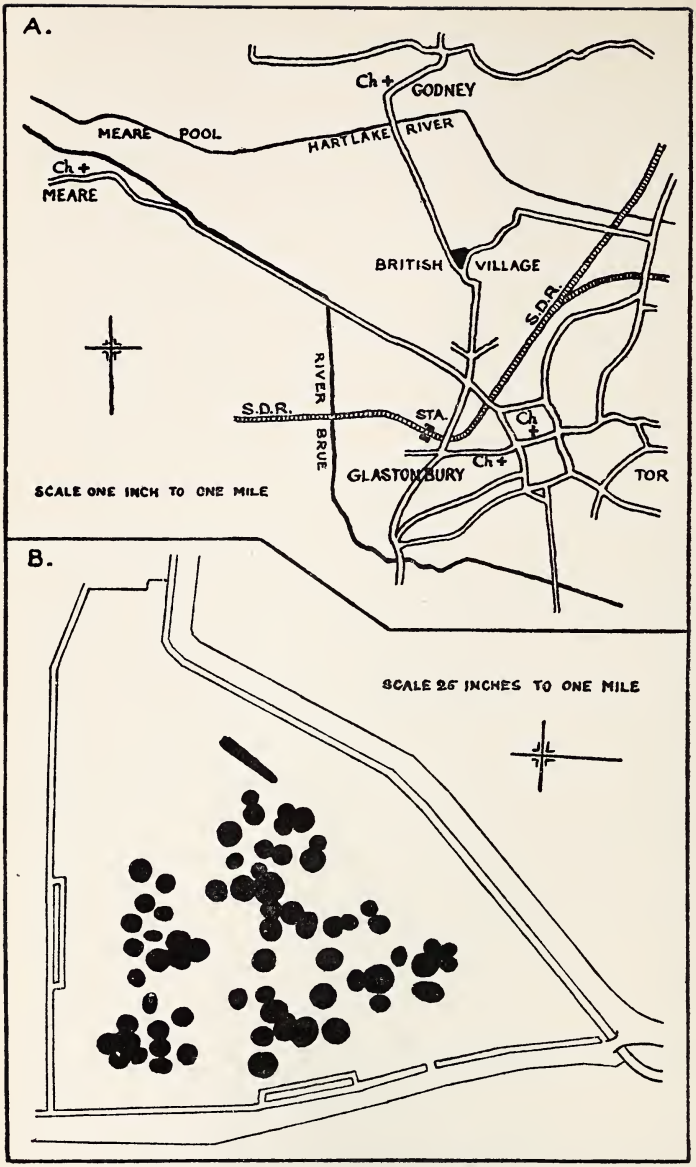
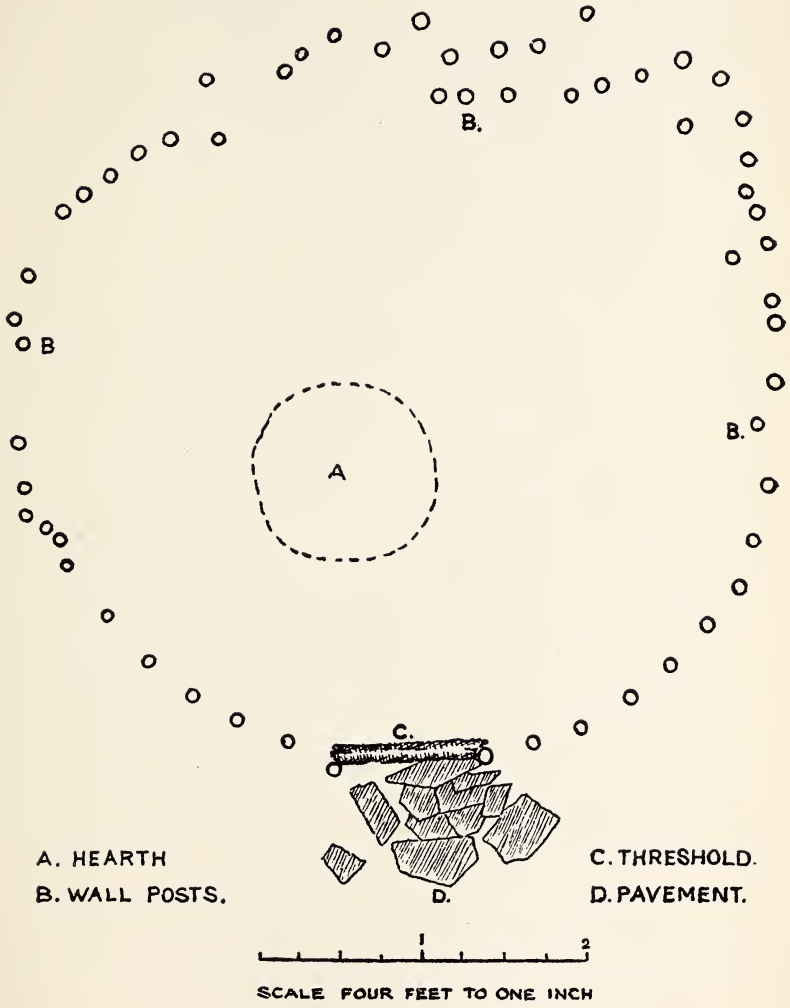


