

NOTES ON THE PRE-HISTORIC ARCHÆOLOGY OF EAST  
DEVON.<sup>1</sup>

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IF we had to determine *à priori* which of the two metals occurring abundantly in Devonshire—copper and iron—was first discovered and employed in the fabrication of implements for hunting and warfare, we should at once decide in favour of that which is most easily recognised as a metal in its native state. We know that copper occurs in a state of such comparative purity as to require but little smelting for the purpose of being brought into a condition that will admit of its being beaten at once into shape; whilst, on the other hand, iron is hardly ever found except in the form of ore, and before it can be worked at all must be subjected to the process of smelting, whilst exposed to a temperature higher than that which can be obtained from an ordinary fire. In Devon tin, from its abundance, and from the great heaviness of its ores, would easily attract attention; and it may have been that when metals were scarce and correspondingly valuable, some tin would be added to copper in order to make up the quantity required for a casting. The alloy thus accidentally made would then be found to have properties different from either of its components, and experience would soon dictate the most advantageous amount of tin that must be added to copper in order to make it better suited for cutting instruments. Hence arose that mixed metal to which the name of bronze has been given, consisting of nine parts of copper to one of tin, and which, according to the oldest classical writers, was in general use before iron was rendered available.

<sup>1</sup> This memoir, read at the meeting of the Devonshire Association at Bideford, in August, 1871, and published in their Transactions, vol. iv. p. 641, is here reproduced by the author's kind permis-

sion. It is in continuation of his valuable communications published in this Journal, vol. xxvi. p. 341; and in this volume, p. 34, *ante*.

Whilst, then, these considerations tend to remove the difficulty that meets us *in limine* when we have to account for the general use of a compound metal, as is bronze, before that of so common a metal as iron, we may gather direct evidence that the use of bronze preceded that of iron, from the fact that, whilst iron is unknown in association with primitive interments, implements of bronze are not uncommon.

Among the implements which are of most frequent occurrence, and which are characteristic of the Bronze Age, are the palstaves, of which a large collection was found in a barrow on a hill adjoining Broad Down about a century ago.<sup>2</sup> I have lately obtained another example of this type of implement, which I chanced to observe lying in a heap of old metal, and which had been brought to Exeter from the neighbourhood of Drewsteignton. Its extreme length is five and a half inches; the width of the cutting edge is one and three quarter inches. On either side is a groove terminating in a stop-ridge, which is two inches from the cutting-edge. The weight of this implement is fourteen ounces. It belongs to the type without any projecting side-loop or ear. Associated with it in the heap was a fragment of bronze, probably intended for casting purposes, weighing five and a half ounces, similar in appearance and character to other fragments of the same composite metal found in a barrow on Gittisham Hill in the year 1809.<sup>3</sup> I have deposited both these specimens in the Albert Memorial Museum, at Exeter.

During my investigations of the barrows in the neighbourhood of Thorverton<sup>4</sup> in the year 1868, I was induced to examine the locality that lay between Raddon Hill and Exeter, with results that ultimately led to the discovery of several barrows scattered at intervals among the fields, and which hitherto had been unnoticed. Through the kindness of the Right Hon. Sir Stafford Northcote, Bart., I was enabled in the autumn of 1870 to excavate one of these barrows, situate in the parish of Upton Pyne, forming one of a group of three ranged along a ridge of low elevation running east and west, and about a hundred yards distant from the Exeter and Tiverton road. I had the advantage of

<sup>2</sup> Transactions of the Devonshire Association, vol. ii. p. 647; Arch. Journal, vol. xxv. p. 310.

<sup>3</sup> Transactions, vol. iv. p. 298.

<sup>4</sup> Transactions, vol. iii. p. 496.

