

## Excavations at the Glastonbury Lake Village, in July, 1902.

BY H. ST. GEORGE GRAY.

DISCOVERIES of prehistoric lacustrine abodes in England have been of rare occurrence; but they are common in Scotland,—where their existence was systematically brought to light in 1857,—and still more so in Ireland, where public attention was first directed to the crannogs by Sir W. Wilde as early as 1839. The discoveries and explorations of Irish crannogs are now, however, almost numberless; but not so in England. As Dr. Munro<sup>1</sup> has recorded, lacustrine remains have been discovered in the meres of Norfolk and Suffolk, at Wretham and Barton,—in the middle of the last century; at Crowland and near Ely, in the Fenland; in the Llangorse Lake, near Brecon; in one or two small sites in Berks, and at some five stations in Holderness, Yorkshire.<sup>2</sup> Quite recently attention has been called to supposed lake dwell-

(1). *Lake Dwellings of Europe*, 1890, pp. 458—474.

(2). General Pitt-Rivers (then Colonel Lane-Fox), as early as 1867, brought to the notice of antiquaries that “certain Piles had been found near London Wall and Southwark, *possibly* the remains of Pile Dwellings.” Roman remains only were found. The General was always most cautious in theorizing and in generalizing; but it would appear from Mr. Edwin Sloper’s letter to the *City Press* of April 2nd, 1902, that General Pitt-Rivers, with others, mistook stable-dung, in its decayed state, for peat; however, the General markedly stated that “it is difficult, if not impossible, to reconcile this enormous rise of seven to nine feet of peat during the four centuries of Roman occupation.” Doubtless, however, the marsh theory was uppermost in his mind. From what has recently transpired, the site appears to have been a *leystall* or *leystow*—a receptacle for every kind of rubbish.

lings at Pike's End, in the parish of Lyneal-cum-Colemere, Shropshire.<sup>3</sup>

Of far more importance, however, than any of the above is the discovery, made in March, 1892, by Mr. Arthur Bulleid, F.S.A., of the Lake Village, situated a little more than a mile north of the town of Glastonbury, in the upper part of one of the moorland levels of central Somerset found to the south of the Mendip Hills. Although the site is about fourteen miles from the coast, it is less than eighteen feet above the mean sea-level. Even as late as 1540 the adjoining levels between Glastonbury and Godney were covered by large areas of water or swamp, one mere being five miles round.

The extent of the ground covered by the mounds measures roughly 400ft. from north to south, and 300ft. from east to west. On its east side, the village is bounded by a natural water-course, now but a narrow rhine. The mounds, some seventy in number, were at the time of their discovery of very slight elevation, only from six to twenty-three inches above the average level of the surrounding ground, and their diameters ranged from fifteen to thirty-five feet. The walls of the huts were constructed of wooden upright posts, the spaces between filled in with wattle and daub.<sup>4</sup>

It is much to be regretted that a careful contoured plan of the village was not made before any excavations took place—say, with contours of such slight vertical height as 0·2ft. (See Plans, Plates I and II.) In this way the exact position and height of each little eminence would have been seen at a glance, without it being necessary to refer to descriptions and other details. Such a survey, too, would have been invaluable for the purpose of making an accurate model of the whole village, showing the precise arrangement, size and height of the mounds

(3). *Trans. Shropshire Arch. and N. H. Soc.*, 1902, 3rd ser., Vol. ii, Pt. iii, p. 408.

(4). Prof. Boyd Dawkins has said that the walls of the hut-circles on Hod Hill, Dorset, were absolutely identical in general construction with those at Glastonbury. (*Dorset County Chronicle*, Sept. 22nd, 1898.)

before exploration. Mr. Bulleid has, however, I believe, made a very large plan of the excavated portion of the village,—although not contoured,—which it is hoped will be reproduced in the near future for the benefit of antiquaries.

It is not my intention to attempt to describe any archæological results that eventuated at the Lake Village before July 1902, unless in making comparisons in the description of the relics represented on Plate III; indeed, I am restricted to the recording of the new excavations that I had the opportunity of conducting on behalf of the Society—at the end of July, just previously to, and at the time of, the Society's Annual Meeting at Glastonbury—which affords ample material for the pages at my disposal to put on record the results of this little exploration.<sup>5</sup>

No book has yet been written on the Glastonbury Lake Village, but an illustrated paper, summarising all the discoveries up to the autumn of 1894, was contributed to the *Proceedings* for that year.<sup>6</sup> The present volume includes Mr. John Morland's general description given to the Society on the site of the village.<sup>7</sup> The Reports of the British Association also contain condensed accounts of the previous explorations, by the discoverer, Professor Boyd Dawkins, F.R.S., and Dr. R. Munro.<sup>8</sup>

As regards date, the village of course flourished during the prehistoric Iron Age; the numerous relics unmistakably, perhaps with a few exceptions, exhibit special characteristics of 'Late-Celtic' art. There are only a very few objects, out of the many hundreds, of which there may be entertained a *suspicion* that they had a Roman origin. Amongst the number

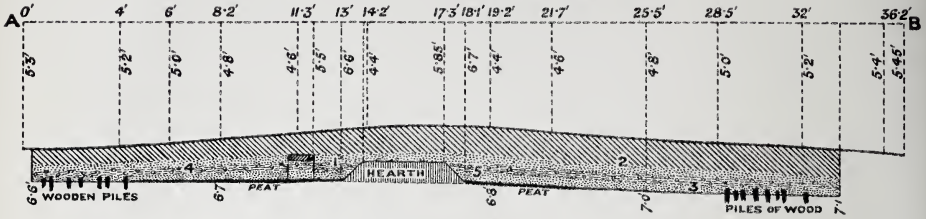
(5). The thanks of the parent Society are due to the Glastonbury Antiquarian Society for having paid, from their Excavation Fund, all the expenses of labour entailed in this work.

(6). *Proc. Som. Arch. Soc.*, Vol. xl, pt. ii, p. 141. This paper has been reprinted by the Glastonbury Antiq. Soc., to serve as a guide to their Museum.

(7). *Op. cit.*, Vol. xlviii, pt. i, pp. 31—33 and 36—38.

(8) *Reports, British Assoc.*, 1893, p. 903; 1894, p. 431; 1895, p. 519; 1896, p. 656; 1898, p. 694; 1899, p. 594.