A. MAP SHOWING SITUATION OF VILLAGE.
B. PLAN OF DWELLING MOUNDS.

BRITISH VILLAGE AT GLASTONBURY.



PLAN OF HOUSE IN BRITISH VILLAGE, GLASTONBURY.

The Lake Village near Glastonbury.

BY ARTHUR BULLEID.

THE Glastonbury lake village is of the crannog or artificial island type, and consists of between sixty and seventy dwelling mounds: it covers nearly three-and-a-half acres, the east and west and north and south diameters being three hundred and four hundred feet respectively.

During the seasons of 1892 and 1893, the time was chiefly taken up with the examination of fifteen dwelling mounds, and of the causeway, and other stone and timber structures in the peat outside the village border. This year has been occupied in tracing the village border, which has now been uncovered to the extent of five-hundred-and-fifty feet, or about one third of its total circumference. These investigations have added much valuable information respecting the size and shape of the village, and have established the following facts:

a. That the village was originally surrounded by the water of a shallow mere.

b. That five feet of peat accumulated during the occupation.

c. That a strong palisading of post and piles surrounded and protected the village.

d. That the ground work of the village near its margin is artificial in some places for the depth of five feet.

Before beginning to describe the various structures constituting the village, it will be well to refer first to its situation and the formation of the land near it.

The village is placed in the moorland level a little more than a mile north of Glastonbury, and although about fourteen miles from the coast it is less than eighteen feet above the mean tide level.

Through the fields that at one time were swamp, the river Brue now passes between high banks. Although these were constructed by the monks of the abbey at least seven hundred years ago, and doubtless were begun at a very much earlier date, yet the land for many years afterwards continued to be covered by marshes and areas of water—one lake, even as late as 1540, was five miles round. The east border of this lake at that time was probably less than a mile distant from the village, and in times more remote must have been much nearer, and possibly included the village in its area. The lake is shewn in several old maps of Somerset, dating from 1575. It has now long ceased to exist, but part of its site can be traced in the fields, which still retain the name of Meare Pool, and the village standing upon its margin is called Meare. About the year 1500 this pool seems to have been the most important area of water, but in the neighbourhood there were several others. These facts shew the state of the land even as late as the sixteenth century, notwithstanding all the embanking and system of drains and canals, and lead to the conclusion that in early times the moorlands of central Somerset, and especially those surrounding Glastonbury, were covered by large tracts of shallow water and extensive areas of swamp, suitable either for the construction of lake dwellings, or a marsh village; but, apart from this, the presence of rushes and aquatic plants in the peat denote the marshy nature of the soil.