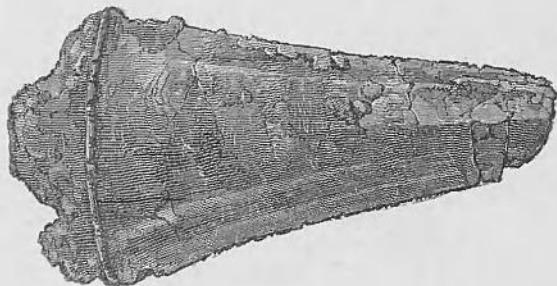


Fig. 1.—Bronze blade. (Two-thirds original size.)

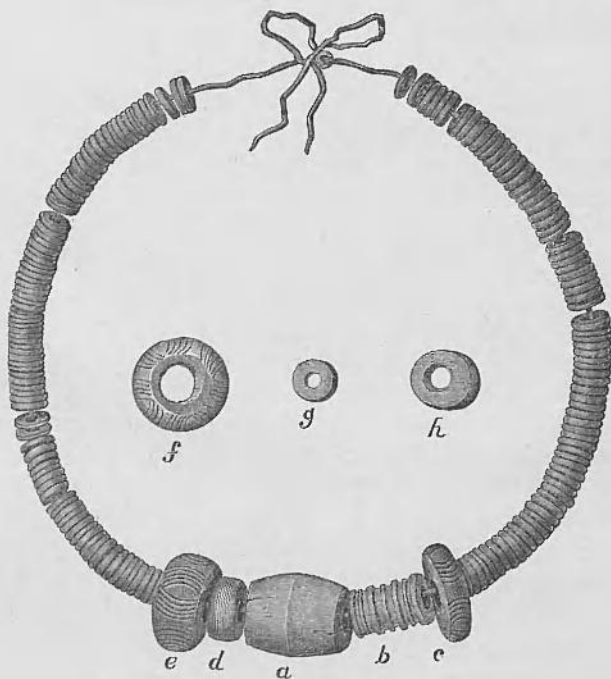


Fig. 2.—Necklace of shale and baked clay. (Original size.)



Fig. 3.—Bronze Pin. (Original size).

Relics found in a barrow at Upton Pyne, Devon. Now in the Albert Memorial Museum at Exeter.

the assistance of another member of the Devonshire Association, Mr. R. M. Lingwood, in conjunction with whom also many of the results that have attended our excavations at Broad Down have been obtained. Selecting the central barrow of the group as the most promising, and with a better provision of workmen than is often the case, we commenced operations by driving towards the centre a trench four feet wide, which was kept on a level with the natural surface of the soil. The barrow was about sixty feet in diameter, and, as we were told, was originally six feet in perpendicular height; at the present time it is reduced to about three feet by the action of the plough. The constructive materials of the mound were ascertained to consist of sand and clay, with a slight admixture of peat, and a few stones. Owing to unfavourable weather our day's work was soon brought to a close. We resumed operations on a subsequent morning by cutting a second transverse section from east to west across and beyond the centre of the mound, but still without any definite result. On laying bare the last course, a few fragments of charcoal appeared, which induced us to continue the work. We then proceeded to remove the whole of the central portion of the barrow in a circle about thirty feet in diameter, when a little additional clearance revealed a heap of burnt clay and red ashes, which occupied a circular space of four feet in diameter, and three feet in thickness,—its limit also being well defined. It may be inferred that this deposit originally occupied the centre of the mound, and that, either by the disintegrating effects of the atmosphere acting unequally on opposite sides of the barrow, or by the action of the plough constantly working in one direction, the soil had been worn down on one face of the barrow more than on the other. The removal of the remaining portion of the mound was now proceeded with; and on disturbing the red brick-like earthy portion of the mass, which was so firmly compacted together as to resemble a cist, charred wood and calcined bones were immediately visible, resting on which was a bronze pin or awl (fig. 3), having the thicker end squared, and wanting a small piece of the point, measuring  $2\frac{1}{2}$  inches in length. It was probably used for securing the ends of the cloth or skin in which the remains were wrapped after being subjected to cremation. It is similar to the bronze awls often found in urns among the

