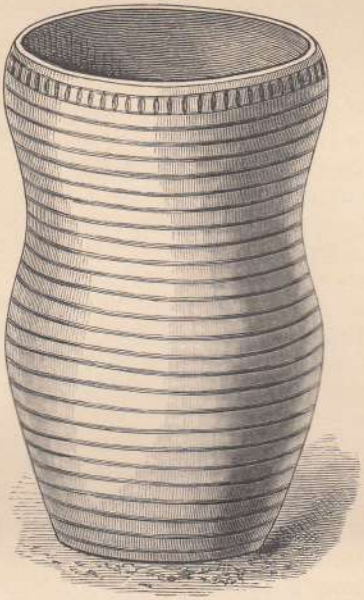


FIG. 1.—FOOD-VESSEL (RESTORED), FOUND IN A BARROW AT BROAD DOWN.
(½ Orig. size. Albert Memorial Museum, Exeter.)

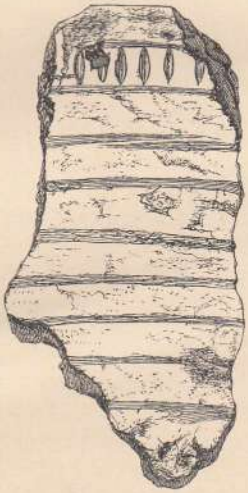


FIG. 2.—FRAGMENT OF FOOD VESSEL, SHOWING THE CHARACTER OF THE ORNAMENTATION.
(Orig. size.)

R. Kirwan, del.

tinction between the "food-vessel" and the urn may also be pointed out; namely, that whilst the ornamentation of the urn is almost exclusively confined to the rim, that of the "food-vessel" extends over its entire exterior surface. We continued our researches to the extremity of the stone cairn, and also removed some of the larger boulders that have been mentioned as forming its periphery, but nothing further was found.

Such, then, are the particulars of the exploration of the three tumuli at Broad Down that have come under observation, the narration of which I have endeavoured to compress within the narrowest limits that a faithful description would admit of. One or two questions arising out of the facts that were then observed naturally suggest themselves, and to these I propose now to endeavour to furnish a reply. Where, however, opinion amounts to little more than conjecture, based as it is upon negative evidence in part, or upon facts that are obscure and of doubtful interpretation, I shall express that opinion with diffidence and reluctance.

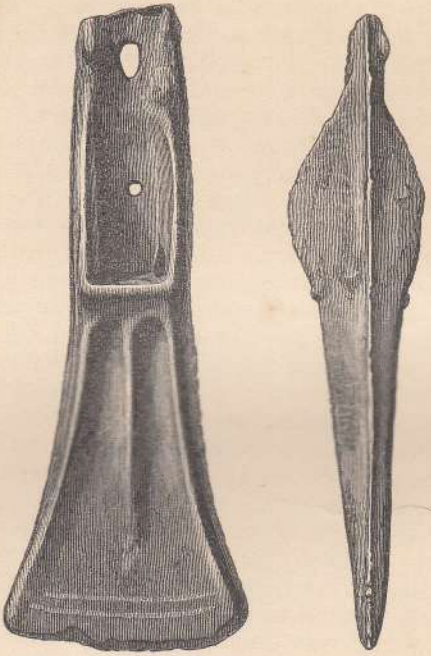
The question of primary importance is this:—To what people, and belonging to what period, are these barrows to be ascribed? This is a question, the solution of which is attended with difficulty. In seeking to furnish a reply to it, there are several points which require consideration. The first of these which may be mentioned is the mode of interment. We find at Broad Down remains bearing the marks of unquestionable antiquity, and which have certainly been exposed to cremation. Now barrow-burial, with its accompaniments, appears always to have held a prominent position amongst the funeral rites of a pagan people; but as soon as that people embrace Christianity, their long-established customs, repugnant rather to Christian sentiment than to Christian doctrine, do not long survive their conversion; the old methods of interment are gradually modified, and cremation yields to inhumation. If the correctness of this inference be allowed, we shall at once be able to refer these remains to a period antecedent to the first introduction of Christianity into this island in the second or third century under the Romans. This inference is confirmed by a comparison of the mode of burial with which we are here familiarised with that in common use among the Saxons. Occasionally indeed cremation appears to have been practised by that people; but by far the more usual custom among them was to dig a grave or cist into the ground to the depth

