

Second Report on Aveline's Hole.

BY J. A. DAVIES.

INTRODUCTION.

During the visit of the Somerset Archaeological Society to Burrington in July, I had the privilege of hearing from Sir William Boyd-Dawkins an account of his work in this Cave. He stated that Aveline's Hole was the first cave which he explored, and it was named by him after his teacher and colleague, William Talbot Aveline.

Since the writing of the last report, about twenty-eight tons of material have been removed from this Cave and sorted. Most of this material came from the right hand side of the Cave, and at a greater distance than thirty feet from the mouth. All the articles described in this paper were found as a result of this work.

For some unknown reason finds of artifacts from the above region were much more rare than from the left hand side, though animal remains were evenly distributed, and the deposit reaches approximately the same height on both sides of the Cave. A depth of three feet has now been reached from fifteen to sixty-five feet from the mouth, (the vestibule is singularly barren), and over the greater part of this area, the lower limit of the insoluble residue from the limestone which forms the red cave-earth has also been reached. Below this red layer is found yellow loam of unknown thickness, which, judging by its fine stratification (on the average more than ten layers make an inch), was deposited by slowly moving water. No finds have been made in it, although recently about two tons were sorted. Possibly it represents more arid conditions than those which existed when the red cave earth entered the cave, but it is not proposed to maintain that the loam is of aeolian origin.

The most fruitful source of material found during the past year was a little rift on the left of the mouth. Few artifacts were found in it, but it has yielded a very large number of small mammal remains, many in excellent condition, and numerous bird bones. The finds may now be described.

HUMAN REMAINS.

Small human bones such as tarsal and carpal bones and teeth were found throughout the small quantity of earth removed from the left of the cave. These had undoubtedly slipped between boulders from the previously excavated two feet above. Nothing of great importance requires reporting with the exception of the teeth, several of which show unmistakable signs of caries, and two apparently have their roots scraped or filed.

ANIMAL REMAINS.

The number of species identified has now increased to 80. This is largely due to the work of Mr. E. T. Newton, F.R.S., who has already identified 49 species of birds from Aveline's Hole. Too high a tribute cannot be paid to his work, which gives us a very clear picture of the bird life of the Mendips in Late Palæolithic times, but thanks are also due to Mr. M. A. C. Hinton (British Museum of Natural History), who has recently worked through a large collection of skulls and jaws of small mammals. All who are familiar with the problems of late Palæolithic chronology will recognise their extreme importance in the determination of the period of the human remains and artifacts. Mr. Newton's report is given below.

Of the larger mammals, numerous small fragments of reindeer antler have appeared during recent excavation—some from the third foot. Perhaps it is wiser to withdraw the assertion that *Bos longifrons* and dog were found in the cave. The supposed remains of the former belong to young individuals with milk teeth so that it is difficult to assign them to a definite species with accuracy, and the remains which have previously been regarded as belonging to *Canis familiaris* are possibly those of a very large fox. The only names to add to the list published last year are Stoat and Weasel, jaws of which were discovered in the rift at the cave mouth.

An interesting fact recently brought to light is that fox bones, which are found everywhere, received special attention from the cave dwellers. They are always gnawed extensively, and often show such definite signs of cutting as would be made by stone implements. Bones of hares and birds have escaped such drastic treatment, though as a rule they are broken. Perhaps the flesh of fox was an Upper Palæolithic delicacy. It would be interesting to find if fox bones are discovered in this state from contemporary horizons.

ARTIFACTS.

BONE, ETC.