Wiltshire barrows described by Sir R. C. Hoare. A few inches below this was a finely patinated bronze dagger, finished with graceful symmetry, and in somewhat imperfect preservation (fig. 1). This weapon or implement measures nearly  $2\frac{1}{2}$  inches in length, and the leaf-shaped blade at the widest part  $1\frac{3}{4}$  inches in breadth. Towards the lower part of the blade there are two small oblong perforations, which appear to have been made at the time of the casting of the instrument, and not to have been subsequently punched. When discovered it retained one of the bronze rivets by which it had been attached to the haft, thereby showing that the handle had been formed of wood and not of metal, as in many of the swords and daggers of the same relative age that occur in Denmark. In reference to the weapons of this type, Dr. Wilson observes that "the metal is too brittle to resist violent contact with any hard body; but if the edge of a bronze weapon is hammered till it begins to crack, and then ground, it acquires a hardness, and takes an edge not greatly inferior to the ordinary kinds of steel." From the discovery of this weapon we are led to infer that one of the last honours paid to the buried warrior was to lay the well-proved weapon by the side of the ashes of the hero who had wielded it, before that his companions in arms piled over the remains the barrow or memorial cairn. The custom still obtains; the soldier's favourite sword is laid on his bier when his comrades bear him to his last resting-place.

Proceeding with the careful removal of this accumulation of burnt bones and charcoal, that I have mentioned as occurring within the cist of baked clay, we found another example of the skill and ingenuity of native manufacture, consisting of a sepulchral vessel of small size, and of the type known as the "incense-cup" (fig. 4). As we cannot doubt that the buried records of the progress attained by the ancient occupants of these islands have been as yet only partially disclosed, so also we may hope that as other examples of native fictile ware are from time to time exhumed from the store-house in which they lie safely garnered, and as the Archæologist is thereby stimulated to greater precision in the study of ancient interments and urn-burials, we shall collect an amount of accurately-observed facts which may enable us to classify into distinct periods the pottery found



Fig. 4.—“Incense Cup.” (Original size).

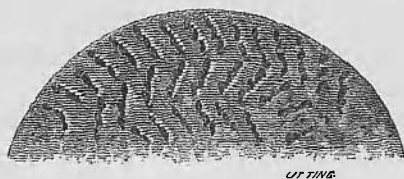


Fig. 5.—Portion of the under surface.

Sepulchral vessel, found in a barrow at Upton Pyne, Devon. Now in the Albert Memorial Museum at Exeter.



in these tumuli ; and by noting the distinctive character of their fashion, and ascertaining the uses to which these curious vessels were originally applied, we may learn more of the daily life of the people by whom they were held in common use.

Many of these native fictile vessels, that were devoted to mortuary purposes, are so rude in form and workmanship as to afford no other sign of advancement in their constructors from a primitive state of barbarism, than such as is indicated by the piety which prompted a funeral pyre for the dead, and a hastily-fashioned vessel wherein their ashes might be interred ; whilst again other examples of sepulchral *fictilia* are lathe-made, and fashioned into regular shape, symmetrical, and even elegant in form. It may indeed be generally assumed that the ruder hand-made unbaked burial urn belongs to the earliest period relatively, whilst the examples of well-finished and elaborately ornamented pottery may be referred to a period when artistic skill was at least partially developed, and when the workman had acquired a knowledge of the potter's wheel ; yet no chronological arrangement can be absolutely based upon the obvious distinctions thus presented to us, for the rudest of pottery has been found associated in the same barrow with graceful and neatly ornamented weapons of bronze. Setting aside then, for the present, the idea of a precise chronological arrangement, we may rest content with the general classification of burial-urns of the earlier period which was first suggested by Sir R. C. Hoare,<sup>5</sup> and subsequently adopted by Bateman<sup>6</sup> and other writers. All the vessels exhumed from round barrows were arranged by them in one of three classes :—

1. Cinerary, or Sepulchral Urns, such as contain human bones.

2. Incense-cups, or Thuribles, a name in familiar use, although the purpose to which these small vessels were appropriated is doubtful. They commonly occur with calcined bones, and are sometimes enclosed in urns of the former class. Mr. Bateman supposes that they do not accompany the earliest interments. Mr. Birch has suggested that they may have been used as lamps.