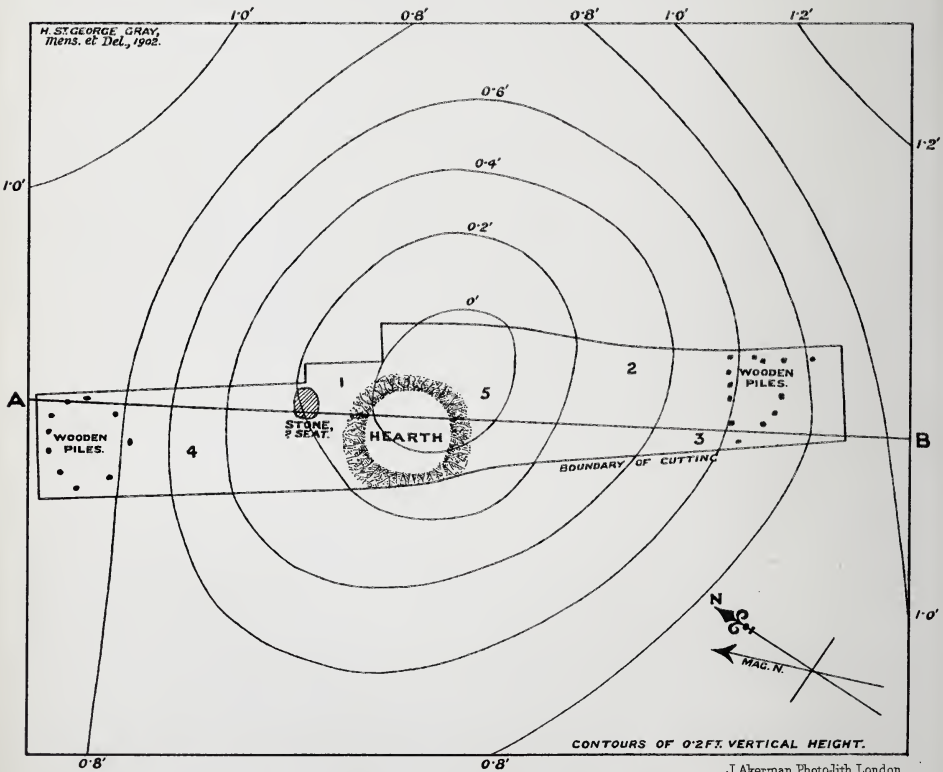
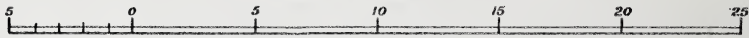
SECTION ON LINE A.B. OF PLAN.



REFERENCES TO SOILS.

-  SURFACE AND TURF MOULD.
-  CLAY FLOORS, AND OTHER CLAY.
-  BLACK MOULD BETWEEN FLOORS.
-  PEATY MOULD WITH SOME CLAY.
-  PEATY MOULD.

SCALE OF FEET.



**LAKE VILLAGE NEAR GLASTONBURY.**  
**PLAN AND SECTION OF MOUND I,**  
**PARTLY EXCAVATED IN JULY, 1902.**

J. Akerman, Photo-lith. London.

are three fibulæ (see p. 110), a fragment of pottery (which I have not seen), part of an iron bridle-bit, and a leaden weight with flat top and bottom and slightly bulged sides.<sup>9</sup> This points to the probability that the site existed as a habitation up to Roman times, and, as Dr. Munro has said, "it is possible that it was the intrusion of the Romans into this district which put an end to it."

The two mounds, Nos. 1 and 2, partly excavated this year (1902), are situated at the north and north-west of the village respectively.<sup>10</sup> Previously to excavation, contoured plans, with contours of 0·2ft. vertical height, were made of both mounds.

MOUND 1, PLAN AND SECTION, PLATE I.

*General Description.*—A rectangular boundary was made round this mound, 30·5ft. by 36ft., for surveying purposes. As shown by the contours and the section, the centre of the mound was only 1ft. higher than the general level of the field. The cutting was made of irregular form, owing to the discovery of a hearth resting on the peat, and the consequent necessity of enlarging the cutting to afford room to work in, to clear the hearth. The superficial mould extended to an average depth of 1·2ft. from the surface,—soil which had accumulated since the abandonment of the village by its inhabitants,—immediately below which the upper floor of clay was reached. On this level a stone slab, about three inches thick, was found, in close proximity to the hearth discovered resting on the peat. This slab might possibly have served as a seat near the fire.

*Hearth.*—The hearth, which was situated nearly in the centre of the mound, was almost circular in form, apparently

(9). Similar to some in Taunton Museum, found in association with Roman remains at Charterhouse-on-Mendip.

(10). These two mounds were pointed out to the writer by Mr. Bulleid as not having been previously touched; with a request that trenches only should be dug across them. His desire has been adhered to as far as possible.

composed entirely of burnt clay, overlaid with a thin coating, which appeared to be fine, rubbly stone or gravel. Its average diameter at base was 5ft.; at top, 3·5ft.; height, about 0·8ft. (See Section, Plate I.)