Owing to the fact that much recent work has been pure quarrying, discoveries of artifacts have been rather infrequent during the past year. No finds of worked antler have been made, but a few bone implements have been obtained. Fig. 16—(1), is a rough bone point or lance from the first foot. It has been made from a tibia of a fairly large animal by cutting away the wall of the shaft at one end, as shown in the sketch, leaving a point. The marks made by the blunt cutting tool are very clear in the original. From its shape, it could be very easily and securely hafted. A somewhat similar point was found in the third foot, but in this case the end of the haft would not have been entirely covered by bone. No. (2) represents a curious hooked bone implement from the third foot, which has been obviously tooled. Its use is unknown. Near it was a fragment of the canine tooth of a Brown Bear, which may have been used as an awl. Some rougher tools—mere fragments of utilised bone which show definite signs of use and adaptation to use—occur in the first and second layers. A curious find consisted of the fragmentary ribs of some small mammal—about the size of those of a rabbit—which showed a series of minute cuts at regular intervals along their surfaces. From the second foot came a cannon bone of horse, which had been sawn in two. Other finds are the two human teeth described above, and a few shell beads from the first layer.

STONE.

Fig. 16—(3), (4), and (5), are *Gravette* points. (4) is a particularly good example having a beautifully retouched butt, and an elaborately chipped back. It came from the first layer. (5), from the third layer, was probably identical with (4), but the lower end was broke off before the commencement of patination. (3), from the second foot, has the same shape, but is smaller than (4) or (5). Nos. (8) and (11) from the third foot may also be described as *Gravette* points, and though not so typical in shape, damaged fragments of the same type of tool are seen in (14), from the second layer, which is made of a granular type of flint, with a non lustrous patina, and (15), a microlithic example from the first foot. No. (17) is a fragmentary *Chatelperron* point from the first foot. Another fragment of the same type was recently found in the second foot. All of these *Gravette* and *Chatelperron* points

bear signs of hard wear on their edges, showing that they were used as knives. No. (7) is a triangular microlithic knife, with battered back, from the first foot. No. (6), from the third layer, is a broken *grattoir*, or scratching knife, made from a stout flake. The worked end is intact. Such tools are common in Upper Palæolithic stations. No. (9) is a *burin* from the second foot. The end opposite to that on which the characteristic blow was struck bears a retouch, and it is probable that the implement was used as a knife. No. (10), which came from the second foot, and is the longest stone tool found in the cave, is a blade with a blunt point bearing a slight retouch. The edges show signs of much hard wear. No. (12), from the first foot, is a thin damaged flake, the finer edge of which has been blunted by a regular, nibbling retouch. The opposite edge has been worn by use. Near the end of the tool two small notches have been made opposite each other by delicate work, leaving a "waist," No. (13), from the third foot, is a thin flake, showing part of the cortex. Two opposed points for boring have been made by careful work. One end is notched. No. (16), from the second foot, is a small retouched broken piercer. Nos. (18) and (19) are pigmy flints, from the first foot. The first is a minute wedge, and the second is pear-shaped. Several fragments of small retouched knives were found in all three layers, and also numerous unretouched blades of various sizes. All these flint tools are made of thin flakes, No. (4) having the thickest cross-section. Practically all bear a lustrous white patina.

Near the cave mouth, in the first foot, and surrounded by bones of fox and small rodents, a small roughly spherical hammer-stone of quartzite was discovered. It bears the marks of usage.

Like the implements which have been previously figured, these stone implements show that the industry from the three feet so far investigated is homogeneous. This is to be expected, when it is remembered that the cave slopes downward from the bottom of a steep combe, and thus a layer of earth and stone three feet thick would be formed much more rapidly than noticeable differentiations in culture. The fact that in one place over a foot of earth and gravel has been laid down since the re-opening of the cave in 1797 supports this view.

All the stone implements are of the same types as those described on pages 69-71 of this volume, no new type of tool having

been met with. There is no reason to modify the view formed before, that the stone culture is a direct continuation of the late Aurignacian, or perhaps a transition between that industry and the Tardenoisian.

SUMMARY.

From the surface to the depth of three feet, in the outer part of the cave, the floor consists of a red plastic clayey soil, plentifully mixed with gravel and boulders, and containing all the finds of every kind which have been described.

Below the red layer is yellow loam, or silt, of unknown thickness. It is less plastic than the upper layer. Gravel and stones, except large boulders, such as fell from the roof, are entirely absent, and apparently it was laid down by much gentler water action than that which carried the red layer. Finds of all kinds are entirely absent from that small portion which has been explored.