of several feet, and to raise a mound of low altitude over it. The Saxon graves, too, instead of being comparatively barren of relics, as are the tumuli of Broad Down, abound with traces of human art; they form, in fact, an archæological mine, from which are dug out weapons and personal ornaments of all kinds, including articles of leather elaborately ornamented with silver or enamel, helmets, spears, shields, swords, daggers, and other weapons; beads of amber, glass, and porcelain; whilst brooches, rings, earrings, and bracelets of gold, silver, and copper, form but a small portion of the catalogue.* Once more, the entire absence of coins, pottery, or weapons that bear the impress of Roman art, such as are constantly found in Roman tombs, tends so far to prove that these tumuli were not raised by that people, who, indeed, seldom commemorated their dead by so ambitious a memorial as the barrow.

On the other hand, the antiquities associated with the tumuli that have been described agree in all respects with the characteristics presented by the remains found in other barrows that have been explored in different parts of the kingdom, and which are generally accepted as of Keltic origin.

The shape and size of the mounds, the mode of their formation, the cremation of the interments, the form, the quality, and the style of ornamentation of the accompanying pottery, all point to the conclusion that these barrows are the sepulchral remains of a people that inhabited this spot many ages before the time of the Roman invasion. One more link in the chain of evidence is supplied by a comparison of the drinking-cup found in tumulus [A], Plate ii. fig. 1, with the gold cup found at Rillaton, Plate iii. fig. 1, and the amber cup found at Hove, near Brighton, Plate iv. fig. 1. The general style and character of these three cups, their similarity in regard to form and size, the ovate form of the bowl which is shared in some degree by them all, the smallness of the handle intended rather for suspension than the insertion of the finger, the ornamental parallel lines that encircle the bowl, and the perpendicular lines that edge the handle in each case of these rare and interesting relics,—all these peculiarities imply a certain constructive analogy, and point to the conclusion that they belonged to members of one and the same people, or of tribes that were cotemporaneous, and who lived under much the same conditions. Now we know that the Cornish treasure-trove, as well as the Brighton

* See an article entitled, "*The Saxon Grave-mounds and their contents*," by Ll. Jewitt, F.S.A., *Intellect. Obs.*, vol. xii. p. 459.



WINGED CELT OR PAALSTAVE OF BRONZE, FOUND IN A BARROW AT LOVE-HAYNE, NEAR BROAD DOWN, ABOUT A.D. 1760.

(⅔ Orig. size.)

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treasure-trove, were associated in the burial-place with a weapon of bronze; so that in the case of these two relics we cannot err if we attribute them to the "Bronze age." Moreover, the absence of pottery along with the burial with which the Broad Down cup was found also leads us to assign that relic to a remote period;* whilst upon the other hand the absence of bronze in that tumulus by no means implies that this metal was unknown when the interment took place. Bronze articles with burials are extremely rare.† For a long period after its introduction, this metal appears to have been employed only for more important articles. Being of necessity expensive, and probably imported from abroad,‡ the poorer classes would continue for a long series of years to employ stone as their material in the constructive art; and probably the rich, in addition to their bronze implements, frequently used others of stone, and especially in cases that would have consumed a large quantity of material in their fabrication. Thus the absence of bronze, in the case of the tumuli under consideration, may be accounted for, both by its liability to decay, and also by the fact of its intrinsic worth, which would render it too valuable to be hid away in a grave-mound along with the dead. However, we have evidence that bronze has been found associated with burials in barrows belonging to this group, and in immediate proximity to those that we have lately examined. About a hundred years ago a "stone barrow," the mode of construction of which appears to have been identical with that represented in Plate i. fig. 3, was destroyed, and at the same time a collection of "bronze spear-heads, amounting to half a wheel-barrow full, was discovered."§ By far the larger portion of these were carried into the neighbouring town of Honiton, and were there sold as old metal. At present one only is known to be in existence; it is in the possession of Doctor Snook, of Colyton. It is of a common type, known as the palstave, and is figured in Plate ix. figs. 1 and 2.

