Report for the fifteen months ending December, 1922.

Though no great discoveries have been made during the past fifteen months those that have been made can certainly be described as important, and the whole period covered by this report as successful; the actual work of the Society is dealt with elsewhere, but it must be borne in mind that all the work is carried out by the members themselves, and that no other labour is employed.

The sessional meetings, reports of which are given below, were all well attended, and were much appreciated by members; the Society has been fortunate in hearing lectures from so many distinguished authorities.

The usual camps have been held at the New Year, at Easter and in the summer, though the rather unsettled weather of the summer months hampered the field work to a certain extent. In spite of this much has been accomplished, as these Proceedings testify.

The rearrangement of the Museum and the re-cataloguing of all the finds, both exhibited and unexhibited, is now practically complete. It is hoped that better and additional accommodation will be available next autumn, so that the necessary extra cases may be placed in the museum.

A number of important additions have been made to the library by gift, loan or purchase, and a full list of these is appended; we take this opportunity of expressing our thanks to all those who subscribed for the purchase of the *Glastonbury Lake Village*, and also to Professor S. H. Reynolds, Dr. L. S. Palmer, Dr. A. B. Prowse and Messrs. J. A. Davies and E. K. Tratman, for presentations to the library. It is satisfactory to note that there has been a large increase in the number of books borrowed by members, and further that the Society has been able to allot funds for the purpose of adding to the library important books.

The Society was invited to send representatives to the meeting of the British Association at Hull in September, 1922. This invitation was accepted, and two papers were read before the Anthropological Section on the results of the Society's work; one paper was by Mr. J. A. Davies on "Aveline's Hole, Burrington

Combe, Somerset" and the other by Mr. E. K. Tratman on "Read's Cavern, near Burrington Combe, Somerset." Both papers were well received, and the Society was congratulated by the President and members of the Section on its achievements.

We desire to express our thanks to the Colston Research Committee of the University for a grant of £20 for equipment and working expenses; this grant in addition to one of £25 from the Guild of Undergraduates for similar purposes has enabled us to bring our equipment throughly uptodate. Our thanks are again due to the Guild of Undergraduates for a grant of £10 towards the cost of publication of these Proceedings.

An attempt is being made in this number to enlarge the scope of the Proceedings in order that a larger public may be interested, for it is only by increasing the circulation that these publications can be made to pay their way. It is satisfactory to note that the sales of the second number exceed those of the first number by nearly 40 per cent.

E. K. TRATMAN,

Hon. Sec.

SESSIONAL MEETINGS.

On October 20th, 1921, a report was made to the Society by Mr. J. A. Davies on "Work at Aveline's Hole." This report has already been published, and so no more reference is necessary.

On November 10th, 1921, Professor S. H. Reynolds, Sc.D., lectured to the Society on "Some bone caves and fissures of the Bristol district."

The lecturer dealt first with the Uphill bone caves, and gave early history of their discovery and exploration. The caves, now quarried away, consisted of a series of rifts opening into the roof of a large lower chamber, which contained Romano-British remains. The rifts, which were choked at their lower ends, contained animal bones, hyæna being the most numerous, while cave bear, woolly

rhinoceros and mammoth were also represented. Writing in 1863, Pooley mentioned another Uphill cave from which some human remains were sent to Oxford. No trace can now be found either of the cave or of the bones.

The cave at Walton near Clevedon, was next described. Professor Reynolds said that before he went to oversee the work several cartloads of bones had been removed, and put on to the light railway. From those remaining he had collected bones of birds and small rodents, including lemmings. Horse, bear, wolf, fox, arctic fox, voles, eagle, buzzard, and wheatear were amongst the species represented. The bones of the bears frequently shewed traces of osteo-arthritic disease. The bones had been washed into the cave, which was evidently much reduced from its original size. The period to which they belonged was probably Aurignacian and Solutrean.

The Durdham Down Fissure was first described by Watson in 1886; it appeared to have been a hyæna den. The bones, many of them gnawed, included those of Elephas Antiquus and Primigenius, hippopotamus, lion and brown bear, as well as reindeer, horse, wolf, badger, otter, weasel and rodents. The presence together of bones of warm and cold loving animals might be explained by three theories; that of structural modification; that of seasonal migration; or that of climatic change during the formation of the deposits.