It is uncertain at what date the land immediately around the village was reclaimed, but we know that in 1788 it formed part of the "old enclosures." The neighbourhood is still subjected to floods, and the village field is frequently surrounded by water in winter time.

The soil accumulated over the site, since its abandonment, varies from nine to thirty inches in depth.

There is nothing particularly noteworthy about the surroundings of the village as it appears now, beyond the facts that it is situated nearly in the centre of the low moorland, between Glastonbury and Godney, and that it is bounded on its east side by a natural water course; this is now but a narrow rhyne, but there are many reasons for believing that it probably represents the ancient course of the river Brue. No distinct reason at present can be given why this particular spot was chosen for the village, unless from its position in the centre of the moor it would have been less accessible from the high ground.

There is little on the surface of the ground to indicate the site of a village; but on careful inspection, between sixty and seventy low circular mounds can be seen, varying from fifteen to thirty-five feet in diameter, only raised from six to twenty-three inches at the centre (the highest point) above the surrounding soil. Each of the mounds represents a dwelling. Referring to the accompanying plan of the field, it will be seen that these mounds are arranged with no apparent method or design, and it has not yet been ascertained whether the mounds originally started as several district groups, which eventually extended to form one settlement, or whether all the mounds may be taken as the component parts of a large crannog of gradual growth from one centre. It will be well to take the formations entering into the construction of the village in the following order:

1. The peat.
2. The village sub-structure.
3. The dwelling mounds or floors.
4. The dwellings.
5. The hearths.
6. The village border.
7. The structures in the peat, outside the village border.

1.—*The Peat.* The total depth of the peat has not been tested, but it has been shewn to be more than fifteen feet. At a depth of about six feet below the present surface a light yellow and fairly well-defined layer of peat is met with : this has been proved to be the level of the ground when the site was selected : below it nothing in connection with the village has been found, but the peat at all levels above yields everywhere abundant signs of the occupation.

2.—*The village sub-structure.* The sub-structure or foundation on which the dwelling mounds rest, varies considerably at different parts of the village, the amount of timber used in its construction being less than the following description of a section would imply.

The surface was formed of large pieces of timber, placed side by side and reaching a foot in depth. Under these were six to nine inches of carefully layered brushwood, resting on more pieces of timber, and on olive-brown peat containing logs—these together being three feet deep—and lastly, between the above layer and the yellow peat, eighteen inches or so of much decayed wood mixed with rushes and dark peat. It was difficult to determine how far the deeper layers were artificially placed, as the wood was so much decayed. The upper layers of timber and brushwood, more especially at the edge of the mounds, were kept in position by hundreds of small piles, many of which were bent over at the top to hold the wood in place.

3.—*The dwelling mounds or floors* are made of clay, ranging from eighteen to thirty-five feet in diameter, and roughly circular. The clay begins at the circumference as a thin layer, but gradually thickens towards the centre of the mound where in some cases it reaches a depth of four feet. On account of the softness of the underlying peat, and the loss of support from the decay of the wood sub-structures, the clay has sunk in some instances as much as two feet. This to a certain extent accounts for the very slight elevation of the

mounds above on the surface. For various reasons the floors of the dwellings were renewed by adding a fresh layer of clay. This process must have been repeated from time to time, for in some mounds there are as many as four or five distinct layers, one over the other, each in its turn having served the purpose of a floor.

4.—*The dwellings.* We have very conclusive evidence how some were made, in shape, size, and construction. In shape they were circular or oval, and the size varied with that of the mound; the hut walls were constructed of upright posts placed about one foot apart, the spaces between them being filled in with wattle and daub. This is shewn not only by the quantity of baked clay bearing wattle and timber marks, but also by the stumps of the actual wall-posts *in situ*. A large number of fragments of baked clay show impressions of square-cut timber, so that some dwellings, or at least some part of them, must have been built in a more substantial manner. The entrance to the huts has been clearly traced: a few rough slabs of lias stone forming the doorstep, with a piece of timber as the threshold. These are shewn in the accompanying plan of a small dwelling, the diameter of which is about eighteen feet.

