

The Evening Meeting

was held in the Town Hall, the PRESIDENT in the chair.

Rev. T. S. HOLMES said he was speaking in the place of Bishop Hobhouse, who, it would be remembered, gave at one of their meetings a most interesting and valuable paper on Forest Bounds in Somerset; and he then wished that someone would take up these boundaries, in order that a map of forest lands and afforested parishes, might be made out similar to that valuable Domesday map he had made. He (the Bishop) had been working himself at Mendip forest, and he believed had induced Mr. Hancock to look up Exmoor, and Mr. Gowing the forest of Neroche; he believed too, that the rector of Westrow was doing something as to Selwood, but someone was wanted to take up the boundaries of North Petherton. An interesting fact with regard to the forest of Mendip was, that after the time that it had been illegally made forest, lands were taken away after the Assize of 1297. Practically there were only left two forest lands, those of Axbridge and Cheddar.

The CHAIRMAN said the work was very important; they must ask for volunteers. He would suggest that those who were engaged in the work should say what they had done.

Mr. HOLMES said the work required local knowledge. Places were mentioned in the Assize, but had slightly changed their names, and did not appear in the Ordnance maps.

Ancient British Village.

Mr. JOHN MORLAND called attention to the pre-historic village, the remains of which are being examined at the present time under the auspices of the Glastonbury Antiquarian Society. He said, the relics found, part of which were shewn in the temporary museum, will find their resting place in the museum at Glastonbury. The site of the village is about a mile from Glastonbury, on the right of the road to Godney, and just beyond a stream, now called Common

Moor Rhine, but which anciently was evidently a small river draining the Glastonbury hills. The field is the property of Edward Bath, Esq., Town Clerk, who has most liberally permitted the needful excavations to be made.* Mr. Arthur Bulleid, the discoverer, noticed the low mounds in the field early in the year, and he has since personally devoted himself to the exploration.

In the field there are about sixty shallow mounds, occupying an irregular area about 400 feet by 300 feet. A brief description of one mound will probably explain the general construction of the remainder. The soil upon which it is built is a brown peat; upon this a floor of willow (?) wands was laid, crossed again by a second layer at right angles to the first; this base was about twenty-four feet across, and roughly circular; it was pegged down by short stakes two to three feet long, well pointed, and the tops in some instances turned over on the floor to secure it. The border was marked by a continuous circle of stakes about a foot apart; these stakes were generally about three inches in diameter, and of alder or other soft wood. On this floor was laid a layer of well-compacted clay, probably brought from a distance of a mile: this was a foot thick in the centre, but fining off to nothing at the edge of the mound. Next on the clay we found a layer of split timber, chiefly alder, and this layer was continued at one side beyond the clay, by a layer of unsquared trunks of the same wood. In the centre of the mound at this level there is a space not covered by timber, containing a stone hearth, with abundance of ashes, charcoal, and burnt clay. Above this layer there is again a layer of compact clay, about nine inches thick in the centre; another layer of timber also continued beyond the mound, above the former extension, and with a surface of clay in the centre, which has

* In a letter to the Editor (dated Oct. 25th, 1892), Mr. Bath writes—"I have presented so much of the field as contains the crannogs—about five acres—to our local Society, with a stipulation that if it should be dissolved the land shall be offered to the County Society. [Ed.]

been used as a hearth. Next we find two more layers of clay, each a foot in thickness, and parted by a layer shewing signs of burnt clay and of charcoal; the top surface of this mound did not yield a distinct stone hearth, but on other mounds we have found such. Above all we have flood soil, about fifteen inches thick in the centre of the mound, and eighteen inches on the flanks. The total thickness of clay in this mound was forty-five inches, but the base layer of the floor was depressed twenty-four inches in the centre through the pressure of the clay in the yielding peat: so that the real size of the mound was twenty-one inches only; now reduced to eighteen inches by the difference of the thickness of flood soil on its top and flanks.

Besides the extension of the timber of the two distinct flooring layers beyond the clay on the level, we find in the same district rows of stakes radiating in curved lines from the mound, certain oaken piles rising above the flooring, and an oaken beam roughly squared, with three mortice holes, in two of which oak piles were found; in the weathered grooves, on the surface of this oak beam, numerous beans were found. The oak piles, if continued upwards, might support a platform of a higher level, which platform might find another bearing on the slopes of the clay mound, or they might form the posts of a modern hut, or, if merely palisades, we may have here something analogous to the formation of a crannog, the stones being re-placed by clay.

