

ART. VII.—*Report on the exploration of Bonfire Scar Cave and Dobson Cave, near Scales in Furness.* By W. G. ATKINSON.

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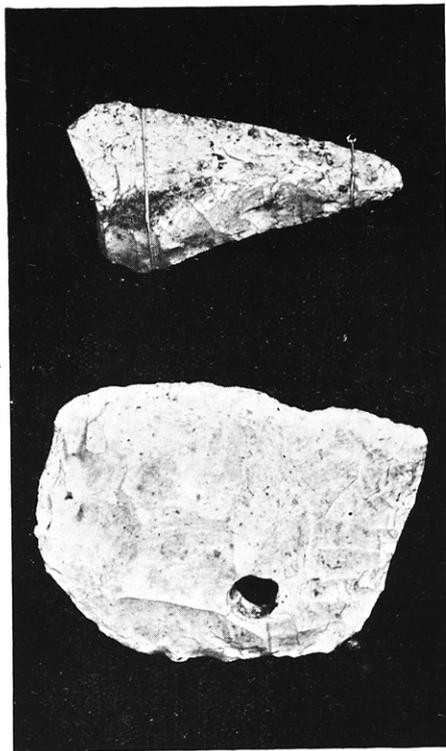
BONFIRE Scar Cave, at the foot of a bluff of limestone, on the most elevated part of Scales' Hags, is a small cavern, measuring 8 feet long by 5 feet wide; the roof being 5 feet above the floor. A sunken V-shaped way—similar to the one by the side of the "Druids' Circles" on Birkrigg—leads in an ascending direction to the mouth of the cave. We commenced the excavation on the 8th Sept., 1925. The mouth of the cave was filled with large blocks of limestone and earth, and we experienced some difficulty in gaining an entrance. A sledge-hammer had to be requisitioned to break some of the large stones before admission was effected. In the preliminary work of opening out the mouth of the cave we found a piece of raddle that had been rubbed into the shape of a pebble, and one human tooth.

These finds encouraged us to pursue the excavation, and we decided to remove the whole of the earth, etc., that had accumulated on the floor of the cave, so that we might subject the contents to a thorough investigation. We quickly discovered evidences that the cave had been used for burial purposes; both human and other animal remains being found. Amongst the latter the bones of the Celtic Ox, *Bos longifrons*, preponderated, all bearing testimony to the dwarfed variety of this animal. Teeth, jaw-bones and other bones, many of which had been split longitudinally, were unearthed. Some few had been fashioned into artifacts. One bone (of Ox) 4 inches long by $2\frac{1}{2}$ inches wide had been cut and flaked into a wedge-



MOUTH OF BONFIRE SCAR CAVE.

Photos, supplied by Mr. W. J. Atkinson.



FLINTS FROM BONFIRE SCAR CAVE.

TO FACE P. 110.

shaped tool and fashioned so as to produce a pointed implement for boring.

Other animal remains included those of sheep, pig, dog, a species of vole (jaw-bone and teeth), rabbit and the bones of various birds. The bones of the sheep indicated that they were of a stunted variety, and some bore evidence that they had been gnawed by dogs or other animals.

A bone of a pig cut transversely, in a somewhat diagonal direction, bore evidence that the cut edge had been used for polishing purposes. Along with these remains, the shells of three species of Molluscs were unearthed—cockle, mussel, and oyster. The paucity of the shells found would lead us to the conclusion that the shell-fish had not been used in a funeral feast, but were probably placed in the cave with human remains for some ceremonial purpose. This view is strengthened by the evidence furnished by some half-dozen oyster shells which appear to be water-worn, as though they had been gathered in that condition on the shore, which is a short distance away.

One piece of pottery, indicating that the ingredients that had been used for its manufacture had been imperfectly mixed, and that the black glaze that partially covered its surface had been crudely applied, was found.