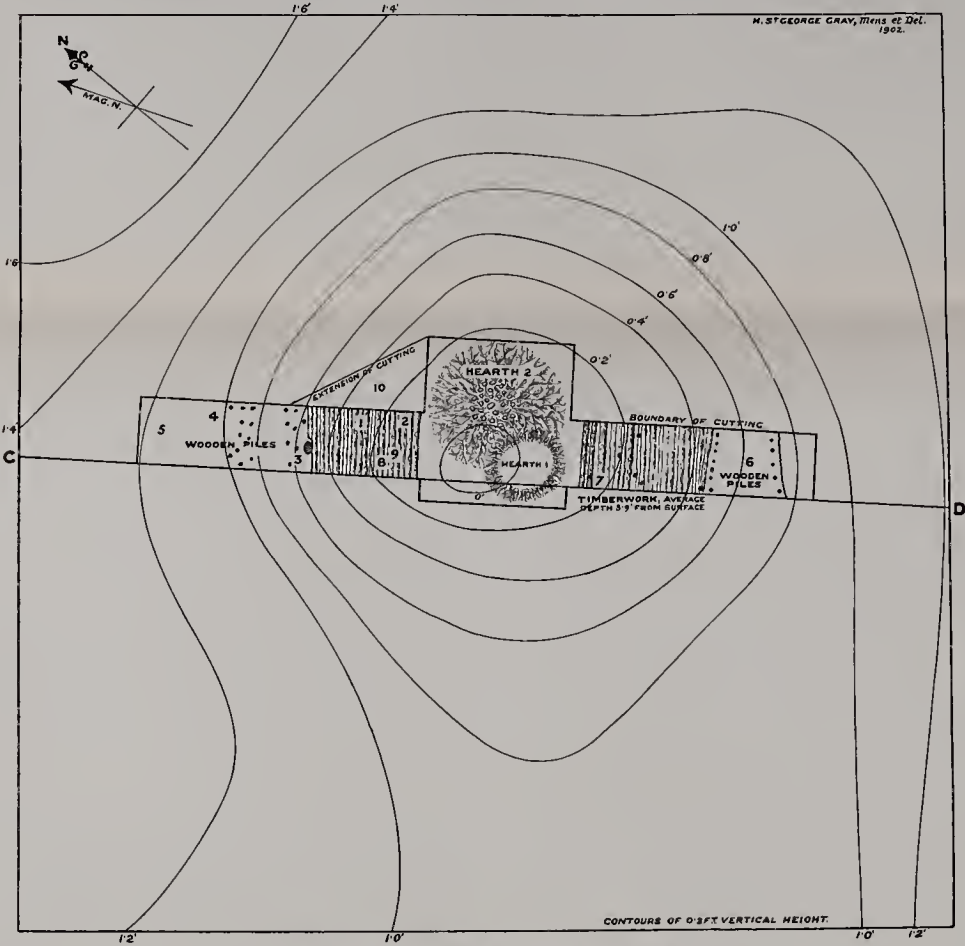
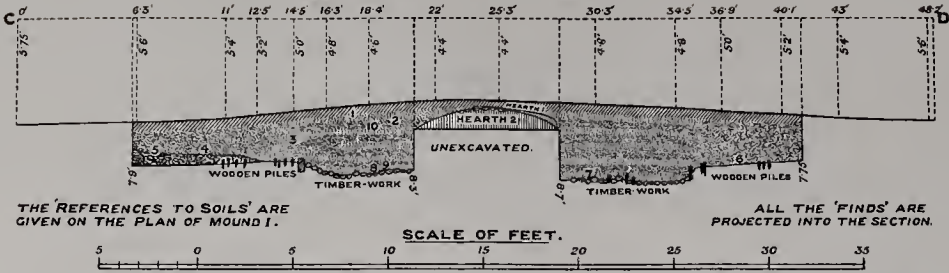
*Floors, etc.*—The two clay floors in this mound were far more even and level than in the majority of the mounds previously excavated. This was one of the mounds, at the base of which no sub-structure of wooden beams or brushwood was discovered.

*Boundary of Hut.*—At each end of the cutting, stumps of the wall-posts of the hut were observed *in situ*, embedded in the peat, in the usual manner. From their position, we may infer that the diameter of this particular dwelling was about 28ft. On the N.E. the piles exposed in this narrow cutting presented an almost circular arrangement.

*Relics found.*—On the upper floor, at “2,” plan and section, the bronze object represented in Fig. 3, Plate III, was found. A portion of one of the early British triangular clay loom-weights, and a clay sling-bullet, were also found on this floor. These loom-weights were probably used to keep the warp tight whilst the weft (or the woof) was worked in with bone shuttles. I have dealt in some detail with the distribution of these objects in another part of the *Proceedings*.<sup>11</sup> Between the two clay floors was a seam of black mould, etc., averaging 0·4ft. thick, in which were found, at “1,” fragments of a bone weaving-comb (since repaired, Fig. 7, Pl. III), and at “4,” metatarsus of sheep or goat, with holes (Fig. 8, Pl. III). On the lower clay floor, at “3,” two ornamental fragments of pottery were found (Figs. 13 and 14, Pl. III), and at “5,” a ball of baked clay, with indentations (Fig. 9, Pl. III). This completes the ‘finds’ from this cutting, with the exception of a quantity of unornamented fragments of pottery, found chiefly on the lower floor, a few fragmentary animal remains, and a quantity of peas (*Vicia Sativa*).

(11). *Proc. Som. Arch. Soc.*, Vol. xlviii, pt. ii, p. 40.

SECTION ON LINE C.D. OF PLAN.



LAKE VILLAGE NEAR GLASTONBURY.  
 PLAN AND SECTION OF MOUND 2, PARTLY EXCAVATED IN JULY, 1902.

J. Akerman Photo-lith London

## MOUND 2, PLAN AND SECTION, PLATE II.

*General Description.*—For surveying purposes, a boundary, 48ft. square, was made. This was a considerably larger mound than Mound 1. As shown by the contours and the section, the centre of the mound was 1·2ft. above the general level of the field, except on the north, where there was a slight depression at 1·6ft. below the summit of the mound. From “D” on plan, in a S.E. direction, the ground commenced to rise slightly, owing to the proximity of another mound, apparently on this side. A cutting was first made, 35·2ft. by 4·5ft., across the mound, in a N.W. and S.E. direction. The superficial accumulation of soil was much shallower here than in the case of Mound 1, averaging only 0·5ft.

*Floors.*—The five floors of clay are only represented in the section (Pl. II) approximately, as it was extremely difficult in this case to differentiate the layers of clay clearly; indeed, at most points along the cutting at the sides it was impossible to distinguish the clay floors from the material between them, viz., clayey-mould (not of a dark, peaty nature, as occurred between the two floors of Mound 1), which is shown and symbolized in the section, as stated before, only approximately. There appears, however, to be no doubt, that the bottom floor of this hut was renewed four times.

*Sub-structure.*—The foundations of this dwelling, as the plan clearly shows, consisted, on its surface, of rough pieces of timber, placed parallel to one another, in a N.E. and S.W. direction, and at an average depth of 3·9ft. from the surface of the mound. On account of the presence of water on the beams, and the narrowness of the cutting in which the work had to be conducted, the sub-structure below this, which might probably consist of brushwood, fascine, and more timber, was not examined further on this occasion. The layer of timbers exposed was kept in position, and especially at the boundary of the platform, by several wooden piles; one exceptionally



large one on the N.W. measuring about  $8\frac{1}{2}$  ins. by 5 ins. in thickness. Owing to the partial decay of the materials of which the sub-structure is composed, and the softness of the underlying peat, it will be seen, on reference to the section (Pl. II), how considerably and unequally the platform has subsided.