The mounds in the field are partly solitary and partly in groups; the one described formed one of a group of four or five, which are under examination.

The relics are generally found either in the neighbourhood of the mounds, beyond the clay surfaces, or in the layers of ashes and other refuse above the several surfaces of clay, not in the clay itself.

The food of the mound-dwellers was partly animal, for numerous bones of the short-horned ox, sheep, and pig have

been found ; also remains of horse, deer, dog, and birds : the larger bones are always found broken, presumably for the marrow. They also grew wheat and beans and ate nuts. Remains of three hand-mills have been found, one of most excellent workmanship,

The spinning whorls shewn in the museum, together with the bone shuttle and bone needles, shew that they were somewhat advanced in civilization. The comb also was probably used in weaving,

The cutting of the wooden stakes and piles, and the morticing of the oak beam, shew that they possessed sharp cutting tools, whilst a tip of stag horn shews the marks of a saw : bone gouges or chisels, and a bone with an almost screw-like tip are also exhibited. Some other bone implements may be whistles.

Two tips of stag's horn, shewing perforations, are probably the remains of horses' bits, explaining the occurrence of the horses' bones already named.

There are many fragments of pottery, some of which have been found apparently below the original ground level of the settlement. Most of the fragments are very rough, hand-made and unornamented, but a few are wheel-turned, and shew a variety of patterns ; a small stamp of stag's horn, which would impress small circles is evidence that this pottery was made at the settlement. One little fragment seems to have been a child's plaything : other objects in baked clay are loom-weights with holes through them, and oval pellets, probably for use in slings. There is much burnt clay in parts of the mounds, probably where the huts have been burnt, and this clay shews on the one side finger marks, and on the other the form of the interstices of the boards, or of the wattles which formed the sides or floors of the huts.

Numerous whetstones or polishing stones, of a good grit and of varied forms, are shewn.

A few flint flakes have been found, but no true flint implements.

Iron is present, but has been preserved very badly ; an iron pin, a few nails, and a spear blade exhaust the list of iron objects found up to the present date.

Of ornaments, the principal are a highly polished jet ring, a bronze fibula, two twisted bronze rings, and a bronze fastening for a strap ; no bronze weapons have been found.

No coins of any kind have been obtained.

Whilst the foregoing description represents the results obtained by a partial examination of a very few of the mounds, up to the date of the Meeting of the Somerset Achæological Society, it may well be that the more complete exploration which is being carried forward, may modify some of the conclusions arrived at, and will certainly add very largely to our detailed knowledge of the life of the dwellers in this prehistoric town.

The PRESIDENT said they would find more about this when they got hold of more weapons. As soon as they got the cutting tools they would know more about the date of the dwellings. It was a matter of the highest interest, and the Society ought to help the exploration in every possible way.

A paper was read by Dr. F. H. MEAD—"A Wide-spread Superstition in connection with Hernia in Young Children," and upon the details of the well-known opening made by the splitting of a growing ash sapling. (Printed in Part II.)

The paper was illustrated by a portion of a young tree prepared for the purpose. This, together with an ash tree, exhibited in the local museum, which had some years ago been actually used in the ceremony, and had since been left to grow, was presented to the Society, and both specimens are now to be seen in the Museum at Taunton.

Somerset and Coal.

Professor BOYD DAWKINS, said he had been asked to say something, more particularly about Coal—a subject which he thought directly interested everyone living in Somersetshire.

It so happened that it had fallen to him, to bring out in a very practical way the result of the exploration or hunting after Coal fields in an area in south-eastern England which touches most closely this area in Somerset; he meant that the evidence they had obtained in discoveries in Dover had a most important bearing on the Coal range, westward, in the direction of Somerset. He might say that in those explorations they began in rocks which, for the most part, were not represented in this county. They began in the Chalk, and they went right through the Chalk into those beds represented by the Greensands of the Blackdown hills. They went through those, and then, below that again, they came to the strata familiar to most of them under the name of Oolite. The Lias and the Red sandstone, and the Red Marl, were absent under those deposits at Dover, but below the Oolite they came to deposits of Coal, in association with the usual sandstone and the usual shales. There were one or two points which he thought had an important bearing on the Somerset question of Coal. In the first place with regard to the amount. They had only gone something like 1,850 feet down from the surface, and had found upwards of 16 feet of workable coal in beds something like eleven in number. With regard to its commercial value, he might say it was an excellent house coal, and experts said it was of considerable commercial value. With regard to the relation of the Somerset coal fields, he might say they were in exactly the same series as exists in the neighbourhood of Radstock. He just gave that as an illustration of the existence of Coal underneath rocks where Coal was never formerly supposed to be, and which extends to the range of the coal fields westward of south-eastern England, and of the same age as those at Radstock. Supposing they took the area of Radstock and the Mendip area, and imagined a series of falls, some throwing rocks to the south, to an extent of 2,000 feet or more. If they examined the Coal measures to the north of the Mendips, they would see that they did not thin out; that they were not grad-

