First Report on the Excavations at Sun Hole, Cheddar.

LEVELS ABOVE THE PLEISTOCENE.

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The cave, which is situated on the north side of Cheddar Gorge, about 100 yards to the east of the Lion Rock, opens at the head of a steep scree slope, which is scantily covered with grass and with here and there a few bushes. This scree slope runs down for a distance of about twenty-five yards below the cave mouth and ends at the top of a cliff, which falls almost vertically to the road level at the bottom of the gorge. (See plate IIB).

The actual cave mouth is about 120 feet above the road and faces towards the south while at the same time it is screened on the east by the high vertical continuation of the eastern wall of the cave.

When the cave was first investigated by this Society a mass of thorn bushes and ivy effectively concealed the entrance. On the first visit, however, it was obvious that others had been before us, for a pit had been dug in the material covering the floor of the cave in the area "DE" (see Fig. 1), and the spoil from the pit had been thrown out over part of the area "BC" in the form of a mound. This material was dubbed the "Old Spoil Heap."

Just inside the cave mouth the roof was five feet above the floor level which rose gently at a slope in keeping with that of the roof towards the back of the single chamber that at present comprises the accessible portion of the cave (see Fig. 1). A little further in the slope of the floor was steeper and its level gradually approximated towards the roof which it eventually reached. In this back area there was a large mass of bright red cave earth which was evidently a quite recent deposit for it is, in fact, still coming into the cave. Just short of the junction of the roof with the accumulated floor deposits a small passage ascended steeply on the east side, but ended after a few feet in a complete choke of earth and stalagmite.

The recent cave earth indicates the presence of a swallet on the hill above at no great distance from the back of the cave, and it is to streams which originally used this swallet that the excavation of the cave in the first place must be attributed. This cave forming stream would have served, then, as a tributary to the river responsible for the eventual formation of Cheddar Gorge.



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Sun Hole, Cheddar FIG. I.

As the main river would steadily continue to lower its bed level by erosion and the tributary streams being unable, by reason of their lesser volume, to deepen their beds at a corresponding rate would find for themselves channels at lower levels in the limestone; thus eventually Sun Hole and similar caves would cease to have streams running through them.

Further the mouth of Sun Hole has been exposed to the action of the weather ever since the Gorge was formed to the depth of the cave mouth, and it is obvious that the present line of that mouth must be far behind the original one. But as material accumulated on the floor of the cave so the walls would be protected from destruction due to the weather, and so it was to be expected that the deeper deposits would conceal an outward extension of the cave walls, and this has already been proved to be the case on west side of the cave.

The local names for the cave are Sun Hole and Sheep's Hole. The former has been adopted by the Society as being the more suitable for the cave, facing due south as it does, is protected from all north and east winds, and also, but to a lesser extent from those from the west; it is in fact the warmest cave site in Cheddar for on a clear day it receives sunlight from early in the morning till late in the evening.

Sun Hole then appeared to be a desirable place to excavate for prehistoric remains and the Society is indebted to the trustees of the late Lord Long for permission to carry out work at the cave.

EXCAVATIONS BY THIS SOCIETY.

The cave was first surveyed out into three foot squares, the survey marks being painted on the walls of the cave so as to indicate the actual floor level as well. Excavations were commenced on April 3rd, 1926, and were carried out in six inch layers area by area, the excavated material being taken outside the cave and carefully sorted. The finds from each area and level were labelled and kept separate until they were catalogued, when all particulars regarding each specimen were recorded under the specimen number. The remains from the "Old Spoil Heap" were kept as a separate group.

As the work progressed difficulty was experienced in the safe disposal of the dug material. Therefore during the winter months a large pit was dug to the west of the cave mouth, and the material from this was sent down to the road level by means of a shute of iron sheets (see plate IIB).

STRATIFICATION.

As the excavations progressed the following stratification was revealed as far as a depth of five feet is concerned for so far the excavations have not reached a greater depth.