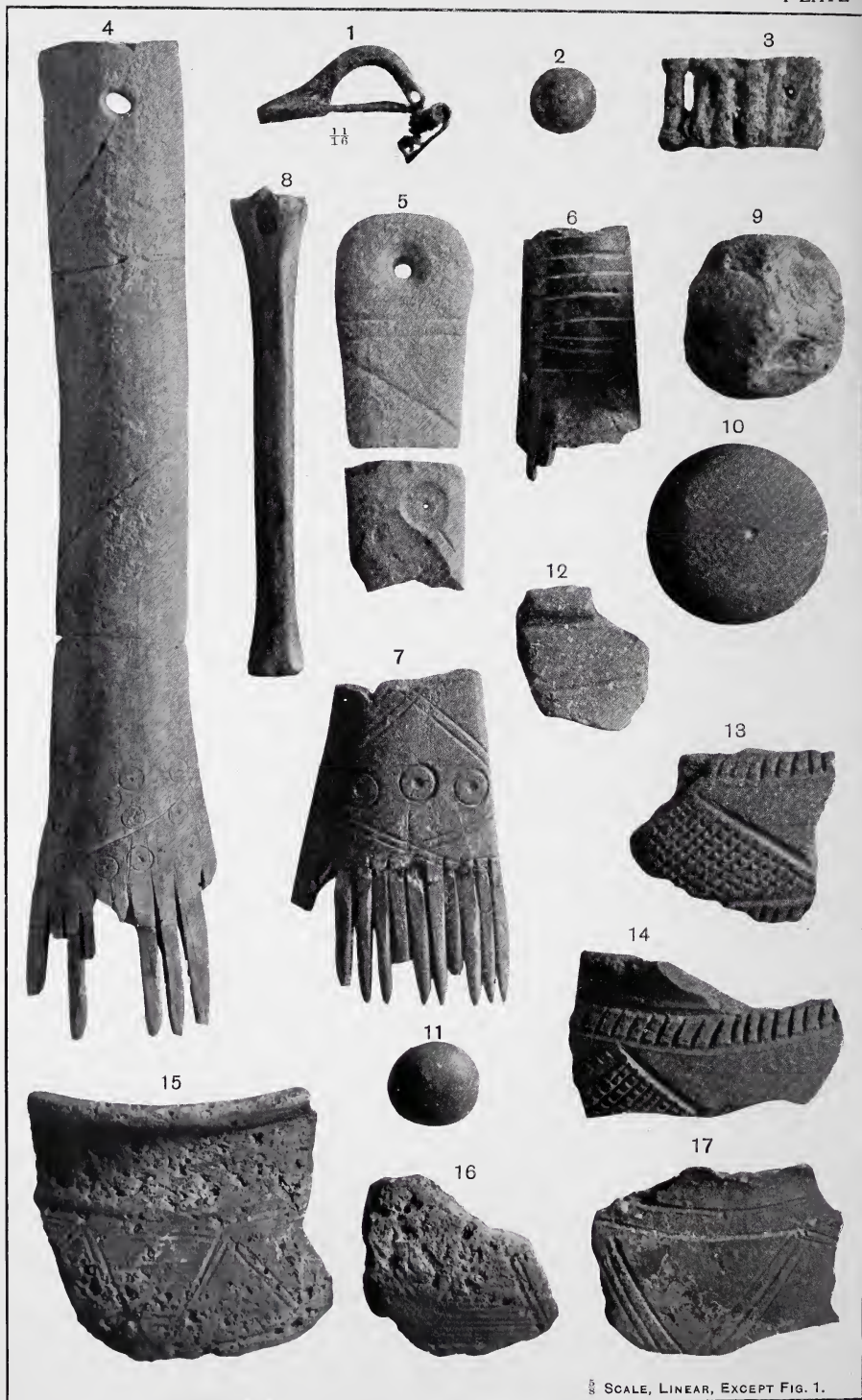
*Boundary of Hut.*—On either side of the foundations of the dwelling, stumps of wooden piles were found, from the position of which it is ascertained that the diameter of this hut did not exceed 28 ft.,—the same as in the case of Mound 1. A dark, peaty seam of mould was observed at the N.W. end of the cutting, as shown in the section.

*Hearths.*—Hearth 2 was of extremely symmetrical form; the base, as far as could be observed without excavating lower in this part, resting on the second floor from the top, the highest part being only 4 ins. from the surface. This hearth was of circular form, 7.1 ft. in diameter, and composed of burnt clay; with a convex surface, set on the highest parts with flat stones, as shown in the plan. Partly overlapping this large hearth, at the south, was a small rough clay one, No. 1, of somewhat oval form, measuring 4.2 ft. in greatest length, 3 ins. from the surface on the north, sloping to 9 ins. from surface at south; its surface was overlaid by a soft, rubbly concretion, which I have been unable to identify.<sup>12</sup> The original cutting had to be extended to trace the outline of these hearths. Doubtless one or more hearths exist below Hearth 2, but this portion of the cutting remains unexcavated.<sup>13</sup>

*Relics.*—On the first floor beneath the surface, at “1,” an unfinished stone spindlewhorl was found, depth 0.5 ft. (Pl. III, Fig. 10); at “2,” between first and second floor from top, fragment of ornamental pottery, depth 1 ft. (Pl. III, Fig. 12); at “10,” on second floor from top, to N.E. of original cutting, head of a bronze nail, depth 1.3 ft. from surface (Pl. III,

(12). A specimen of this has been preserved for further examination.

(13). It was the desire of the Glastonbury Antiq. Soc. that any hearths discovered in these cuttings should not be removed.



$\frac{1}{8}$  SCALE, LINEAR, EXCEPT FIG. 1.

RELICS, LAKE VILLAGE, NR. GLASTONBURY, July, 1902.

From Photographs by H. St. George Gray.