ually denuded away, which would be the case if they were at the end of the original deposit, but that they were cut short off. That showed him that those measures must exist in those areas down to which they had been thrown by this series of falls. He would put it in this way: if they had the platform on which he was standing sawn up, and thrown up into a series of steps, they could trace the planks. This applied so far as he knew merely to the south of the Mendip hills; but he thought it would be quite well worth while for any great landowner who had land in the area of Glastonbury, or further to the south than that, to begin a systematic series of borings. He felt sure that most important results would follow from that—that the Coal was there which was cut short off by those great natural dislocations, which had thrown the Coal into a series of steps south of the Mendip hills, but how far from the surface it was impossible to tell without accurate observations. With regard to the depth at which Coal might be workable, 3,000 feet was not an exaggerated depth at which it might be worked commercially; so that 2,000 feet was not at all a large amount to take into consideration. Some of the largest collieries in this country, and some of the most important in Northern France, Belgium, and Southern Germany, had a greater depth than 2,500 feet. Thus they would see that underneath these rocks there was reason to suppose there might be a Coal field; and he ventured to prophesy that as time went on, and intelligence increased, experiments would be made further and further to the south of the existing Coal fields in Somersetshire; and whilst that was going on in Somersetshire, he had no doubt that experiments would be made by which the western prolongation of the south-eastern Coal field would be proved to exist, and they would have here what had taken place in Northern France, where, by a series of experiments of that sort, the area of workable Coal fields had been extended something like ninety miles to the westward of where the Coal occurred at the surface in the visible Coal fields. In

conclusion, Professor Boyd Dawkins alluded to Mr. Morland's paper, and said undoubtedly a most important lake dwelling had been found in the neighbourhood of Glastonbury.

The CHAIRMAN said he thought there was no trace whatever of anything like a workable Coal measure to the north of Westleigh, and it appeared that they were there in the presence of an immense effort of dislocation and tossing of the measures which might be seen in a great many parts of Devonshire, and that as a consequence they had not any extended Coal field here ; but, as he had said years ago in a paper on the possible extent of the Somerset Coal field, if they found Coal south of the Mendips then it might be worth while—supposing the coal beds trend in this direction—to make borings ; they might then do it with a chance of success.

Mr. USSHER said he supposed there was no subject so interesting to even a non-geological audience as one which might bring trade to the country and put money in the pockets of people ; and such a subject was Coal. He heard this subject once discussed, and ably discussed, by Professor Hughes, who compared the regions of the south of England, covered with secondary rocks, to a table covered with a cloth. The table illustrated rocks in which the Coal troughs occurred, and the table cloth the covering of newer rocks. Now, he said, if you put a sovereign here and there, underneath this thick table cloth, on the table, which would not show through the cloth, you would not be able to tell the position of the sovereigns. Suppose a person should have a chance of getting one of those sovereigns if he put a shilling on the right place, was it not ten to one against his doing so, for had he not the whole table surface on which to put his shilling while the sovereigns were only dotted here and there ?

But there was another aspect of the question which Professor Boyd Dawkins had not alluded to. It was this. If they had those same conditions of carboniferous rocks that prevailed in the Belgian Coal field, and apparently occurred at Dover—if

they had that same condition prolonged eastward—sink by all means. But if on the other hand there was a different type of rocks, such a type as they had in the Culm measures of Devonshire, then very much would depend on the value they assigned to those Culm measures in the geological succession. It had been thought that they were unproductive Coal measures, and that where they occurred they would not have Coal measures. He thought that was wrong, but he could not prove it. If they studied these Culm measures on the continent they would find they were overlaid by true Coal measures, and he thought it was possible the prolongation of that type westward towards the Dover boring might allow of the troughing in of true Coal measures, even if the Culm measures were maintained.