I am indebted to a friend for the following extract from the diary of the late Matthew Lee, Esq.:—"July, 1763. The labourers on Lovehayne Farm, Colyton, near Southleigh,

* I may here cite the authority of Sir R. C. Hoare, who says that "simple cremation was probably the primitive custom. The funeral urn in which the ashes of the dead were secured was the refinement of a later age."

† "Articles such as swords, spear-heads, and celts, which were of bronze, appear only on the rarest occasions to have been interred with their owners." Canon Greenwell in *Arch. Journ.*, vol. xxii. p. 256.

‡ Britanni ære utuntur importato. Cæsar *Bell. Gall.* v. 12.

§ Davidson's *Notes on the Antiquities of Devon*, p. 73.

destroyed a stone-barrow in order to procure a supply of stones for the new turnpike-road. Upon one side of the barrow they found about a hundred Roman chisels for cutting stones, of a metal between a copper and brass colour, rough, and unhardened." It is possible that, as has often occurred, there were spear-heads mixed with the objects familiarly called "celts" or "chisels." These latter bronze relics are quite distinct from "spear-heads." They are properly to be described as "palstaves," of the type without any side-loops. It is by no means improbable that this was one of those remarkable hoards or deposits buried by some itinerant manufacturer of bronze weapons and implements. The single specimen preserved agrees well with the description given in Mr. Lee's diary, being a somewhat defective and unfinished piece. The rough seams at the side, left by the divisions of the mould, have not been trimmed off.

Here then we have evidence which will enable us to arrive at an approximate data for these barrows. Upon a survey of these facts I see no difficulty in assigning a high antiquity to the relics that have been lately brought to light, or in considering them as the remains of a people who flourished long before the advent of any historic race. Taking all the circumstances into consideration we must assign them to a period antecedent to the Roman invasion of Britain, and probably we shall not err if we refer them to a period far more remote, when bronze, whilst known, was scarce, and when its use was confined to the more powerful part of the population.

I have ventured to put forth these conjectures, at the same time that I have stated the reasons on which they are based, because it would appear as if some degree of theorizing is required in order to reconcile and explain isolated facts; and whilst I do not claim universal acceptance for the conclusions at which I have arrived, yet they will be so far useful if they provoke discussion, which is the road to truth, that ought to be the object of all investigation. I am fully aware that before we can pronounce with confidence, upon any of the important points that have been raised in these pages, more extensive researches must be carried out. Up to the present time no cranium has been discovered to supply a cephalic index, whereby a knowledge of the general type of race to which these people belonged may be arrived at. It is worth any pains, however, to establish such a fact if possible; for the determination of the cranial type would enable us to draw trustworthy conclusions, and is exactly that which is

required to dispel the mists that still enshroud the pre-historic period of East Devon archæology.

I have great pleasure in expressing my thanks to Mr. Albert Way, to whom I am indebted for many suggestions. It is through the kindness of the same friend that Plates ii., v., and ix. have been placed at my disposal for the illustration of this memoir by the Society of Antiquaries; and also Plate iv. by the Sussex Archæological Society.

I may also add that Sir Edmund S. Prideaux, Bart. has expressed his intention of presenting to the Albert-Memorial Museum in Exeter the various relics that have been excavated from the barrows at Broad Down. It is hoped that they may constitute the nucleus of a collection illustrative of the prehistoric archæology of this county.