No clue to the height of the huts has yet been obtained, neither has anything been found to show decidedly what kind of roof was used.

5.—*The hearths*, generally speaking, are found at the centre, and highest part of the mound, their average diameter being about four feet, and roughly circular. They are often composed of a few slabs of stone embedded in the clay, less frequently of rubbly stone or gravel, sometimes of clay only. As a rule there is one hearth for each floor, and as many as five hearths have been found in one mound.

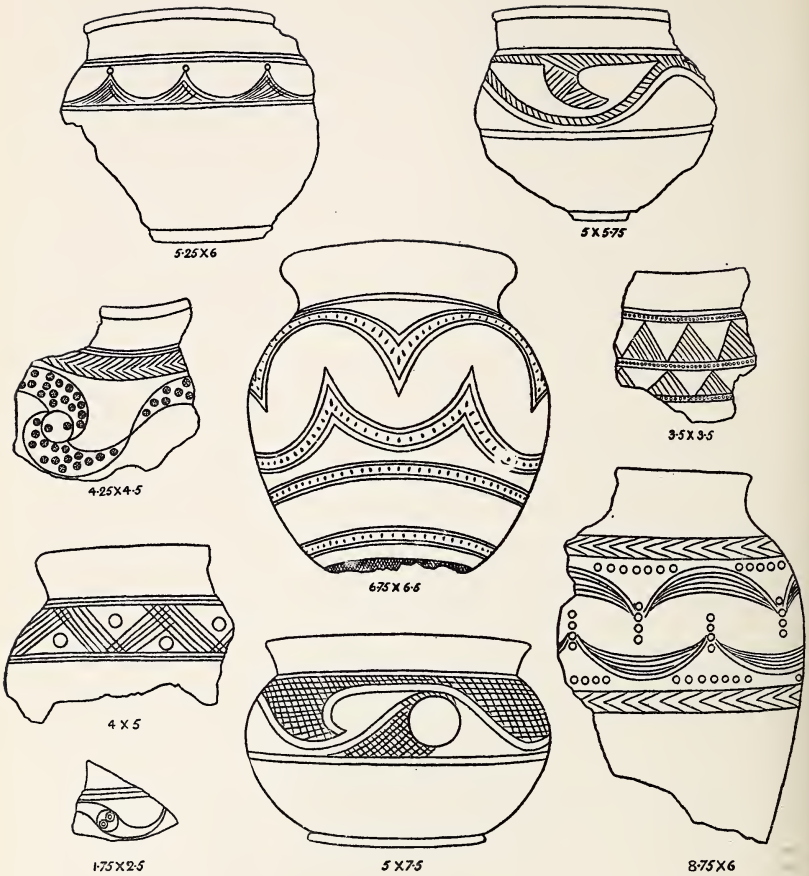
6.—*The village border.* The palisading at the edge of the village is formed of piles three to nine inches in diameter, and from five to eleven feet in length, kept together by more or

less coarse hurdle work. Although in many places the piles are much displaced and decayed, yet they form a fairly perfect and continuous, though irregular outline; at some parts placed so closely together that from fifty to seventy have been counted in the space of ten feet. The majority slope outwards, having the appearance of *chevaux de frise*, at angles varying with the state of preservation of the border; but a large proportion of them were undoubtedly driven in vertically, and have been either broken off or gradually forced out into their present position. Some piles barely reach the true peat, whilst others pierce it for several feet; occasionally a few vertical piles are still seen among the slanting, and probably shew repairs to the border.

The border of the village has a very irregular outline, the piles being arranged in varying curves. This unevenness has been proved in some places to be due to extensions of the village. The surface of the border immediately inside the piles is formed of trunks of trees and large pieces of timber placed side by side parallel to the margin, and reaching eight to twelve feet inwards: underneath these more timber is found alternating with layers of clay and brushwood, with which are intermingled patches of stone, peat, rush, and bracken, to the depth of four or five feet.