As to the question which appealed to them nearer home—Coal south of the Mendips. Besides those dislocations which Professor Boyd Dawkins had explained, there was another view of the case. They knew that one of the causes of the fact of their having Coal at all was due to the contraction of the earth's crust into a series of curves, and the operation of denudation upon those curves. They found that the direction of those folds was roughly from east to west; and when they studied the Culm measures it was exceedingly important to ascertain their effects; whether the troughs were broadening outward and so giving a chance of arriving at higher beds, or narrowing and passing out eastward, so as to bring up rocks from below. It struck him that the evidence between Wellington and the south coast of Devon was against getting coal between the Greensand of the Blackdowns and the exposed Palæozoic area, because the troughs of the Culm measures were shallowing out near the border of the Secondary area, so that Devonian rocks came to the surface. Then again, the movement of folding had been progressing towards the steepest side; and the Mendips had the steepest side of their fold dipping under the Radstock Coal fields.

Mr. CHISHOLM-BATTEN read a paper on William Smith, Father of English Geology. (See Part II.)

THE LATE PROFESSOR FREEMAN.

The CHAIRMAN said he had been spoken to by several on the subject of getting a bust placed in Taunton Shire Hall, to commemorate the late Professor Freeman. There was no man of their generation, he thought, more worthy of being commemorated in that abiding way. Considering his connection with their Society, he thought it most fitting that they who had enjoyed his company so long, and had benefited so much from the valuable information he gave—he had been almost the architectural life of the Society—should take the lead in obtaining subscriptions for the purpose of having a bust placed in the Shire Hall; and if the members were of the same opinion he thought they might ask their Secretaries to obtain subscriptions for the purpose.

CANON CHURCH had great pleasure in seconding the proposal. Mr. Freeman had been so intimately connected with this county of Somerset; had lived here so long; had made it his home; had illustrated its history so vividly; had done so much for the history of the Cathedral Church of Wells, that he thought some such honour as that proposed would be a fitting tribute. He was a man he had known from early years; he had never ceased to have the greatest respect for him: he felt they had lost a man who would not be replaced in this generation, not only in the history of the county, but in the world at large, and he thought the Society should be the first to mark their respect for him.

Mr. ELWORTHY, whilst agreeing with every word that had been said as to the great debt the county and all England owe to Professor Freeman—and no man there or elsewhere could treasure his memory more highly than he did—said he must take notice in his official capacity of one remark which had fallen from the President. He begged to submit that it would be altogether *ultra vires* for the Secretaries of this Society to

raise subscriptions for a bust to be placed in the County hall. If it were to be placed in the Museum it would be a different thing; but he thought they would be chargeable with impertinence, if they as Secretaries started a subscription list for this purpose. The Secretaries had taken steps to perpetuate in the best manner possible for this Society, the memory of their great historian, whom they were all proud to call their own. A memoir had been promised for the next volume by Mr. Hunt; and he ventured to think they would all agree that the best man had been asked to write it. He submitted that such a monument in the pages of their *Proceedings* would prove more lasting and more valuable than any other they as a Society could raise. With the President's leave, he would ask him to withdraw that portion of the resolution which involved the Secretaries of the Society.

The PRESIDENT explained that every bust which had been placed in the Shire Hall had been the result of private subscription. The process had always been for the bust to be subscribed for and for the permission of the authorities to be asked to have it placed in the County hall. He could not see that a Society with which Professor Freeman was so intimately associated would not be a fitting Society to commence such subscription, and to receive subscriptions from other persons. He did not want the Secretaries to canvass for subscriptions; he wished simply to let it be known that lists were open, and he suggested that this should be done by their Society.

The Rev. F. W. WEAVER agreed with Mr. Elworthy that it would be *ultra vires* for the Secretaries to start a subscription list for the purpose proposed. He ventured also to point out that there was another town in the county besides Taunton, and that was the city of Wells, which also had a town hall. Those in the east of the county would think it very hard if a bust were placed in Taunton. They would claim it for Wells, the city in which Professor Freeman lived, and for which he had done so much.

The resolution was not put to the Meeting.

The Lake Dwellings at Godney Moor.

The Rev. GILBERT SMITH suggested that a small committee of the Society should be appointed to investigate. Those carrying on the work at the present time might form the Committee, and be assisted by the Society in the work of excavating.

The PRESIDENT suggested that the subject should be postponed till the next evening.

Mr. MORLAND promised to give the proposal due consideration.