3. Food-vessels and drinking-cups, probably intended for

<sup>5</sup> Ancient Wilts, vol. i. p. 25.

<sup>6</sup> Ten Years' Diggings, p. 279.

food, occurring both with burnt and unburnt bones, but never containing them.

The example of the ceramic art before us is, as I have said, to be referred to the second class of these mortuary vases. It is of a dingy brown colour, carefully formed by hand, of fine clay tempered with a little sharp sand, and well baked; the walls, as is usual with vessels of this class, are relatively thick, and average about  $\frac{3}{8}$ ths of an inch in thickness. It measures  $1\frac{3}{8}$  inches in height, and  $2\frac{1}{2}$  inches in diameter, is perfectly circular, and is decorated on the entire exterior surface, and also on the interior of the lip, by an elaborate pattern of lines closely incised with a fine-pointed instrument, and forming a series of herring-bone and chevrony bands and markings. Two lateral perforations (shewn in the accompanying woodcut) also occur, as is common with vessels of this class, and which characterised the example of a similar type found at Broad Down.<sup>7</sup> The original contents of this vase, whatever they may have been, have been converted into a coarse-grained snuff-coloured dust.

Altogether the example before us exhibits in symmetrical proportions and suitable material the evidences of experienced workmanship, and when viewed in connection with the fact that one side is perforated, and that the under surface is ornamented, it seems no improbable inference that it was destined for suspension above the level of the eye. The woodcut (fig. 4) may be considered a fairly accurate representation of the form, proportions, and character of this little mortuary vessel. Fig. 5 represents a portion of the rude ornament on the under surface.

These cups have also occurred in Wiltshire, Dorsetshire, Yorkshire, Derbyshire, and in Scotland; they vary remarkably in form, in the character of their ornamentation, and in the number and position of the lateral perforation.<sup>8</sup>

Continuing our investigations of the ashes and burnt bones that have been mentioned as occurring within the central cist of baked or sun-dried clay, we observed a grain of carbonised wheat lying in the *debris* of the heap. It

<sup>7</sup> It is figured in this Journal, vol. xxv. p. 307, and in the Transactions of the Devonshire Association, vol. ii. p. 636.

<sup>8</sup> Ancient Wilts, vol. i. pl. 24, p. 199.

Warne's Celtic Tumuli, pl. 2; Bateman's Ten Years' Diggings, *passim*; Wilson's Prehistoric Annals of Scotland, vol. i. p. 415.



presents an appearance similar to that of the wheat and other grain that occurs abundantly on the sites of *Pfahlbauten* in the lakes of Switzerland, described by Dr. Keller, and without doubt found its way into the barrow at the early period when the mound was heaped up. At the same time also we noticed in the rubbish a very small bead or disc of shale, which induced us to sift through this mass again with the most scrupulous care, when we were rewarded by the discovery of some fifty beads similar to that first observed. They consist of thin *laminæ* of shale, about three lines in diameter, and are perforated for the purpose of being strung together like a modern string of beads so as to form a necklace (fig. 2). There also occurred one larger cylindrical or bugle-shaped bead formed of red clay, one line in length and two lines in diameter, which was probably placed so as to be a central decoration to the necklace (fig. 2, *a*); three beads of shale, of about the same size as the bead of red clay already mentioned, were also obtained. They are cylindrical in form, and ornamented with punctured incised chevron patterns superficially drilled in the shade (fig. 2, *e, c, f*). With these beads of shale was found a portion of the stalk of an encrinite, which had probably been strung with the beads, and formed a portion of the same ornament (fig. 2, *b*).