7.—*Structures in the peat outside the east border of the village.* The only indication of these before digging was a single low mound about sixty feet long. This ridge was made of clay, varying from nine to eighteen inches in thickness, and covered with a layer of rubbly lias stone, the whole apparently resting on the surface of the peat; the ridge, when traced, was found to begin within a few feet of the village border, and extended in a northerly direction for one hundred feet: it then changed its course towards the south-east for forty feet.

On the east side of the main portion of this embankment, was a layer of irregular blocks of blue lias stone, scattered for the most part near the surface of the peat, covering a space from



DECORATED POTTERY FROM THE VILLAGE

ACTUAL SIZE IS GIVEN IN INCHES

GLASTONBURY.

ten to fourteen feet in width and one-hundred-and-thirty in length: at one part the stones formed a kind of wall four feet deep in the peat.

It is clear that the clay ridge and the stone work were made late in the occupation of the village, and at different dates, the stone work being of earlier construction than the clay ridge or causeway. It is difficult to conjecture the use of the former except for protection. The clay ridge, or causeway, was evidently a landing place but the object of its curved shape is uncertain. Its use does not seem analogous to the zigzag causeways that have been met with elsewhere.

I now mention a few of the finds which throw light on the lives of the inhabitants and the probable date of the occupation, giving those more especially that have been met with since the last meeting of this Society; but for the information of those who have not visited the excavations, or the Glastonbury Museum, I would say that the objects mentioned, and those exhibited here in the local Museum, are only a few selected specimens from the many that have been found, the bone and horn implements alone numbering several hundred.

Flint.—Besides many scrapers, and flakes, there is one good arrowhead: this was found well within the village border and near one of the dwellings.

Stone.—The objects of stone include spindle whorls, whetstones, and parts of querns.

Bronze.—The find of greatest importance in bronze is a well preserved bowl. It is made of two pieces rivetted together: the under surface is semi-circular, and a hole in it had evidently been made good by rivetting on a small piece. Among the other objects of bronze are two more spiral finger rings, a penannular ring brooch, and parts of several fibulæ.

Iron.—Of this metal there are two reaping hooks with wooden handles, besides other implements.

Pottery.—Of both hand and wheel made kinds are still met with in great quantities. Recently, a decorated wheel-made

bowl of black ware, in perfect preservation and highly finished, has been found. Besides this there are numerous pieces of pottery, elaborately marked with designs in circles, curved and flowing lines, and triangles. Many of these fragments are doubtless capable of reconstruction. A few of the designs are given on the page opposite. In the finest specimens the under surface of the pot is also decorated.

Horn and bone.—Amongst the objects made of horn and bone, dug up this year, are needles, gouges, handles of knives, and combs.

Baked clay.—Of baked clay there are portions of loom weights, pellets, or so-called sling stones, and crevice marked clay.

Glass.—Parts of two blue glass beads with white marking.

Wood.—Many very interesting objects have been dug up this year, made of cut wood, among them being seventeen pieces of a morticed framework, probably part of a second loom, one having been found last summer.

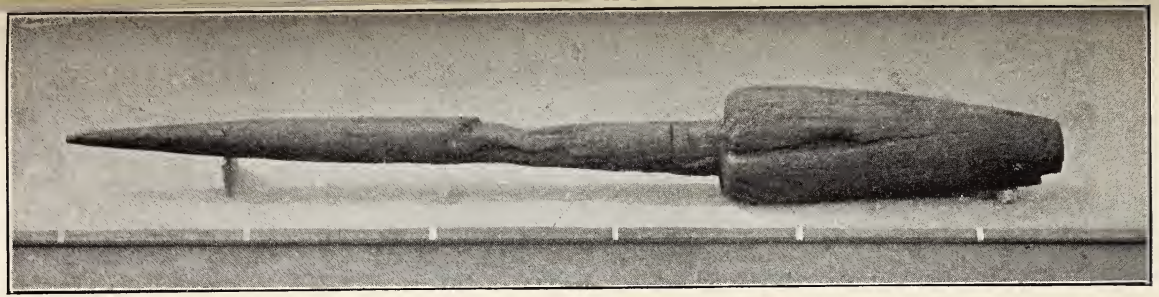
Portions of a small stave-made bucket with decorated side.