The lecture was illustrated by lantern slides.

At a meeting on November 25th, 1921, Mr. Miles Burkitt, M.A., lectured to the Society on "Prehistoric Art, its meanings and uses."

A new discovery was reported by Mr. Burkitt of what was evidently a ceremonial burial of Mousterian times in France. The head of the skeleton, from which the face bones had been removed, was found on one side of a boulder, and the rest of the bones on the other side. The first cup markings to be discovered of Aurignacian times were in the same cave.

The third discovery was that in the cave of Trois Frères in the Ariège. High up on the wall of the cave and near a windowlike opening was a painted figure, part man and part beast. This suggested the masked figures employed for magic purposes by primitive peoples of to-day.

Mr. Burkitt entered into an interesting discussion of the meaning and psychology of the cave paintings. He dismissed the theories of pure decoration of a dwelling place, and of mere artistic ebullience, because of the inaccessibility of the sites of the paintings, and came to the conclusion that they were the expression of magical arts probably intended to give help to the hunter in procuring a supply of food. He also considered the possibility that there may have been definite schools for teaching the "Art mobilier."

On Friday, December 9th, Mr. J. H. Savory lectured to the Society on "Caves of the Mendips." The lecture was illustrated by slides made from the lecturer's own magnificent photographs of the caves, which were much appreciated. The newly discovered parts of Swildon's Hole, Priddy, were much admired, while the first complete plan and section of the same cave caused much interest. Other parts of the cave that were shewn were the forty and twenty foot falls, the corrugated strata, the double pot, Barnes's Loop and the November 12th Grotto. An illustrated description of Lamb's Lair completed the lecture.

On Thursday, January 19th, 1922, the President, Professor Edward Fawcett, M.D., C.M., delivered the Presidential address on "Giants, and their possible relation to Prehistoric Man."

The President said that Sir Arthur Keith had first pointed out the resemblance between the skulls of giants and of Neanderthal, and the newly discovered Rhodesian man.

The history of Cotter the Bristol Giant was given with the result of the examination of his bones when his body was exhumed in 1906. From the measurements then obtained, Professors Fawcett, Beddoe and Karl Pierson estimated his height to have been about seven feet ten inches. The pituitary fossa was enlarged to an enormous extent. The suggestion had been put forward by Sir Arthur Keith that the pituitary body was more active in prehistoric than in modern man. The festooning of the supra-temporal crests was present in the skull of Cotter, and also in those of the skull from Aveline's Hole.

On February 2nd, 1922, a lecture was given by Professor J. F. Dobson, M.A., on "Prehistory in Greece." This starts with the neolithic period as no palæolithic remains have been found. However, there is a complete sequence of culture from early neolithic times to the Early Iron Age. It was shewn how stones became sacred, and thus sanctity was attributed to neolithic stone implements, especially the axe. The use of the axe in religious ritual was traced and illustrated by lantern slides of buildings and vase paintings. The cultures could be approximately dated by means of the contemporary Egyptian cultures.

On February 16th, 1922, Mr. H. Balfour, M.A., of the Pitt-Rivers Museum, Oxford, lectured to the Society on "The Art of the Bushmen of South Africa, as compared with that of Prehistoric Man."

Mr. Balfour explained that Bushman art was essentially realistic, like that of other people of the nomad-hunter stage. The animals which were best portrayed were the eland, buffalo, wildebeeste, ostrich and domestic cattle; the latter were used by the Bushman, although he did not domesticate them himself. The work was that of naturalists as well as of artists. Observers of the Bushmen before they became scarce maintained that the artists were specialists who guarded their secrets from all but a few chosen disciples. The colours used were derived from ochres, carbon, lime and vegetable sources. Fatty substances were used to help the mixing of the colours, which remained visible for a very long period even on exposed rock surfaces. While Palæolithic Man restricted himself to profile drawing, the Bushman presented his animals in very various attitudes.