1. Humus with many stones. Depth 0 to 12-ins. This was a very loose deposit and was practically indistinguishable in colour from layer 2. It was found on the platform outside the actual cave mouth and just inside it only. It was missing further in the cave.

2. Dark earth and stones. This again was a loose deposit and was found inside the cave and on the platform where it lay at an average depth of 12 to 24-ins. Its depth was slightly less towards the sides and also towards the back of the cave where at a distance of about 12 feet from the entrance it practically ceased to exist.

3. A hearth containing much well burnt wood ash which gave it a distinctly grey tinge. This was a much more compact layer than either 1 or 2. On the platform it was 9 to 12 inches thick (depth 24 to 36 inches), being less at the sides where it sloped up a little on the underlying layer. Inside the cave it sloped up towards the, back coming to the surface in the area "E" and ending there.

4. Late Pleistocene rubble. This is yellow in colour and can by this means be easily distinguished from the layers above. On the platform this material was largely cemented together with stalagmitic material especially at the sides where it reached a somewhat higher level than in the centre. In places the stalagmite imparted a distinctly whitish colouration to the material. Inside the cave the amount of cementation increased considerably and formed a breccia floor over considerable areas. Beneath this floor which reached a depth of six inches in places and which came to the surface in the area "E" was the yellow rubble of the platform. Patches of brecciated material occurred in this as far as a depth of 3 feet (-2 to -5 feet actual depth), beyond which it has as yet not been excavated and therefore its depth is unknown.

From 1 and 2 above it will be seen that a rapid fall of 1 foot occurs just inside the cave mouth so that inside the cave the hearth, which is the most important layer so far exposed, appears at a depth of 12 inches only.

FINDS.

In describing these it is proposed to deal only with those from the levels above the pleistocene as the deposits of this earlier age are as yet practically untouched and have so far yielded but scanty remains.

HUMAN REMAINS.

These possibly represent burials and therefore the level or levels to which they belong cannot be stated with any certainty ; the majority were found near the east wall in the area "BC." It is probable that they belong to the upper levels although some of the bones came actually from the hearth. The bones are so few that they are of very little importance, and so are not worth a detailed description.

The individuals represented are :----

- Adult, aged *circa* 50 60 years. Represented by a number of very worn teeth.
- (2) Adult, aged *circa* 30 years. Represented by a portion of the skull and a few teeth.
- (3) Child, aged circa 10 years. Represented by several fragmentary limb bones and some teeth.
- (4) Child, aged circa 5 years. Represented by a portion of superior maxilla with teeth.

ANIMAL REMAINS.

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The fauna from all three levels above the pleistocene is the same and includes sheep, ox, pig, horse, red deer, roe deer? and goat? The bones are fragmentary, having been largely broken up by human agency. The great majority came from the hearth many of them from this level being partly calcined. The commonest animal is the sheep with ox and pig about equal second. The remains of the other animals are sently.

ARTEFACTS.

It must be noted before describing these that the nature of the deposit is such that finds from one level can easily descend to a lower one through spaces between stones. Further disturbance by previous excavators and by burrowing animals together with the thinness of the layers allows of the distinction of only two levels above the Pleistocene; namely the upper soil and humus and the hearth. However if percentages of finds from levels be taken we find that the Roman and La Tène pottery occurred generally at a higher level than the few sherds of pottery which can fairly safely be assigned to the Hallstatt period.

A.—LEVELS ABOVE THE HEARTH.

I. POTTERY.

1. ROMAN. Only a small number of sherds have been recovered representing not more than eight vessels. These have the typical

everted lips of late date and all but one are of the black to grey ware of the Upchurch type; one other ware is represented by a single sherd shewing a part of the base of a buff vessel.

2. LA TENE. At least six vessels are represented by the few sherds recovered, but only two are worth describing separately. The type of vessel and ware is that found at the Glastonbury and Meare lake villages and at Read's Cavern and Wookey Hole, to quote but a few sites.

The lip forms present the usual characteristics as will be seen by a reference to figure 2 numbers 1-3.