Interesting examples of necklaces and other ornaments similar in character to that here described have been discovered in the excavation of some of the Derbyshire barrows.<sup>9</sup> It is probable that in these beads we detect the evidence of the first use of the turning-lathe, and the germ of its application to a great variety of uses. I am aware that the introduction of the lathe has been referred to Roman influence; but whilst works of the Anglo-Roman period executed in shale, and with obvious traces of the influence of Roman art, are abundant in the South of England, ornaments of this material occur also among the contents of Scotch barrows, lying beyond the pale of Roman civilisation, and where no traces of their occupation have been found. Where we meet with such ornaments, characterised by the same simplicity of design and workmanship as that of the pottery and bronze that are associated with them in the

<sup>9</sup> Bateman's *Ten Years' Diggings*, pp. 25 and 47. See also *Grave-Mounds and*

*their Contents*, by Llewellyn Jewitt, pp. 123-5.

same barrow, we shall probably not err if we refer the one as much as the other to times long anterior to the era of the first Cæsar. The workmanship, no less than the circumstances attendant on this discovery, must determine the age of the relics of shale, as well as that of ornaments on other objects of clay, of bronze, and of gold.

I pass on from the investigation of the *sepulchralia* of East Devon, revealing the evidence of the dead, to give a short description of the results obtained from the examination of an aboriginal stronghold, and which has furnished no less conclusive evidence of the more frequent presence of the living.

It will be remembered that the locality of which I speak is peculiarly rich in the number of its "hill-forts" or "castles," as they are locally called. This circular "hill-fort" is the expression of a simple idea, which would naturally commend itself to a people who felt the want of defence against sudden attacks; and the modification of a second or third concentric *agger* or rampart is but the progressive development of the original idea to provide security against an active and aggressive enemy.

Taking Broad Down as the centre, and describing a circle of a few miles' radius, there would be included within its compass the following forts or strongholds:—1. Farway Castle, situate on the summit of Farway Hill, a circular entrenchment, 70 feet in diameter, and enclosed by a single line of circumvallation of low elevation. 2. Blackbury Castle, oval in form, enclosed by a single *agger* and fosse, 36 feet deep on the south-west, measuring about 208 paces from east to west, and about 100 paces from north to south. The gateway is flanked by a ditch and rampart on either side which extends diagonally to a distance of 50 paces from the principal *vallum*—the device of some Vauban of those early days. 3. Hocksdun Castle, formed by a triple *vallum* with a fosse, enclosing an area about 280 paces in length from east to west, and 140 paces in average breadth from north to south. Davidson mentions a tradition that great treasure was found here by a sailor called Courd. 4. Musbury Castle, of a long and irregular form, enclosing an area of about six acres, and surrounded by a single *agger* and fosse; here, again, the gateways are defended by outworks. 5. Axminster Castle, now entirely destroyed. 6. Menbury Castle,

about three acres in extent, enclosed by a single *vallum*. 7. Dumdun Castle, of a subovate form, 300 paces in length, and 60 paces in breadth, enclosed by a double *agger* of bold elevation. 8. Stockland Great Castle, twelve acres in extent, about 300 paces in length, and as many in breadth, irregular in form, and enclosed by an *agger* in some places more than 40 feet in perpendicular height. 9. Stockland Little Castle, of nearly circular form, about 120 paces in diameter, with a single *vallum* of great strength, and of about two acres in extent. 10. Widworthy Castle, a small circular camp or fort, about 80 paces in diameter, almost destroyed. 11. Hembury Fort, enclosed by a triple circumvallation about 40 feet in perpendicular height, and divided unequally by a double *agger* of low elevation, extending across its area from east to west. 12. Woodbury Castle, of an irregular oval form, about 300 paces in length, and about 120 paces in width, surrounded by a single *vallum*, except on the north-west where the defence has been doubled. 13. Belbury Castle, on the right bank of the river Otter, oval in shape, formed by a single entrenchment, about 130 paces in length, and 70 paces in breadth. 14. Sidbury Castle, about 500 paces in length, and 150 paces in breadth at the widest part, surrounded by a double rampart 40 feet in height, and with an intervening fosse.