Fig. 2); at "3," fragments of a bone weaving-comb (almost completely restored), depth 1·6ft. (Pl. III, Fig. 4); at "4," depth 1·6ft., two pieces of another weaving-comb (Pl. III, Fig. 5); at "5," depth 1·7ft., a fragment of ornamental pottery (Pl. III, Fig. 17); at "6," eight fragments of ornamental pottery, found strewn about, at a depth of 2·6ft. (Pl. III, Figs. 15 and 16). On or near the timber-work sub-structure the following relics were discovered:—At "7," part of a horn weaving-comb, depth 4ft. (Pl. III, Fig. 6); at "8," on the lowest floor, depth 3·5ft., a small bronze fibula (Pl. III, Fig. 1); and at "9," close to the fibula, an ovoid lump of bronze, much corroded.

In this mound were also found, a small polished pebble (Pl. III, Fig. 11); two metatarsi of sheep, one having a small circular hole at the flat end;<sup>14</sup> a metatarsal bone of the crane (*Grus*);<sup>15</sup> and a fragment of rib of horse, showing marks of cutting.<sup>15</sup> In addition, there was a quantity of fragments of pottery and some fragmentary animal remains, especially from the lower levels.

DESCRIPTION OF PLATE III. RELICS.

(*Every object is represented to a scale of  $\frac{5}{8}$  linear, except Fig. 1.*)

Fig. 1.—Bronze fibula, of extremely small size (34m.m. long), with coiled spring of bronze wire (the wire 1·3m.m. thick), in continuation with the pin. The summit of the bow is of circular section, diam. 4·3m.m. The catch for the pin and the fore part of the fibula are somewhat large and clumsy in proportion to the length of the object. There are only one or two incised lines as ornament.

There is much difference of opinion in the matter of dating

(14). Seven of these are shown in the cases at Glastonbury Museum.

(15). Several similar specimens from the village are exhibited in Glastonbury Museum.

fibulæ.<sup>16</sup> Mr. C. H. Read, F.S.A., Keeper of the British Antiquities, etc., in the British Museum, has examined this fibula, and says that "it seems to be Roman, of the second or third century A.D." If it is Roman (it is not a common type), such an identification does not accord with its *gisement* in Mound 2 (Pl. II). It was found at "8" (Plan and Section), at a depth of 3·5ft. on the lowest floor of the hut, and within an inch or two of the timber-work foundation of the mound. It seems to me, from its position alone, that it must have been manufactured in the Iron Age, and probably towards the commencement of that period. As stated before (p. 105), three fibulæ were found by Mr. Bulleid, whose *form* caused some antiquaries to suggest their Roman origin. Since hearing from Mr. Read, I have been to Glastonbury particularly to compare these fibulæ, and I find that the one under consideration is of precisely the same form and character as the three above mentioned, with the exception that it is not perforated with the triangular hole through the thin plate forming the catch for the pin.<sup>17</sup> There seem to be, therefore, two distinct classes of fibulæ from the Lake Village, viz., what is generally known as the La Têne form, and the type of which Fig. 1 is a representation.

**Fig. 2.**—Head of a bronze nail of rounded form and hollow, composed of thin material, only 0·5m.m. thick. The point of the nail projecting beyond the base of the head is deficient. It is precisely similar to the brass-headed nails known by upholsterers as "French furniture nails." Nineteen similar objects, mostly smaller however, are shown in the cases at Glastonbury Museum, labelled "rivet-heads." Fig. 2 was found in Mound 2, at "10" (Pl. II), on second floor from top, at a depth of 1·3ft. from the surface.

(16). Recently, I have particularly observed this in the case of the fibulæ in the "Walter Collection" (p. 34), which have been commented upon and dated approximately by several authorities.

(17). "Excavations in Cranborne Chase," Vol. II, Pl. xcix, p. 123; and *Archæologia*, Vol. IV, p. 182.

Fig. 3.—Bronze object, much corroded, consisting of framework and six bars at regular intervals. Its precise purpose is uncertain, and I have never seen anything quite like it. It may have served as a buckle, as it certainly suggests a junction between strap-ends. In most collections it would probably be relegated to the ‘horse-trapping’ series. Found on upper floor of Mound 1, at “2” (Plan and Section, Pl. I). Nothing similar has previously been found in the Lake Village.

Fig. 4.—Bone weaving-comb, found in 17 fragments, the edges of which were much weathered and rounded. It is somewhat curved longitudinally, and unusually long, exceeding in length any of the 34 specimens already exhibited in the Glastonbury Museum; length  $8\frac{5}{8}$  ins. (about 218m.m.), greatest width  $1\frac{5}{8}$  ins. (41m.m.) The handle-end, which has been roughly cut off square, has a hole probably for suspension.<sup>18</sup> There were originally ten teeth: nine is a fair average, but there are as many as fifteen, and as few as six, in the Glastonbury specimens. The remaining teeth in Fig. 4 average 25 m.m. (1in.) long; the teeth of those already in Glastonbury Museum vary from 6m.m. to 30m.m. in length. Near the dentated end, the comb is incised with the dot-and-circle ornament in fourteen places, without any systematic arrangement,—a style of decoration somewhat common in remains of the “Late-Celtic” period. Fig. 7 has similar decoration, and also three of the 34 combs above-mentioned.<sup>19</sup> Fig. 4 was found in Mound 2, at “3” on Plan and Section (Pl. II), at a depth of 1.6ft. from the surface.

(18). Of the 34 combs above-mentioned, 15 have perforations near the end; another likewise, with an additional hole an inch below; and another has a large perforation,  $1\frac{1}{2}$  ins. from end, with a smaller one an inch further down.

(19). This dot-and-circle pattern occurs on one of the bone counters from Ham Hill, in the “Walter Collection” (see p. 38), and on the bone knife-handle from Worlebury, in Taunton Museum (*Proc.*, Vol. iii, pt. i, Plate p. 9; and Dymond and Tomkins’ *Worlebury*, 1886, Pl. x, Fig. 8). This ornament has been dealt with at some length by General Pitt-Rivers (see *Archæologia*, Vol. xlvi, p. 436).

It may be of interest to introduce here a few general remarks on the combs from the Lake Village (excluding those represented on Pl. III). The majority of these combs conform to the general curves and outline of the bones or horns from which they are manufactured. With regard to the form taken by the handle-end, there are four varieties :—

(1). A rare type is that with the pointed end, Glastonbury being represented by one specimen only, with a perforation. Another example of this form, from Maiden Castle, Dorchester, has been figured.<sup>20</sup> Under this heading should be included one of the bone combs found on the surface of Kent's Cavern, Torquay, in the British Museum; in this case, however, the end is not abruptly pointed, but the sides gradually taper from the dentated end to a somewhat rounded point.