(1) Several fragments of a large cooking pot with a slightly marked roll lip which bears on its internal surface a well-marked girth groove. The vessel is hand made and of medium quality paste, which contains many white granules. The exterior is reddish brown in colour while the interior is much darker being almost black in places.



FIG. 2.

(2) Two sherds of a vessel with an everted lip form and bearing above the shoulder a decoration consisting of girth grooves separated by a narrow band of cross hatching. A similar form of decoration occurs on a vessel from the Glastonbury Lake Village.¹ The vessel is hand-made, and of medium but hard paste, while the colour varies from dark brown to black. (Plate IVA, Fig. 1).

3. HALLSTATT.

Only a very few sherds representing but two vessels may be assigned with any degree of accuracy to this period. They are, however, worth describing in detail.

Glastonbury Lake Village, Vol. II, Plate LXXXIII, Pottery 242.

(1) Two sherds shew the typical finger tip ornament so common on pottery of this date arranged in the form of a ring immediately below the lip. One sherd also shews a plain boss standing out from the surface of the vessel just below the line of ornament. The paste is fine and hard while the colour is a light brown. (Plate VIa, Fig. 2.)

(2) A few sherds of a large vessel bearing a decoration consisting of alternate panels of furrows arranged at right angles to one another and at an angle of 45 degrees to the horizontal bounding furrow. Below this furrow comes a very slightly raised rib which bears a faint finger tip ornament. The vessel is of medium quality soft paste which varies in colour from black to red; the whole of the outer surface has been tooled, giving it an almost glazed appearance. A very similar vessel comes from All Canning's Cross.² (Plate IVA, Fig. 3)

II. STONE. (Fig. 3).

(1) This is an end scraper from the "Old Spoil Heap" material. The flaking of the implement, which is made of black flint is very coarse.



FIG. 3.

(2) The implement is made of grey flint, and a portion of the cortex of the nodule remains on the upper surface; it is best described as a serrated knife rather than as a saw. The serrations are very fine and have been made by pressure directed from the lower surface. The teeth are far too fine and regular for the serrations to be due to hard wear.

(3) (4) These are flake knives of flint, both of which bear some secondary chipping along their edges. One is slightly fire crackled.

2 All Canning's Cross, Plate XLIII, Fig. 1

(5) This is another flake knife of flint bearing a nibbled retouch along one edge. It is made of black flint which now bears a blue to white patina. It was found in the "Old Spoil Heap" material.

(6) The implement is made of a dark coloured flint with a mottled patina. It is a small knife with its back carefully chipped for a part of its length rather in the manner of a *point-à-cran*. It was found in disturbed material and from its general appearance probably belongs to the Pleistocene levels.

In addition to these implements a roughly cubical hammer stone of quartzite measuring 6 by 5 by 4 cms., and a portion of a Kimmeridge shale bracelet were found. The bracelet (Plate IVA, Fig. 8), has a depression running vertically through one end of the part recovered as if it had contained a pin, possibly to serve as part of a hinge.

3. METAL.

The only metal artefacts from the levels above the Hearth, or indeed from all the levels above the Pleistocene are four Roman coins. Three are complete and have been reported on by Mr. Mattingly of the department of Coins and Medals of the British Museum. The fourth coin has had a portion punched out leaving a crescentic part behind. This mutilation has been purposely carried out, and is therefore in keeping with the evidence from other sites, the object of the mutilation being to divide the coin into two of a lower denomination than the original coin.

(1) A normal coin of Constans of the mint of Aquileia. *Circa* A.D. 345. The reverse shews a soldier dragging a barbarian from a hut with the legend *Fel. Temp. Reparatio Aqs.* (Aquileia).

(2) An ancient imitation of a coin of Tetricus I. Circa A.D. 273, with the word Hilaritas(?) on the reverse.

(3) An ancient imitation of a coin of Tetricus I. Circa A.D. 273. This coin bears an interesting reverse. Sol I, with the legend (come)s Aug.