These fortifications approximate more or less closely to a circular form, generally occupy an area of from three hundred to eight hundred feet in diameter, are enclosed within one or more trenches or ramparts of earth, and are monuments of the energy and industry no less than of the military skill and strategy of early British workmanship. It will be noted that they are not simply circular hill-forts, wherein we trace the mere rudimentary efforts of a people in the infancy of the art of defensive warfare ; they display superior engineering skill both in the choice of site, and in the elaborate adaptation of the earth-works to the natural features of the ground. Though undoubtedly of native workmanship (as I have said), many of them having been possibly strongholds and places of retreat thrown up by the native Briton to withstand the encroachments of the Roman invader ; in the course of time they have passed into the hands of the conqueror, and have been probably occupied successively by Briton and Roman, by Saxon and Dane. But the subject has already been

treated of with ample details by Mr. P. O. Hutchinson<sup>1</sup> and his descriptions are accompanied by accurate plans; a very perfect idea can thus be formed of the original design of these works; his careful researches can therefore be supplemented by little worth recording.

Mr. Strahan has lately called my attention to the remains of one of these strongholds situate at High Peak, about a mile and a half west of the town of Sidmouth. Its lofty site at an elevation of 500 feet above the sea-level has secured it against the inroads of the aggressive ploughshare of the agriculturist; but the action of the sea, ever exerted in undermining the base of the cliff, the summit of which is crowned by the fort, has secured for it a fate no less inexorable. By this agency the destruction of the entire stronghold has been effected with the exception of a small portion of the northern *agger*, which is about 90 paces in length, 20 feet in perpendicular height on its northern escarpment, and averages 35 feet in breadth at the base. The remains of an outwork can be traced at the eastern extremity, which perhaps formed a redoubt to defend the gateway on that side. Beyond the rampart there is a plateau on the slope of the hill, about 40 feet wide, formed by the removal of the earth used in filling up the *vallum*. So complete has been the demolition of the fort, that we have not sufficient material left to afford a conjecture of its probable size; we can only point to the skill, which in this instance also appears to have been shown in turning to the best account the natural aptitude for defensive purposes that the headland presents; the embankment or rampart which formed the wall of the fort on its northern side, and which stands on the crest of the hill, is sloped away so as almost exactly to coincide with the angle at which the latter rises from the valley, thereby securing a commanding defensive position with a relatively small expenditure of labour.

I have said that the action of the sea, by wearing away

<sup>1</sup> Transactions of the Devonshire Association, vol. ii. p. 372. See also Mr. Hutchinson's Memoir in the Journal of the British Archaeological Association, March, 1862, p. 63, with numerous ground plans, &c. In the Collectanea Archaeologica, published by the Archaeological Association, vol. ii. p. 18, a memoir by Mr. G. Vere Irving has also been given,

relating to Ancient Camps, Earthworks, and Fortifications in Devon. A list of the strongholds that exist in the country, or in adjacent parts of Somerset, comprising not less than eighty examples, is appended, with brief descriptions and reference to descriptions given by Polwhele, Lysons, and in various topographical works.

the cliff beneath, has almost obliterated the fort that crowned it ; to the same agency we owe the accident that the southern face of the surviving portion of the *vallum* has been laid bare, whereby a deposit of charcoal, extending to a length of about 50 feet, and several inches in thickness, has been exposed to view. This occurs at the eastern extremity of the rampart ; it may be referred to the remains of beacon-fires kindled as the signals of war and invasion, when perhaps the natives had already learnt to watch the horizon for the dreaded fleets of the Gaul or the rude Norse Viking. At such a period they would retreat within their stronghold as soon as the enemy was spied in the offing, and would lie there secure until the spoilers set sail again in quest of some less watchful prey. It is equally possible that the charcoal marks the remains of the bonfires which formed part of the festive or religious rejoicings of the tribe by whom the stronghold was occupied.