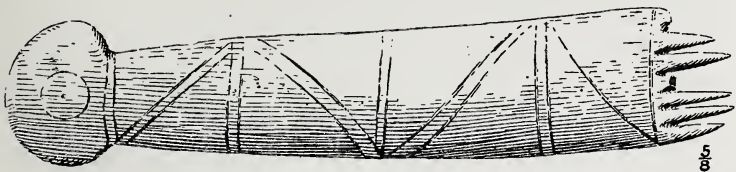
(2). Those with an oval, or almost circular, enlargement at the end appear also to be a rare form. The Lake Village is represented by a very ornate example of this kind, with a perforation. Another, with an almost circular head (perforated), from Haslingfield, Cambs., is exhibited in the British Museum. The only other example of this form that I am able to record is the weaving-comb found near Winchester, in Taunton Museum,<sup>21</sup> of which the accompanying is an illustration (Fig. 18); its length is  $6\frac{1}{4}$  ins. (158m.m.), the teeth averaging 11m.m. in length. It is ornamented with double, incised, zigzag lines, with similar lines in the triangular interspaces at right angles to the line of the comb; the oval and shouldered end is decorated with a large representation of the dot-and-circle, which may perhaps be an indication for an intended perforation.

(3). Those with an oblong enlargement at the end are a less rare type. There are five from the Lake Village, three of which are perforated. Two of this variety, of deer-horn, 5 ins. and 5.6 ins. long respectively, with perforations, were found by

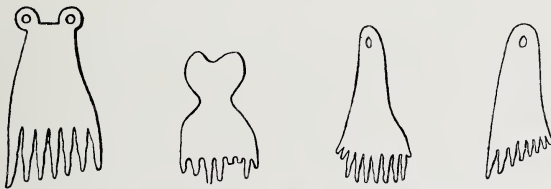
(20). See p. 115.

(21). Presented by Rev. R. St. John Gresley.

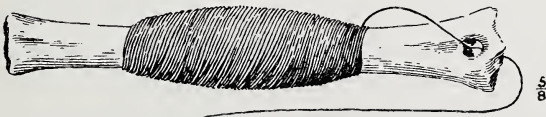
General Pitt-Rivers at Mount Caburn Camp, near Lewes.<sup>22</sup> Another, also with a perforation, in the British Museum, was found on Dunbury (Danbury or Danebury) Hill, near Nether Wallop, Hants; it is ornamented with the dot-and-circle pattern, arranged in a zigzag manner. Another of this type,



**FIG. 18.—WEAVING-COMB FOUND NEAR WINCHESTER.**  
(TAUNTON MUSEUM COLLECTION).



**FIG. 19.—DEERHORN COMBS FROM GREENLAND.**



**FIG. 20.—ANOTHER ILLUSTRATION OF FIG. 8, PLATE III,**  
SHOWING POSSIBLE USE OF THE BONE.  
**GLASTONBURY LAKE VILLAGE.**

with eight broken teeth, is exhibited in the British Museum, but, unfortunately, no locality has been preserved; in the place of the dot-and-circle pattern, it is ornamented with concentric circles in twelve places, including three on the oblong enlargement, where there is no perforation. One of this type, in the

(22). *Archæologia*, Vol. xlv, Pl. xxiv, Figs. 11 and 12.

Blackmore Museum, Salisbury, of bone, with perforation, was found in the Pits at Highfield; it is ornamented with the double-line zigzag pattern.

(4). Those with squared or slightly rounded end (Figs. 4 and 5), and without any enlargement, are the commonest type,<sup>23</sup> and, indeed, the majority of the Glastonbury examples come under this heading. Perhaps the rudest comb from the Lake Village is the one made from a metatarsus of ox, split lengthwise, displaying the groove throughout the length of the outside of the bone, and not tooled or trimmed in any way.

The commonest ornament on the Glastonbury combs consists of cross-lines (single and double), generally with triangular interspaces. (See the one figured in the *Proceedings*, Vol. XL, pt. ii, Plate p. 150). About a dozen of the combs have no decoration at all.

These bone and horn weaving-combs have not been very frequently described or figured. As recently as 1872, opinions were divided as to their purpose; some considering them designed for personal use, others regarding them as tools; but it is now generally accepted that they were used for pushing home the weft (or the woof) in weaving. Both at Björko and the Broch of Burrian these long-handled combs were found associated with double-tooth combs and side-combs; showing that their possessors had weaving-combs, in addition to the more suitable appliances for combing the hair.

*Somerset.*—The “Walter Collection” contains a fragment of one of these weaving-combs, from Ham Hill.<sup>24</sup> A bone comb,  $5\frac{1}{2}$  ins. long, and  $1\frac{1}{4}$  ins. across its dentated end, “ornamented with concentric circles, was discovered, with an iron spear-head,” at Ham Hill, in 1862.<sup>25</sup>

*Dorset.*—Three similar combs were found at Maiden Castle,

(23). The one figured in the *Brit. Arch. Assoc. Journ.*, Vol. xxviii, Pl. i, Fig. 4, from Maiden Castle, is of this variety.

(24). There do not appear to be any examples in Bristol, Bath or Exeter Museum.

(25). *Journ. Brit. Arch. Assoc.*, Vol. xxviii, p. 43.



Dorchester, two of which have been figured by Mr. H. Syer Cuming;<sup>26</sup> the teeth in these cases are extremely short, and one is peculiar in having the upper end pointed (p. 112); the other is recorded in the *Proc. Som. Arch. Soc.*<sup>27</sup> One, ornamented with concentric circles arranged in a diamond-shaped pattern, was found in the entrenchment at Spettisbury.<sup>28</sup> Another was found near Badbury Camp. General Pitt-Rivers had, some years ago, in his collection, one from Portland, with seven teeth; and another of deer-horn, from Jordan Hill, near Weymouth, which originally had eight teeth (now in the Pitt-Rivers Museum at Oxford): both were found associated with Roman remains. Dorchester Museum contains one bone weaving-comb, short and with eight small teeth, of No. 4 variety, with no perforation; found at Preston, near Weymouth, in 1846. Mr. Balfour informs me that the Pitt-Rivers collection at Oxford also contains four other specimens of bone from Weymouth, which belonged to the original collection; one, which is broken off at the dentated end, has a perforation at the handle-end and is ornamented with the dot-and-circle pattern all over the face: another, which had ten teeth, is  $7\frac{1}{2}$  ins. long, and decorated with the zigzag pattern so common on these combs.<sup>29</sup>

*Wilts.*—Similar combs were found in 1868, in the pits at Highfield, near Salisbury. Besides the Highfield specimen above mentioned, Salisbury Museum contains two weaving combs of No. 4 variety, one of bone and one of horn, both unornamented; one from the Pits, the other from the Trenches, at Highfield. The Blackmore Museum also contains a bone weaving-comb of No. 4 variety found at Westbury, highly

(26). *Journ. Brit. Arch. Assoc.*, Vol. xxviii, Pl. i, Fig. 3 and 4, and p. 42.