The very happy circumstance of the discovery of the small rift at the cave mouth filled with red earth, in which were numerous avian and small mammal remains, has served to emphasize the similarity between the fauna and age of the deposits here, and that of the Ightham Fissures, although in the latter deposits large pachyderms and hyæna were present. There is no trace of these animals in Aveline's Hole, and therefore the remains may be a little later than those from Ightham.

CONCLUSION.

If the Magdalenian harpoon described on page 69 be regarded as a fossil, and the evidence it affords is used in conjunction with that obtained from small mammals, the period of formation of these deposits may be definitely determined. To accomplish this the evidence must be compared with that given by the stations in which the artifacts and animal remains have been thoroughly investigated. A suitable station for comparison is *das Schweizerbild* in Switzerland. In this Alpine cave a remarkably prolific late Magdalenian layer overlay a stratum containing small Arctic rodents. Above the Magdalenian horizon was a further layer of rodents, and in it were discovered Mesolithic remains. According to one authority the upper rodent bed may be a result of a resortment of the deposits.¹ To those who have spent much time in

¹ Macalister, *European Archaeology*, Vol. I, p. 423.

practical cave exploration this seems a very arbitrary method of explaining away the presence of a rodent layer 0.80 to 1 metre thick, especially when that layer covers another from which tundra types are entirely absent.² No remains of pika were found in the lower rodent layer, but this animal was well represented in the upper layer. In Aveline's Hole pika is present, but is relatively uncommon compared with common and banded lemmings. Its presence may indicate a later date than that of the lower Schweizerbild rodent layer, which apparently was laid down at the time of the Bühl post-glacial advance, and in early Magdalenian times. Again, the maximum of cold in France was reached in Middle Magdalenian times (M.5.).³ The presence of pika in Aveline's Hole seems to show that in the period M.6.b., the maximum of cold had been recently past in the South of England. This is supported by the presence of the harpoon which is M.6.(b), and of remains of pig, ox, horse, stag, and many small passerine birds which do not belong to the tundra. Against this must be set the presence of lemmings, reindeer, and other northern animals which were discovered closely associated with the pika, horse, ox, etc. Again, the red earth which was evidently washed in, and in which all the finds were made, covers the yellow earth which, as shown above, was deposited during a drier interval. As a tentative suggestion it may be put forward that this dry interval is identical with that suggested by Mr. H. J. E. Peake⁴ in his elaborate correlation of the Ice Age and Palæolithic cultures.

In order to elucidate the above rather involved argument the matter may be set forward in a series of equations.

GSCHNITZ, *Schweizerbild*, U. rodent layer = *Aveline's Hole* (Red layer), [M.6. (b),] (Pika).

INTERVAL, *Schweizerbild* (Late Mag.) = *Aveline's Hole* (Yellow layer) ?

BÜHL, *Schweizerbild* = *Teyjat, Dordogne* [M.5.]. (L. Rodent Layer)

During the next twelve months it is hoped to carry out much more extensive excavations in the yellow earth. The discovery of a representative fauna in this should go a long way to answer the question of the exact geological period of the late Magdalenian phase in Britain.

² Osborne, p. 447. Burkitt, p. 117.

³ Burkitt, p. 104.

⁴ H. J. E. Peake, *Man*, 1921. pp. 6-11.