On Thursday, November 2nd, 1922, Professor H. J. Fleure, D.Sc., lectured to the Society on "Races of Britain." He described the work undertaken by himself and Miss Fleming to conserve the fast vanishing anthropological data in Wales. He shewed maps of parts of Wales on which the cephalic index and index of nigrescence of the individuals who had been examined was indicated by a letter of the alphabet. In this way it could be seen that the more extreme types inhabit the less accessible districts. Thus

heads shewing an index of seventy and under only occur in the Plynlimmon district of Wales, and in Portugal, Sardinia and Ireland. This type is further marked by retreating foreheads, prominent brow ridges, wide cheek bones, low and wide orbits, prognathous jaws and a cranium with a high vault. It seems to represent an ancient race, and closely resembles the skulls of the so-called river bed type, such as the Coombe Capelle specimen. From a variety of evidence it appears probable that these men are the survivors of an ancient race, which, starting from a centre somewhere in Central Asia, was gradually pushed to the fringes of the land. The Welsh type resembles that found on the shores of the Mediterranean except in possessing a fairer skin. The Nordic race was bred from the same type, but many of its individuals retain throughout life the blondness of childhood. The two types have blended in Britain.

The Broad headed peoples came into Europe along the mountain axes, and it is along these that they are to be found to-day. The so-called Beaker type of broad-headed men is characteristic of Eastern Britain. They have prominent brows and receding foreheads and square jaws which are not prognathous.

Until the end of the Bronze Age the forests prevented free movement, but when they were cleared, the valleys were inhabited, and seasonal visits made to the moorlands, so that some tribes possessed winter and summer homes. This is illustrated by the place names on some Welsh maps. The Welsh race presents an earlier phase of racial existence than the English.

On Thursday, Nov. 30th, 1922, Professor S. H. Reynolds, Sc.D., lectured to the Society on "Cave Formation and Mendip Geology." He gave a general survey of the Mendip geology, illustrated by numerous maps and slides. After explaining the deposition of the various strata the lecturer explained that caves were the direct result of the solution of limestone by the carbonic acid contained in rain water. In the case of Mendip caves the problem was complicated by the tilting of the strata. Read's Cavern was formed along a soft band, and was like parts of Eastwater swallet, a bedding-plane cave with an enormous accumulation of boulders, while the mountain limestone in which it was formed shewed several folds not quite in the same plane.

Rowberrow Cavern was formed in dolomitic conglomerate, which was almost as readily attacked as the limestone. It is a larger cave than one would expect from its position near the edge of the conglomerate.

On Friday, Feb. 2nd, 1923, Mr. Cyril Fox, Ph.D., lectured to the Society on "Regional Archæological Surveys, illustrated by the Cambridge Survey."

Dr. Fox shewed how, by using available archæological material the history of a region can be reconstructed. To do this intensive surveys of small regions are necessary. Round Cambridge it is evident that the Neolithic occupation was a heath occupation, while in the Bronze Age this area extended to the fens, and also invaded the edge of the uplands and forest area. This change in distribution was still more marked in the Early Iron Age, but was still confined to the open land, which was suitable for agriculture In Roman times the forests had begun to be cleared, as agriculture could be further developed in the existing peaceful conditions. Thus from Neolithic to Roman times a gradual movement can be traced from the open heath lands of the North-East of the district to the agricultural land of the South-West, the forest tract being the last to be extensively appropriated.

On Thursday, Feb. 15th, 1923, the Presidential address was delivered by Professor E. Fawcett, M.D. A brief outline of the work and successes of the Society during the past year was given, and proved to be highly satisfactory, but a warning note was struck concerning the need for new members. The President then delivered an address on the mode of elaboration of the highest brain from that of lower forms.

On Thursday, March 1st, 1923, Mr. L. W. G. Malcolm, M.Sc., lectured to the Society on "The Invention of the Art of Iron Working."