A number of stone implements were discovered, the most important of which were two, fashioned in flint. One of these was a scraper, $2\frac{1}{2}$ inches long by 2 inches wide. It has a perforation $\frac{5}{16}$ of an inch wide, which might have served for the insertion of a piece of hide or cord, for the safe keeping of the implement. This perforation has been pronounced to be a natural hole, due to a coral stem; some part of this hole appears to have been rubbed. The implement is made from a flake of white-coloured flint about a $\frac{1}{4}$ inch thick. Mr. Frank Stevens, F.S.A., Controller of the Salisbury, South Wilts. and Blackmore Museum, writes "it has a fine bulb of percussion and conchoidal

fracture, which are good evidence" that this implement has been carefully fashioned. One edge of this implement is somewhat straight and knife-like: the opposite side is slightly convex. It shows "ripple-flaking" on one edge and must have been a very effective tool. It is flaked on one side only. Sir Arthur Keith, to whom it was sent with a number of human remains, says of it "The most remarkable flint is that wide flaked Mousterian-looking scraper."

The other flint has been submitted to three authorities for an opinion. One pronounces it to be a scraper, another a knife, and a third a lance or arrow-head. Like the scraper above described it is fashioned of white flint, and flaked on one side only, and measures $2\frac{1}{4}$ inches long by $1\frac{1}{4}$ inches at the broadest end. The opposite end is brought to a point, and the implement bears evidence of very careful flaking. The writer knows of no similar implements found hitherto in Furness. These implements were most probably imported. There were others found that bespeak a more careless type of workmanship. Mr. Stevens, to whom one of these was submitted, writes "it looks like a celt, broken in the making." He further comments "on the downgrade type of work executed by the men of the Early Iron Age." Prof. G. F. Scott Elliot in *Prehistoric Man and his story* (3rd edition, page 366) writes of the men of the Age of Metals, "They had both adzes and axes of stone. These were not carefully made." These words are verified in the making of this celt, but it would answer well for cutting purposes for all that. It measures 6 inches long, and is $3\frac{1}{2}$ inches wide, and $1\frac{1}{2}$ inches thick. It is broken at the butt end, the opposite end is rounded, and has a fine cutting edge.

Another flat, somewhat rounded piece of mudstone, similar in texture to the kind frequently used for the making of polished celts, bears evidence of having been chipped and rubbed into shape. Mr. Stevens "does not

think that this was so made for use as a hammer-stone, as there is not sufficient evidence of its having been used for battering purposes," but admits "it shows signs of having been rubbed." It might possibly have served for throwing purposes for the killing of small game. A piece of grit-stone, 3 inches high, 2 inches in diameter, has the appearance of a muller or pestle for grinding purposes. One end, that might serve for grinding, has a little depression in it, to facilitate this process.

Another piece of grit has been rubbed into a triangular shape, and has probably been used for grinding. A small pebble evidences that it has been employed for polishing purposes, one surface only (and that a flat one) being polished.

In both Bonfire Scar Cave and Dobson Cave, iron objects were found. One of these is somewhat like a clinched nail of small size; the other has been pronounced by Mr. Stevens to be an implement. It is four inches long and $\frac{1}{2}$ an inch in diameter at the thickest part. Sir Arthur Keith writes, "do find out the date and origin of these iron pieces." They are of some importance in our investigation, as they confirm the opinion that the Early Iron Age had dawned when these remains were interred. One authority consulted hints at the possibility of cannibalism. The bones might suggest "a feast of the dead hero. Eating him to get his courage was quite common" amongst primitive peoples. Some countenance to this view is to be found in one of the bones discovered, which has been split longitudinally, and bears the marks of teeth. Sir Arthur Keith states that this bone is "part of a human fibula," but does not report any signs of cannibalism. Mr. Stevens writes that "the packing of the bones together in the cave suggests an ossuary."

Perhaps the most remarkable object found is a piece of a human skull, 3 inches long by $2\frac{1}{4}$ inches wide at the broadest part, which shows signs of having been cut with

some sharp instrument. Sir Arthur Keith thinks it might have been used as a scraper, and in his report numbers it 19a. Sir Arthur Keith numbered the bones reported on, in the following manner:—

(Human remains). Bonfire Scar Cave.

4. Fragment from the upper front end of the right parietal bone of a young adult. The outer surface has a smooth shiny polish, and the inner rough surface is smoothed. I have seen a complete skull with such a shiny polish. I think it only occurs where bone becomes impregnated with lime salts and I suspect that the polish is due to dust being blown over the surface. I cannot make out any facet such as rubbing would produce.