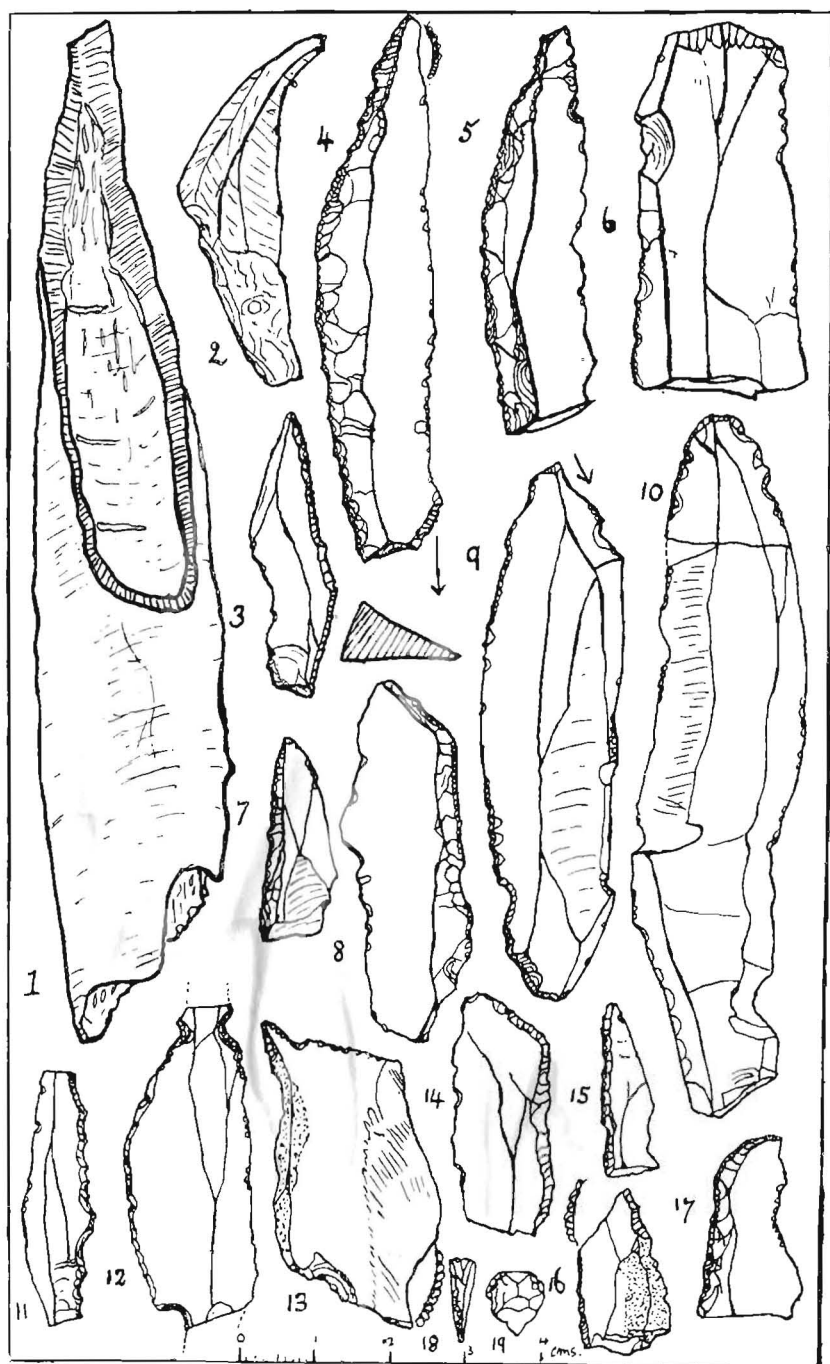
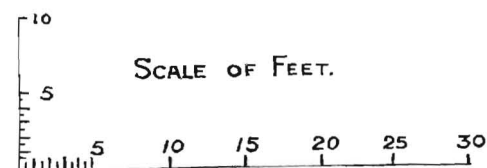
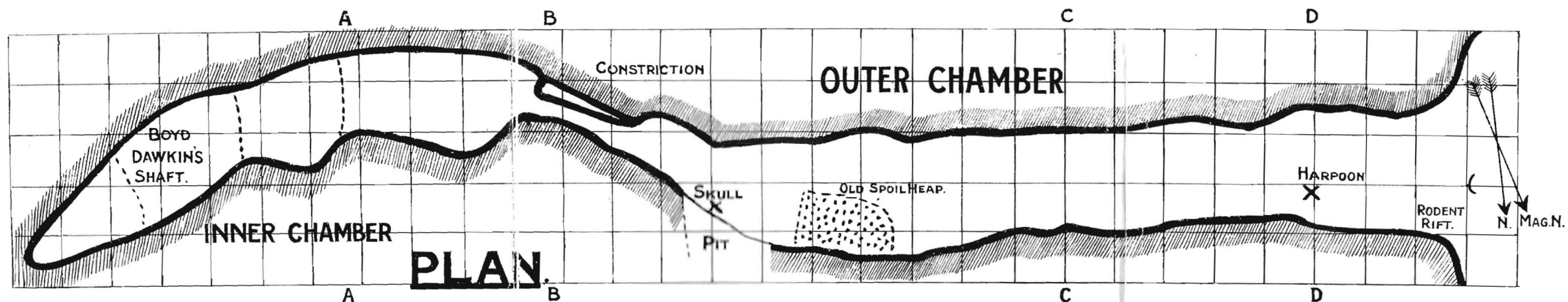