He explained that the actual origin of the art is unknown, as are the first people who used iron, which was of the wrought variety, and therefore softer than hardened bronze. The metallurgical processes employed are little known, but the earliest furnace

was probably a shallow hollow in the ground. The Catalan furnace was brought into Britain by the Belgæ. Though the types of furnace used differed in early times, the method of obtaining iron was always the same, and consisted of heating the ore with charcoal, when a lump of malleable metal was obtained the iron was never melted.

The Iron industry in Britain probably came from North Italy, via the Mediterranean and Eastern Pyrenees. The dates of the introduction of iron into various parts of Europe were mentioned.

On Friday, March 16th, 1923, Dr. A. C. Haddon, F.R.S., lectured to the Society on "The Races of Europe." He pointed out that the racial problem in Europe was fairly simple up to the beginning of Upper Palæolithic times, when a new race came into Europe, and displaced Neanderthal man. Four races appeared in Europe in this period, and all took the route along the North coast of Africa into Spain and Italy from Western Asia. Later the retreat of the Ice Northwards opened up a second migration route, namely the Loess belt, and henceforwards all invasions of Europe from Asia, with the exception of that of the Arabs, were by this new path.

In Neolithic times Europe was invaded by a broad-headed people who introduced such inventions as the making of pottery, the polishing of stone implements, agriculture and the domestication of animals. This race has apparently added its useful capacity to the moral characteristics of the long-headed race. A combination of the two gives the best results. Dr. Haddon concluded his lecture by a brief sketch of the movements of races in Europe in historic times.

The papers read by Dr. L. S. Palmer¹ on Friday, October 20th, 1922, Mr. J. A. Davies² and Mr. F. Langford³ on Thursday, November 16th, 1922, and by Mr. E. K. Tratman⁴ on Thursday, January 16th, 1923, are dealt with elsewhere in this number.

¹ See page 126.

² See page 113.

³ See page 135.

⁴ See pages 122 and 147.

LIBRARY LIST.

Additions to Library since March, 1922.

Abbott, L. Classification of British Stone Age Industries, and some new, and little known, weil-marked Horizons and Cultures. Avebury, Lord ... Prehistoric Times. The Glastonbury Lake Village. Vol. I and II. Bulleid. A. Bushe-Fox, I. P. ... Excavations at Hengistbury Head, Hampshire. Crawford, O. G. S. ... Man and his Past. Darton, N. H. ... Geology of the Bighorn Mountains. Fleure, H. J. Peoples of Europe. Macalister, A. S. ... A Text-book of Prehistoric Archæology (Vol. I. Palæolithic). Moir, J. Reid Humanly-fashioned flints in middle Glacial Gravel at Ipswich. Reynolds, S. H. ... British Pleistocene Mammalia. Vol. III. Pt. I. Hippopotamus. Sollas, W. J. ... Paviland Cave. An Aurignacian Station in Wales

Buides.

British Museum Guides to: Stone Age (1911).

Bronze Age (1920).

Iron Age (1905)

Races of Mankind (1921).

Fossil Remains of man (1922).

Mammals (1921).

Todd, T. W. ... Mammalian Dentition (1917).

Pamphlets, etc.

Recent Excavations at Stonehenge. Hinton—British Fossil Voles and Lemmings. Wilson and Reynolds—Uphill Bone Caves. Hull Museum Publications.

Society Reports, etc.

Yorkshire Philosophical Society, Annual Report, 1904–1908. Somersetshire Archæological and Nat. Hist. Society, Vol. LXVII, 1921. Wiener Prähistorische Zeitschrift 1919 (Heft 1-2, and 3-4). 1920 and 1921. 1922 (Heft 1-2).

Withdrawal from Library.

Munro, R. Palæolithic Man and Terramara settlements in Europe.

Motices.

A very few copies of the first number of Proceedings are still available Price Three Shillings. This number contains the first report on Read's Cavern (Keltic Cavern).

Some copies of the second number of Proceedings are available, Price Two Shillings and Six Pence. The first full report on Aveline's Hole is contained in this number.

All communications should be addressed to the Hon. Secretary at the University.

All cheques, postal orders, etc., should be made payable to the Society, and crossed Westminster Bank Limited.

This number of Proceedings completes Volume I.