B. THE HEARTH.

1. POTTERY. (Plate IVA.)

The quantity of this material recovered from the Hearth is quite small only about 100 sherds being found, and most of these are of no great size; at least seven vessels are represented, but the real total is probably greater, and so it has been impossible to reconstruct a single vessel. A number of the sherds do however belong to vessels



SUN HOLE, CHEDDAR. PLATE IVa.



SUN HOLE, CHEDDAR. PLATE IVD.

of definite types and these are described in detail below as they are of the greatest importance in fixing the date of the occupation indicated by the hearth.

(1) A few small sherds of typical beaker pottery have been recovered. The paste is fine and hard, and the sherds bear the very common interrupted line decoration, which is made by means of a toothed wheel. Two of the sherds shew plain areas, and it would seem that at least two beakers are represented. The colour varies from a dark brown to black. (Figs. 5 and 6.)

(2) Sherds of another beaker of small size shew a decoration of irregularly arranged incised furrows very similar to that on a portion of a beaker from the West Kennet long barrow.³ The vessel is made of a fine, hard and black paste. (Fig. 7)

(3) A number of sherds of a large thick vessel, with a red exterior and of a soft coarse paste have been found. Most of the sherds are actually from the hearth, but a few of them came from the base of layer (2). One sherd shews a sharply angled base while another bears a band of cord chevron pattern bounded by a raised rib on which finger tip ornament has been impressed. (Fig. 4)

(4) Of this vessel parts of the base only have been found, and these obviously belong to a vessel of large size. The paste is dark with many fine white granules, and is fairly hard. (c. f. sherds from layers 3 and 4 Chelms Combe).⁴

(5) Just outside the entrance and resting on, but not in the hearth, was a portion of the base of a neolithic round-bottomed bowl. The paste is soft and coarse, and is brown on the surface, but black in the main mass. It would almost seem that a slip of finer and lighter paste was put on both surfaces of the vessel just before firing. A barbed and tanged arrow head, and a fine knife of flint were found close to the sherd and on the same level. (Fig. 4, Nos. 2 & 19).

(6) A single sherd shewing the lip form of another bowl was also found. In this case the paste is fine and hard and nearly black in colour, while the thickness is surprisingly small. The lip has been formed by running a spatula lightly round the edge, thus slightly flattening it and forcing the surplus clay towards the exterior where it forms a quite irregular beading at the lip.

(7) Several sherds of a fairly thin red to black vessel were found scattered all through the hearth. The paste is extraordinarily coarse,

³ West Kennet Long Barrow, Plate VIII, No. 75.

⁴ Excavations at Chelm's Combe, Cheddar, Som. Arch. and Nat. Hist. Soc. 1925-1926.

especially for such a thin vessel many large calcite fragments being included in it. The lip, as in (7) above has been formed by spatulation of the edge, which has thus been rendered quite flat, and has had a very faint finger tip ornament impressed upon it. (Fig. 2, No. 4).

2. STONE. (Fig. 4)

The majority of the flint implements from the hearth came from the platform area just outside the cave. In this group are included three implements from the very base of layer 2, for these implements are so obviously of the same facies that there can be no doubt that they really belong to the hearth.

All the implements described below are of flint unless it is otherwise stated. The patination varies tremendously from being scarcely existent to a very dense white. In the majority of cases it has taken place to such a degree that the flint is no longer black, but has assumed a mottled bluish white colour. Further great economy has been exercised in the use of flint for in quite a large number of cases the implements have not been freed of the cortex of the nodule completely as to do so would render the portion of flint too small for practical purposes. In some cases only the cortex has actually been trimmed to give a usable edge.

Numbers 8, 14 and 15 are steep end scrapers of which 8 and 15 are somewhat keeled, have very rough secondary chipping, and are of very poor quality flint. Number 14 is flat on top, and is all together a much finer implement with the secondary chipping carried right down the two sides which have evidently served to turn the implement into a side scraper as well.