The greater part of a solid cut tub in fragments, six inches high, and twelve inches in diameter, the outside decoration being of a very bold and beautiful description.

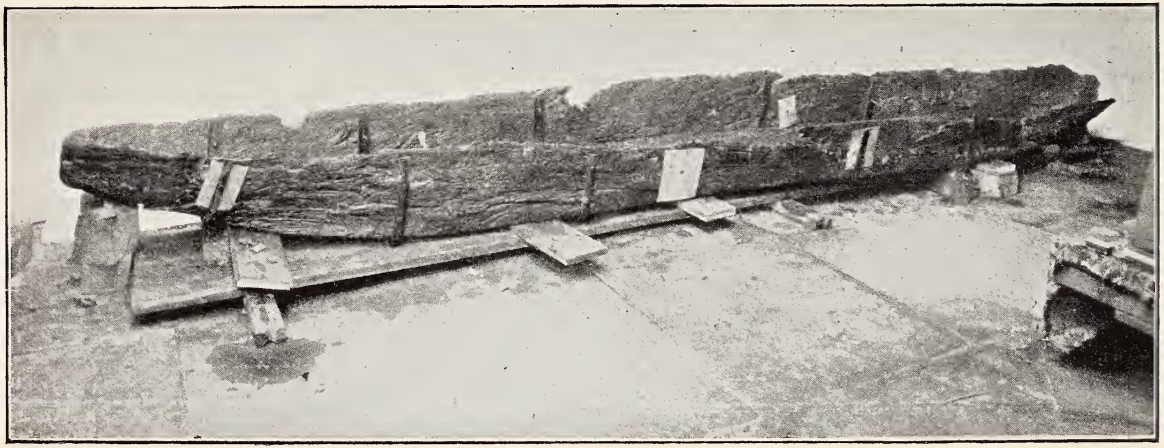
Part of the axle of a wheel, with bases of two spokes *in situ:* the length of the axle is fourteen inches, its diameter eight, and the length of a spoke twelve inches. The whole is of light construction and of perfect workmanship, and was probably a potter's wheel.

Unbaked clay pellets or sling stones have been dug up by hundreds; and the bones of animals have been met with in such quantities in some places, that nearly a wheelbarrow full has been obtained from a square yard of peat.

Professor Boyd Dawkins, F.R.S., has examined some of these bones, and amongst them he has found the following mammals and birds represented:



PIECE OF WROUGHT OAK, PURPOSE UNKNOWN.



ANCIENT BRITISH BOAT FOUND AT GLASTONBURY



IRON INSTRUMENTS.



BRONZE BOWL.—Diam. $4\frac{3}{4}$ in.

Objects found at the British Village, Glastonbury.

Domestic Mammals.	*Domestic Birds.*
Bos longifrons.	
Capra hircus.	Gallus domesticus.
Ovis aries.	
Sus scrofa.	
Equus caballus.	
Canis familiaris.	
Wild Mammals.	*Wild Birds.*
Felis catus ferus.	Crane. Abundant.
Lutra vulgaris.	Swan. ditto.
Canis lupus?	Heron.
Sus scrofa ferus.	Diver, species?
Castor fiber.	Mallard.
Cervus elaphus.	Grebe.
Cervus capreolus.	
Articola amphibia.	

More human remains have been met with this year than previously, including two complete skulls and portions of a third, and numerous fragments of bone from a cremated body: the skulls both show signs of having undergone rough treatment either by an axe or sword.

The botanical specimens have been submitted to Mr. J. G. Baker, F.R.S., of Kew, who has given the following report:

Report on the Peat from the British Village at Glastonbury.

"*Leaves.*—It contained abundant leaves of Salix cinerea, a species everywhere abundant in Britain at the present time, not restricted to damp places; on some of the leaves were found Rhytisma Salicinum, a minute fungus. There were a few leaves of myrica gale.