FIG. 16.

AVELINE'S HOLE.



ELEVATION

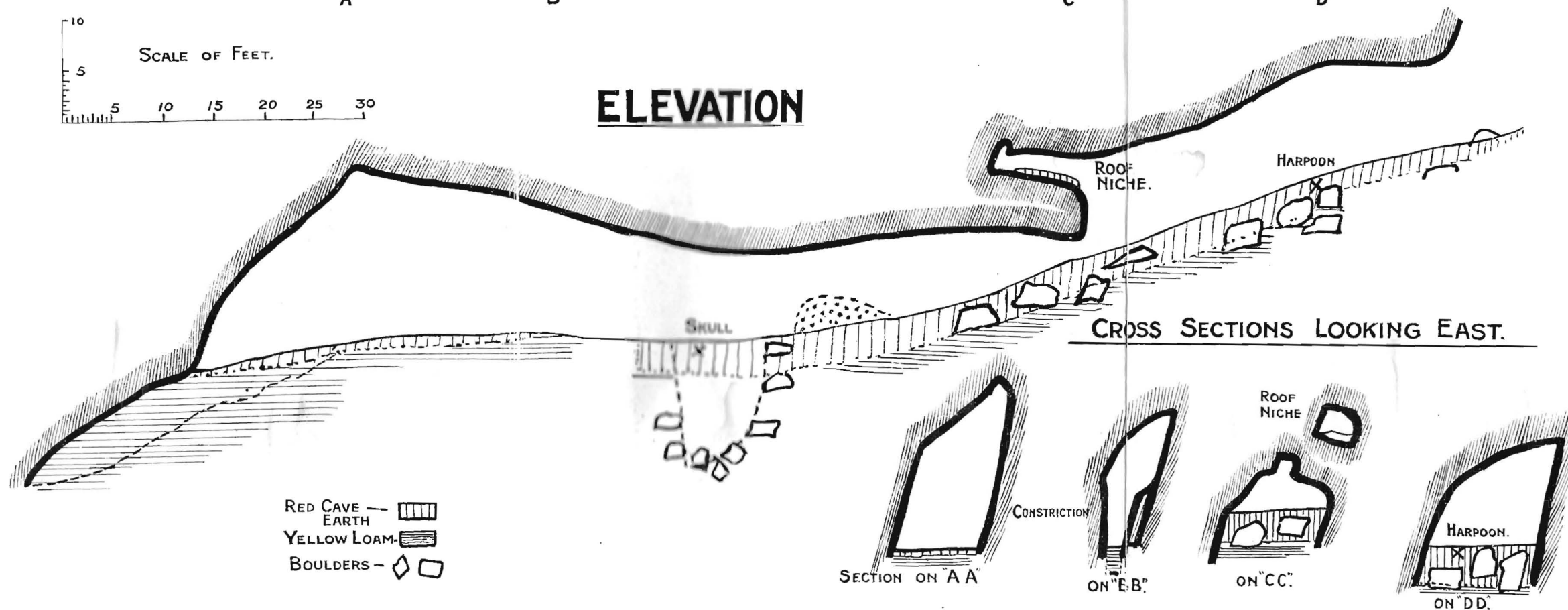


FIG. 17.