Numbers 18, 12 and 22 are also end scrapers, but of a flatter and thinner type. Numbers 12 and 22 have a single scraping edge, the latter being also slightly fire crackled. Number 18 is a very fire example of the horse shoe form of end scraper and side scraper combined for the secondary chipping has been continued down both sides.

Numbers 16, 5 and 20 are best described as side scrapers of which the first two approach very nearly to the round form. The first is of very poor quality flint, and the second has merely had the cortex removed to form the edge the remainder being left as it was when struck off the parent block. The third is but the remnant of a very finely scaled implement. It is badly fire crackled, and was found in pieces, but sufficient remains to shew the excellency of the workmanship.



FIG. 4

Numbers 10, 11, 13 and 23 are knives of which 10 and 13 bear no secondary chipping, but shew signs of extensive use along their edges. Number 11 bears a minute secondary chipping along the slightly curved edge, and has in addition two carefully chipped notches in its back. Number 23 is the mere fragment of an implement, and here again along one edge the secondary chipping is made actually in the cortex. Number 19 is part of a wide knife, and bears fine scale flaking along both sides.

Number 4 is a beautifully made implement, the "business" portion being the stem. This is too large and blunt at the point to have been used as a borer, and it was probably used as a reamer to enlarge holes already made.

Number 6 may also have served as a very coarse reamer, but as the tip and the two long sides have been carefully brought to an edge it is probable that the implement served a variety of purposes.

Number 17 was probably a true borer, but the point is missing. Both sides shew signs of extensive use as knives. The implement came from a mass of material disturbed by trespassers and from its general appearance is probably of palæolithic date. The disturbance had been carried down into the top of the Pleistocene deposits.

Numbers 7 and 21 from their appearance and form can only have served as fabricators for the manufacture of other implements.

Number 9 is a peculiar toothed implement which as far as is known has not been recorded from other sites. The utilised edge has been retouched for two-thirds of its length, and bears two carefully made teeth separated by about half-an-inch. It could serve as a means by which parallel lines could be incised in bone or other material.

Number 1 is a very fine leaf-shaped arrow head; it bears a carefully executed scale flaking over the whole of the upper surface, and at the tips and round the edges on the lower.

Numbers 2 and 3 are two barbed and tanged arrow heads. In the latter the barbs are rudimentary, and the tip is blunt. In the former the remaining barb is very well marked.

In addition to the above there are nearly a hundred odd chips and pieces of flint, including two chips from a polished implement, as well as two small hammer stones, one of flint and one of limestone.

3. BONE. (Plate IVB).

(1) A point made from the split metatarsal or carpal of a sheep. The point has been carefully ground, and the whole implement polished by use. There is an indication here of variation in the manner of

making these points during this period as compared with the iron age examples from numerous sites. In the iron age the points are made as a rule by cutting off either the proximal ends of the bones, as at All Cannings Cross, or the distal ends as at Glastonbury Lake Village and similar sites. The bones are then trimmed to a point by cutting away the anterior surface. At Sun Hole the bone has first been split down its length, and then pointed by trimming away the freshly exposed surface towards the original lateral surface. Points similarly prepared come from Chelm's Combe,⁵ and Merlin's Cave in the Wye Valley, where a mixed deposit dates in the upper levels from the late Neolithic-Beaker times to late Roman.

Further evidence on this subject is required, and it is to be hoped that excavations at sites of a similar period will provide it.

(2) This is a mere fragment of a second point similar to number 1.

(3) This is a long slender point or pin with the tip missing. The implement was found in three pieces, and of the three fractures two were ancient as a film of stalagmite covered the broken surfaces. A similar but more rounded, longer and stouter point comes from layer IV at Chelm's Combe.

SUMMARY.

From the various pieces of evidence described above it is possible to reconstruct with a fair degree of accuracy part at least of the history of the cave since the close of Pleistocene times.