Following the line of charcoal towards the west, at a few paces distant from it, and at about the same horizontal level below the crest of the rampart, there occurs a layer of bones interspersed with charcoal in dust and in small fragments, extending to a length of about 30 feet ; in some places this bone-bed is nearly a foot in thickness, and is of unknown width. The bones which are thus numerous are generally well preserved, more or less discoloured, and have lost a portion of their weight. They consist of the remains of hog (probably wild, from the size of the tusks), deer, and ox (*bos longifrons*). Many of the bones are split longitudinally as if to facilitate the extraction of the marrow ; Mr. Pengelly suggests that the object of fracturing the bones longitudinally was for the purpose of fabricating the fragments into awls, needles, harpoons, and other implements.

The presence of industrial products also was indicated by several rounded pebbles of various sizes, extraneous to the local formation, and doubtless collected from the neighbouring beach ; some appeared to be sling-stones, others bore marks of abrasion on their edges, and had probably been used as hammers or pounders, without a handle, for the purpose of cracking the bones. We also found nodules of flint, such as occur in abundance on the tops of the neighbouring hills ; with them were cores of dark-coloured flint from which flakes had been struck, and also fragments or chips detached



in the first dressings of these cores. Of these implements some show so little trace of design that, had they not been found intermixed with the bones of animals that mark the remains of feasts, they would certainly have been thrown aside as lacking sufficient proof of having been manufactured by man ; others are more carefully chipped into shape, have a keen edge, considering the nature of the material, and might well have been used in scraping hides or in cutting flesh, or even fresh bone. Of the bone implements many are of the rudest form, consisting of mere chips or fragments of bone, worked roughly to a point at one end. One, however, shows more careful construction ; it is an incisor-tooth ingeniously shaped into the form of a pin or awl, and marks the progress which had been made from the first rude implements.

We searched carefully among the *debris* and ashes for any grain or vegetable substance, but could find nothing, with the exception of small pieces of wood-charcoal, which occurred in abundance. The presence of several pieces of red hæmatite covered with scratches indicate the mode in which these primitive hunters scraped off a red powder—the favourite aboriginal colour—which, mixed with grease, would furnish as good means of personal ornament as are employed by many savages of the present day. Numerous fragments of pottery occurred also in the *debris* ; some of it is of a pale buff or burnt umber colour, while occasionally it is of a darker tint, varying from a dull red to a yellowish brown. The whole of it is coarse, unglazed, and of the simplest description ; some of it is hand-made, whilst other portions bear marks of having been turned on the wheel. The paste of which it was compacted consists of clay tempered with sharp sand or small fragments of stone ; owing to this circumstance the outer surface is generally rough. The decoration presents considerable diversity : some of the fragments are plain, others are ornamented by incised lines made with a toothed instrument, others by circular indented lines and bands impressed upon the soft clay ; and others by raised hoop-like marks or ridges formed either by the hand or the wheel. From the diversity of patterns presented by these fragments it may be presumed that they represent a considerable number of fictile productions. The great abundance of charcoal that characterises this *Kjokken-*



*modding*, as well as the very small proportion of bones which show the action of fire, would lead to a doubt whether the flesh taken from the large mass of fractured bones that occurred, if indeed it has been cooked, has been cooked by roasting. In favour of the meat having been cooked is the abundant evidence of fire, more than in that rude condition of life could be supposed to be required merely for purposes of warmth. If the meat were cooked by roasting, it is not likely that so many of the bones would escape traces of fire. The presence of the pottery would imply that these camp-dwellers cooked their food by boiling ; but it is difficult to understand how they could effect this with vessels formed of ware too ill-compacted and too imperfectly baked to stand the action of fire, unless we suppose them to have employed means still in use among the Esquimaux, who boil their food without putting the vessels in which it is cooked on the fire. This is effected by means of stones heated in the fire, and then thrown into the vessel filled with water, which is thus boiled from within.<sup>2</sup>