(27). Vol. xvi, pt. i, p. 23.

(28). *Proc. Soc. Antiq. Lond.*, Vol. iv, 1st ser., p. 190: exhibited in the British Museum. There is a large fragment of another weaving-comb, probably Dorset, in the British Museum.

(29). The perforated handle-end of this comb is of a somewhat unusual form; it comes, however, under the heading of variety No. 4.

decorated with a triangular design, each of the alternate triangles being filled with some fourteen representations of the dot-and-circle pattern; the dots are much deeper than the circles.

*Sussex.*—Two horn weaving-combs were found at Mount Caburn (p. 113). General Pitt-Rivers had three in his collection from Lancing, with six, eight, and nine teeth, respectively (one of which is now in the Pitt-Rivers Museum at Oxford). Brighton Museum possesses a specimen found by Mr. Park Harrison in the "Late-Celtic" pits at Cissbury; its ten teeth were all broken off at the time of discovery.

*Other Localities.*—The British Museum contains an example of No. 4 variety, without perforation, from Hunsbury Camp, Northampton; and another of this type from the surface of Kent's Cavern, Torquay. Sir John Evans had one in his collection from the neighbourhood of Cambridge. Two were found at Castle Hill, Thetford; described by Dr. Stukeley in 1760.<sup>30</sup> Another was discovered near the church at Stanwick, North Riding, with "Late-Celtic" remains.<sup>30</sup> Another comb of the same type was found in the Roman Baths at Hunnum.

*Scotland.*—A bone comb of this class,  $5\frac{1}{3}$  ins. in length, with five perfect, but large and clumsy, teeth, was found in the Broch of Kettleburn, near Wick, Caithness, some fifty years ago, and is described in the *Arch. Journ.*,<sup>31</sup> where the writer remarks that "one might scarcely imagine this relic had been intended to bring under subjection even the hirsute locks of a savage!" Two others from Kettleburn are in Edinburgh Museum.<sup>32</sup> The Broch of Okstrow, Birsay, produced two,<sup>33</sup> and the Broch of Lingrow, Scapa, one.<sup>34</sup> Four found at Howmae, North

(30). *Arch. Journ.*, Vol. x, p. 218, and ditto, York Vol., 1846, p. 6.

(31). Vol. x, p. 218.

(32). *Catalogue of the National Museum of Antiquities, Edinburgh, 1892*, p. 237, Nos. 35, 36.

(33). *Op. cit.*, p. 234, Nos. 26, 27.

(34). *Op. cit.*, p. 235, No. 12.

Ronaldsay, have been figured.<sup>35</sup> Another was found in a broch at Thrumster, Caithness, 1782.<sup>36</sup> The Broch of Burrian, North Ronaldsay, produced sixteen long-handled bone weaving-combs,<sup>37</sup> and the Broch of Burray, Orkney, four.<sup>38</sup> Another, with nine teeth, was excavated from the ruins of the Burgh of Burgar, parish of Evie, Orkney, 1825, which has been figured.<sup>39</sup>

Combs somewhat similar, but shorter and broader, appear to have been used in the Bronze Age. One with the dot-and-circle pattern was found in the pile-dwelling in the district of Borgo San Donnino, in Parma province.<sup>40</sup> Two with short handles, and holes for suspension, were found at Mussdorf, Ueberlingersee, Lake of Constance.<sup>41</sup>

A comb of a somewhat different form and character, of the Stone Age, was found in Kent's Cavern, Torquay, by Mr. Pengelly, F.R.S.

Fig. 19, p. 113, gives the outlines of four deer-horn combs of somewhat similar form, from Greenland, in the Ethnographical Museum at Copenhagen; they are said to be used for combing flax. Mr. E. T. Stevens, in 1870, drew attention to those used by the Eskimos, and the Basutos of South Africa, for scraping fat from the backs of skins.<sup>42</sup>

Fig. 5.—Portion of the handle-end of a long-handled weaving-comb, in two pieces, which do not join. The hole for suspension is counter-sunk on the smooth side. The smaller

(35). *Catalogue of Edinburgh Museum*, p. 242, Nos. 1-4.

(36). *Op. cit.*, p. 228, No. 66.

(37). *Op. cit.*, p. 232, Nos. 85-100, and *Proc. Soc. Antiq. Scot.*, Vol. ix, p. 550.

(38). *Catalogue of Edinburgh Museum*, p. 233, Nos. 2-5.

(39). *Arch. Scotica*, Vol. iii, p. 44, Pl. v, Fig. 3; and Wilson's *Prehist. Annals of Scot.*, p. 424.

(40). Keller's *Swiss Lake Dwellings*, p. 385, Pls. cxi and cxv.

(41). Munro's *Lake Dwellings of Europe*, p. 140, Fig. 31, Nos. 6 and 7.

(42). Stevens' *Flint Chips*, p. 65, and *Journ. Brit. Arch. Assoc.*, Vol. xviii, p. 44.

fragment is ornamented by a circular depression, with a small hole in the centre (which, however, does not extend through the comb-handle, as the illustration indicates). This decoration seems to have been produced by means of a centrebit. Found in Mound 2, outside the line of the wooden piles indicating the limits of the hut walls, at "4" (Plan and Section, Pl. II), depth 1·6ft.

**Fig. 6.**—Portion of a horn weaving-comb, which probably had nine teeth originally; it is very smooth, owing to prolonged use. The decoration consists of roughly incised and uneven lines across the comb. Found on the timber-work platform at the base of Mound 2, at a depth of 4ft. from the surface ("7" on Plan and Section, Pl. II).