Twigs.—Probably these belong to Salix cinerea.

Seeds.—The abundant seeds represent three genera: Ranunculus, Potamogeton, and Carex. All these are large genera, and it is impossible to say which species they represent. Potamogeton indicates a lake or pool. Altogether the

peat contains nothing whatever that might not be found living in the surrounding district at the present time."

In a subsequent report the following seeds and woods are mentioned :

Quercus Robur.	Vicia Sativa.
Alnus Glutinosa.	Corylus Avellana.
Betula Alba.	Atriplex.
Hordeum Vulgare.	

From the uniform character and distribution of the things found a fair conclusion can be arrived at as to the probable period during which the village was occupied, and the following facts help to fix the approximate date.

No bronze weapons have been met with, this metal being used for personal adornment and things of domestic use ; but iron implements and weapons are not uncommon. No coin has been found, neither has one single fragment of Samian or other Roman pottery been discovered, though there are numerous villas and extensive Roman potteries in the neighbourhood. With few exceptions, such as a fibula or two of Roman type, and an iron bridle bit, all the objects may be said to be of late Celtic origin, and belonging to a period dating from somewhere between 200 and 300 B.C. down to the Roman occupation. The human remains discovered this year will doubtless help to determine who the inhabitants of the dwellings were, whilst from the other things we gain a considerable amount of insight into the kind of life they led. It is evident that they were farmers, possessing both arable and pasture grounds on the adjoining high lands, that they grew wheat and peas, and owned small horses, sheep, and cattle. There is proof that the people were acquainted with a rude kind of metallurgy, for crucibles have been dug up that were used for smelting metals. Then we know that spinning and weaving were carried on to a large extent, and from the numerous pieces of cut wood-work we learn that they were excellent carpenters and used the lathe, and there is decided evidence that the



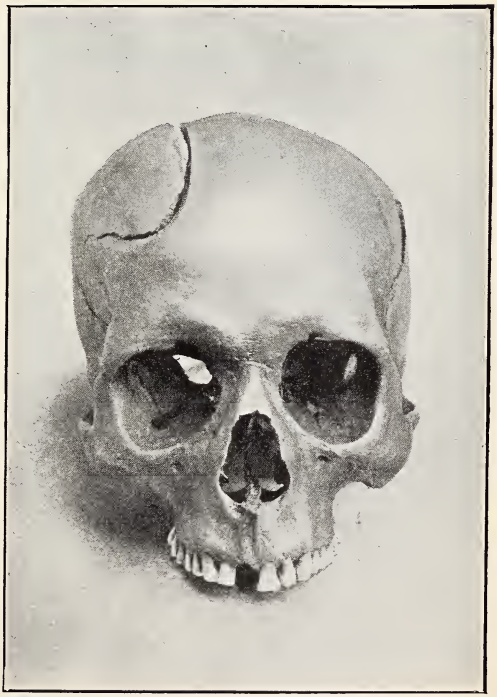
ANCIENT BONE COMB.



SLING-STONE OF
BAKED CLAY

—

JET RING.



SKULL, SHOWING SWORD CUT

Objects found at the British Village, Glastonbury.

pottery was made on the spot. From these and other facts we cannot do otherwise than admit that the inhabitants of the lake village were industrious, and fairly civilised people; and, we presume, the delicate fibulæ fastened equally delicate fabrics, which were doubtless manufactured by these people. The pottery and wood-work, and the decorations on both, speak for themselves, and shew a skill and taste curiously in contrast with their rough life and the inferiority of their dwellings; but we cannot doubt, with the evidence before us, that they used, and in most cases constructed, the objects which have been found.

In feeling and general design, the decorations on the pottery seem strongly like ancient Greek. Moreover, the details, in more than one particular, are identical with some of the fragments found by Schliemann at Mycenæ. *See* "Mycenæ and Tiryns," p. 71. [Ed.]