In order to recover some clue to the character and history of this primitive community, and a knowledge of the arts and rites which they practised, let us institute a comparison between the contents of the barrows at Broad Down and the accumulated refuse obtained from the remains of their feasts at Peak Hill, when we are struck with the general similarity that distinguished them. In both cases we observed an absence of relics that are distinctive of Roman art and civilisation ; in both cases we have the evidence of a people living in primitive rudeness, and employing only the products of native art ; the sepulchral pottery of the one corresponds also in material, character, and ornamentation, with the simple domestic cooking vessels of the other ; whilst also the conclusion naturally suggests itself that the stronghold or "Castle" originated in the same laborious contrivance and skill as that which gave birth to the colossal proportions of the tumulus, by which the honours of the dead were rendered in the olden times to which they pertain. And without endeavouring to deduce from the evidence before us more than it seems fairly to warrant, we may gather also from the glimpses that are

<sup>2</sup> Notices of the ancient practice of "stoneboiling" may be found in this Journal, vol xxiv. pp. 248, 264. See also

Tylor's *Early History of Mankind*, p. 261 ; and see Sir John Lubbock's *Prehistoric Times*, pp. 250, 380.

afforded by this comparative examination that the strongholds of the South of England were native British constructions, which imply the existence of a numerous population, which are the work of a patient and ingenious race whose motto was defence rather than aggression, whose arts were still in their infancy, who subsisted by hunting and fishing, and by such natural products as man without agriculture can obtain, and who lived contemporaneously with, or under similar conditions of civilisation with the people to whom the sepulchral honours of the barrow and the cairn were raised. The connection that we are thus enabled to trace between the barrow-builder and the fort-builder is the important feature of the present discovery, for it enables us to add another link to the chain of evidence which is gradually uniting into one harmonious whole the scattered fragments relating to the early history of our forefathers. Thus also are we enabled to determine a relative if not a positive chronology. When treating of primitive antiquities, the Archæologist does not attempt to fix dates with precision; his object is rather to trace out events that are the landmarks of relative progress; relying on the proofs furnished by the similarity which characterises the rude products of primitive handicraft, he is led to infer an identity of race and period. Applying this test to the instance before us, he will probably not err if he attribute the era of the barrow-builder and of the fort-builder to a period anterior to the time of the Roman Invasion, when the use of the working of iron was unknown, and when the armourer fashioned his weapons from the rare and costly copper or bronze, still supplying numerous deficiencies with implements of bone and flint.

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#### EXPLANATION OF THE WOODCUTS.

FIG. 1. Dagger of bronze, from the Kist in a barrow at Upton-Pyne. Original size.

FIG. 2. Amulet or Necklace. Original size.

- a.* Bead of shale, fusiform in shape and devoid of pattern. It probably formed the central portion of the ornament.
- b.* Portion of the stalk of an encrinite. It appears to have been strung along with the beads.
- c. e.* Beads of shale, ornamented with an incised pattern of lines worked in a chevron.
- f.* Front view of ditto.
- d.* Red bead of baked clay.
- g.* Perforated plate or disc of shale of which the amulet was formed.

FIG. 3. Bronze awl or pin, found with the burnt bones, and probably used to fasten the cloth in which they were collected. Original size.

FIG. 4. Incense Cup, found in a barrow at Upton-Pyne. Original size. The rim of this vessel is not so sharp-edged as would appear from the woodcut; it is also broken in parts and irregular, owing to the coarse quality of the clay of which it is composed. A zig-zag pattern, imperfectly worked, may be traced on this rim.

FIG. 5. Portion of the under surface of the incense cup, showing the pattern that was impressed on it.

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The Institute is indebted to the kind courtesy of the Author for the Illustrations of this Memoir.

Whilst the foregoing addition to the valuable records of Mr. Kirwan's researches, given from time to time in this Journal, has been in the press, the painful announcement has reached us of the untimely death of our Friend,—of the deep grief of his bereaved wife and children, in which all who knew him must heartily sympathise.

We cannot fail to bear in grateful remembrance, that his latest communications were marked by his zealous interest in exertions for the cause of our Society, in anticipation of our projected meeting at Exeter, that seemed so full of promise under the auspices of so hearty and intelligent a fellow labourer in the promotion of our mutual purposes of interest.

*Deo aliter visum !*