No occupation seems to have taken place since Roman times, though doubtless casual visits have been paid to the cave from time to time. The latest period of occupation of the cave appears then to have taken place in Roman times. The date of this occupation, namely A.D. 273–345, is given by the coins, and is one which corresponds with the late types of pottery found. It corresponds also to the time when sea raids were at least becoming prevalent, and the native population had to find as far as possible safer dwelling places, such as the caves of the Mendips and elsewhere afford. Of the severity of these raids and their harmful effects the numerous coin hoards of this period amply attest.

Whether the cave was occupied during the La Tène period, that is between A.D. 50 to B.C. 500, is doubtful, but the presence of sherds of vessels of typical La Tène forms uninfluenced by Roman technique rather suggests a temporary occupation within this period. The

5 ibid, p. 21 and Fig. XI, B1 and B2.

scarcity of the finds makes it certain that the duration of any occupation was very short.

The same arguments may be applied to the Hallstatt division of the Early Iron Age for the only finds that may be attributed to this period with any degree of certainty comprise only a few sherds of pottery.

Occupation in the Bronze Age is on the other hand well represented by the numerous remains from the hearth which from its thickness and trampled condition must represent an occupation extending over quite a considerable period as the deposits accumulated to an average depth of 9-12 inches. This relatively lengthy period of occupation is perhaps the explanation of the discovery in the same horizon of pottery types which are usually assumed to differ somewhat in date, and in this connection it is well to bear in mind the fact that some of the sherds of the vessels of the normally later types were found resting on the top of the hearth, and in the base of the layer above. On the other hand the comparative scarcity of pottery would seem to indicate that the occupation was quite short, and that therefore the types of vessels represented are in fact contemporary.

The association in the hearth of such distinct pottery types as the beaker, and the Neolithic round bottomed bowl and vessels bearing the cord chevron design has been already noted from such sites as Rowberrow Cavern, Chelm's ('ombe,6 Soldier's Hole in the Mendips and Merlin's Cave in the Wyc Valley and Windmill Hill, and in face of this accummulation of evidence the types must be regarded as contemporary. Sun Hole then must be added to the list of sites at which this association occurs.

Perhaps of greater interest than the pottery are the associated types of flint implements. One such series has been described in connection with the excavations at Rowberrow Cavern.7 In that cave, though, the series was not quite so large as that from Sun Hole. The flints from the latter cave may therefore be taken as representative of the various types of flint implements in use in the Mendip region at the time indicated by the hearth. That being so it is important to note the occurrence together of such forms as the leaf and barbed and tanged arrow heads for the former arc usually assumed to be earlier in date than the latter. Further in this cave it is the barbed and tanged forms that are the more heavily patinated, but this difference may be due to difference in the origin of the flint, or to the

ibid, p. 17 et seq. Spel. Soc. Proc., Vol. U, p. 46, et seq. and p. 197, et seq.

weathering conditions to which they were exposed. The pygmy flints of early Bronze Age date are, however, absent from this Cave.

The date represented by the hearth would be about 2000 B.C., if $Fox's^8$ dating of the incoming beaker culture is correct. The presence of Neolithic bowls and the complete absence of all traces of copper or bronze would seem to argue a little earlier date, say round about 2100 B.C., but nothing definite can be concluded for metal is very often absent in barrow inhumations associated with early forms of beakers.

CONCLUSIONS.

It may be concluded, then, that since the close of the Pleistocene Sun Hole was occupied :—

1. For a considerable period round about 2000 B.C., namely at the commencement of the beaker period of the Bronze Age.

2. Casual visits were paid during the Hallstatt and La Tène periods of the Early Iron Age.

3. A somewhat longer period of occupation occurred during the later part of the Roman era in Britain, at a time when danger from sea raids was considerable.

Finally on behalf of the Society we would like to express our thanks to Mr. Athay for facilities afforded for the storage of tools at Cheddar, and to Mr. Arthur Gough for permission to make use of the parking ground as a temporary dump for the material from the pit during the winter months. We are also indebted to Mr. J. A. Davies for the drawings of the flints and to Mr. R. F. Parry for various services rendered.

8 Fox, Archael. of Cambridge Region, p. 16, et seq.