**Fig. 7.**—Dentated end of a long-handled bone weaving-comb, which had twelve teeth in its complete state. It is much wider (49m.m.) than the average-sized combs from the Lake Village; the teeth are also longer than the majority. This is another instance in which the dot-and-circle pattern figures; in this case, however, it is deeply incised. As stated before, the double cross-line ornamentation, forming triangular interspaces at the sides, is the most usual decoration on these combs. Found in Mound 1, in 16 fragments, close to the hearth, between the two clay floors, at a depth of 1·5ft. beneath the surface ("1" on Plan and Section, Pl. I).

**Fig. 8.**—Metatarsus of sheep or goat, with condyles cut off at one end; at the articular end, an oval hole at top, and another on side close to the end. The bone has evidently had considerable wear, it being very smooth and polished. It was found on the lowest floor of Mound 2, at a depth of 3·5ft. from the surface ("8," Plan and Section, Pl. II). Twelve precisely similar objects are exhibited in the cases in Glaston-

bury Museum, but they are not *described*.<sup>43</sup> There can be little doubt that they were used in the process of manufacturing cloth. Mr. Henry Balfour, who has seen this specimen, offers the suggestion that it *could* have been used as a kind of shuttle-spool in weaving—the thread being drawn off the bone as required for the weft and passing through the hole to prevent the unrolling of the wound-on thread. He adds that “it would do well for narrow-band weaving, though not so suitable for wide cloth.” The drawing on p. 113, Fig. 20, illustrates these observations.

**Fig. 9.**—Ball of light reddish-brown clay (fired), almost circular, averaging 36m.m. in diameter, and having 13 indentations arranged more or less regularly over the surface, except at one part, which is bare. These holes appear to be caused by the impress of the thumb and fingers, but whether they are intentional or not it is difficult to decide. Suggestions can be offered as to its possible use. It may have been designed for use in a game, or it may be a rough sling-bullet.<sup>44</sup> There is a ball-shaped piece of bluish-grey clay (unbaked), rather larger, in Glastonbury Museum, which has some slight, irregular indentations. Fig. 9 may be a pinched-up lump of clay from which a potter was going to form a spindle-whorl, or it may have been a mass, of convenient size, squeezed up by a potter, ready for use in making vessels of pottery; it is quite possible that the potter who formed it, liked to work with lumps of clay of a more or less standard size.<sup>45</sup> In Glastonbury Museum there are several

(43). Seven metacarpi of sheep, with one perforation through middle of each (in one case two circular holes), are also shown in Glastonbury Museum.

General Pitt-Rivers found similar specimens at Woodcuts and Rotherley, S. Wilts, which appeared to him “possibly to have been used for winding string, or perhaps as netting-needles, or as a bobbin.” (*Excav. in Cran. Chase*, Vol. i, p. 175, and Vol. ii, p. 172.)

(44). Placed amongst the Lake Village clay sling-bullets in Glastonbury Museum are several more or less spherical lumps of clay, without indentations.

(45). Compare the so-called ‘hand-bricks,’ found in Lincolnshire, at Hale Magna, and near Ingoldmells, and other places. (*Arch. Journ.*, Vol. vii, p. 70; Vol. xvii, p. 64; Lincoln Vol., 1848, p. xliii; and Bristol Vol., 1851, p. xciii.)

irregular masses of burnt clay (mostly flat), with finger-marks ; the baking of these rough pieces would probably be accidental, and not intentional. The ball was found in Mound 1, on the lower floor of clay, near the hearth ("5," Plan and Section, Pl. I).

**Fig. 10.**—Spindle-whorl, in process of manufacture, of indurated sandstone of Devonian age ; almost circular (diam. 41m.m.), and of bi-convex section. It will be observed that the incipient pit is not central, and that a ring has been faintly scratched around it, in a more central position than the hole itself. The ring was probably indicated to correct the faulty commencement of drilling the hole. As Mr. Balfour has hinted, it was probably the intention to finish the hole by 'pecking,' instead of by drilling ; as the latter process, continued from an excentric starting-point, would yield a lop-sided result ; whereas, by a 'pecking' process, the position of the hole could be properly adjusted. Found in Mound 2, on the first floor, at a depth of 0·5ft. ("1," Plan and Section, Pl. II). Some three dozen spindle-whorls of stone have been found at the Lake Village, including a rough one, with hole just commenced ; there are also four or five flat, circular pieces of stone, without any indication of incipient holes.

**Fig. 11.**—Small brownish-black pebble, exhibiting a very smooth and polished appearance. Found in Mound 2. Over four dozen similar pebbles, of various colours, have been found previously at the Lake Village ; and it is generally supposed that they must have been used in some game. Painted pebbles have been found at Hod Hill, and in brochs at Caithness.

**Fig. 12.**—Small fragment of rim of pottery, of a light, yellowish-brown colour, ornamented with slightly indented straight lines. Found in Mound 2, between the first and second floors, at a depth of 1ft. ("2," Plan and Section, Pl. II).

**Figs. 13 and 14.**—Two fragments of black, ornamental pottery, found together in Mound 1, on the lower clay floor (“3,” Plan and Section, Pl. I), and evidently belonging to the same pot. The ornamentation is clean and deeply-cut, and is of a style of frequent occurrence in the Lake Village.

**Figs. 15 and 16.**—Fragment of rim of a pot, and another piece, probably belonging to the same vessel, of a dark-brown colour. Found, with three other ornamental fragments, probably of same pot, and three other pieces of a different character ornamented merely by a few incised lines, in Mound 2, strewn round about “6” (Plan and Section, Pl. II), at a depth of 2·6ft. from the surface, close to wooden stumps of hut-walls. The ornamentation on the fragments figured consists, apparently, of a band of chevron pattern, the alternate triangles being filled with horizontal lines, parallel to the base. There do not appear to be any other fragments precisely of this ornamentation from the Lake Village. This pottery is much pitted, as the illustrations well show.

**Fig. 17.**—Fragment of pottery, ornamented with a chevron, or zigzag, pattern, round the bulge of the vessel. Found in Mound 2, at a depth of 1·7ft., outside the area occupied by the hut (“5,” Plan and Section, Pl. II).

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