5. Upper fragment of a right parietal bone, probably of an old person.

6. Right half of upper jaw of a child, about 8 years of age, probably a boy. The chewing surface of the milk molar is more worn than is seen in the corresponding milk molar of a living child.

7. Fragment of left parietal bone of the same skull as No. 5.

8-19. Fragments of the vault of 2 or 3 human skulls, perhaps more. Some of them are from the skull of an old person: mostly of parietal and frontal bones, no reconstruction is possible.

19a. Upper part of frontal bone, includes the middle and to left of middle the cut crosses the left frontal eminence. The fractured surface shows that the bone was broken at death or soon after. The cut at its lower end—the left frontal eminence—was made by a sharp metallic weapon—probably a sword. On the outer or left margin is seen a perforation—which caused fracture of bone—made by a pointed instrument. The bone is blackened in patches as if it had lain in ashes. It is comparatively smooth; the upper edge is slightly rubbed. It may have been used as scraper. Fragment thick and strong, apparently from a man's skull.

20. Of a young man, crowns almost unworn. All the teeth are free from disease. The chin is square, but not prominent—rather receding.

21a and 21b. Of a woman, middle-aged. The teeth are not deeply worn. The wisdom tooth is absent, being undeveloped—a sign which is met with amongst the Romano-British as well as in living women. Her chin was square, and moderately developed.

22. Fragment of an oldish person: all the teeth have fallen out of the sockets after death, save the first molar which is only moderately worn. The chin is receding, being a mere rounded elevation or knob.

23. Right half of an oldish person's jaw. The teeth now lost had been present at death. Chin wide but not prominent.

24. Fragment of the right side of a man's jaw. No caries tooth was noted, and no trace of a gumboil.

25. Upper third of the right thigh-bone of a strong man. Just below the small trochanter its width is 35 m.m. and its front to back diameter 26 m.m. The shaft is thus moderately flattened. Such a thigh-bone is usual in the Romano-British and Late Celtic people of Britain.

26. Head of a human thigh bone: left side, may be opposite side of 25.

27. Upper part of left humerus; probably a woman's.

28. Fragment of upper end left humerus, probably a woman's.

29. Part of the shaft of a right humerus, extending from neck to middle of the shaft. Probably a man's.

30. Fragment of upper end of a right humerus; probably a man's.

In the excavation of the Disc Mound at Sunbrick there was but slender evidence of the observance of the rite of the cremation of human beings. There was much more indication of this practice in the remains found in Bonfire Scar Cave. Quite a number of bones, and some pieces of charcoal were here unearthened. The name Bonfire originally meant Bonfire; is it possible that the place-name of this site had its origin in the far-away practice of cremation?

My thanks are due to Sir Arthur Keith and Mr. F. Stevens, F.S.A., for their interest in the work, and opinions on the remains; to Mrs. and Miss Richardson, of Stockbridge House, Ulverston, for their assistance in the search for objects of archæological interest; to Mr. Edward Swainson for permission to carry out the investigation; to Mr. R. Stables for his careful work in digging, and his keen interest in all the finds.

Reference is made to Scales Hags in Wm. Close's

edition of West's *Antiquities of Furness*, published in 1805, page 394, where he writes: "There are several reasons to believe that the hill called Scales Haggs contains many large subterraneous vacuities, and that some of them were known to our ancestors." J. P. Morris in *The North Lonsdale Magazine*, page 85, quotes from Close's record as does Dr. H. Barber in his *Furness and Cartmel Notes*, page 106. Nothing seems to have been done in the way of excavation at Scales since that carried out by the members of the Archæological Institute in 1868. This excavation was done in a cave at some little distance from Bonfire Scar Cave. The latter was pointed out to me by Mr. Robert Crawford, of Oxford Street, Ulverston.

In conclusion, Sir Arthur Keith writes "you have parts of at least half a dozen people—men and women." From his remarks respecting the characteristic chins of these people, which were somewhat inconspicuous and receding, we may infer that the individuals whose remains were here found, belonged to the Late Celtic people, who lived in the Early Iron Age.