ON A HOARD OF BRONZE IMPLEMENTS FROM NEW BRADWELL.

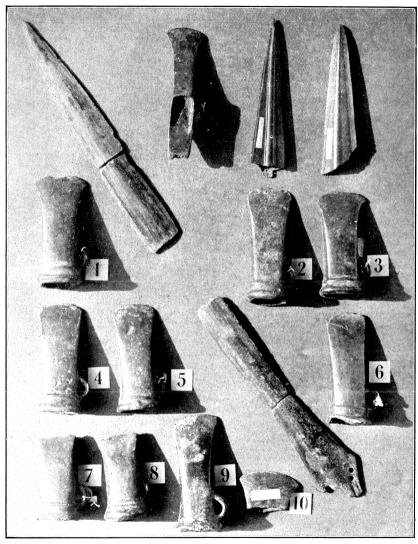
[By Alfred Heneage Cocks, M.A., F.S.A.]

In the course of carrying out some drainage work at New Bradwell in 1879, on a site now built over at the back of what was called the Corner Pin, a shallow hole about 1ft. 6in. deep, filled with black soil, was met with. There are a large number of similar holes in the neighbourhood, but in this particular one lay a bronze founder's hoard of 16 worn-out implements,* which fortunately came into the possession of our member, Mr. W. Whitbread, of Hanslope.

The hoard comprised one palstave, one (broken) sword, two (broken) spear-heads, and 12 socketed celts (three of them broken). Mr. Whitbread gave one of the celts to the Nottingham Museum, and another one to Sir Herewald Wake, Bart., of Courteen Hall, Northampton; but the remainder of the hoard he has kindly deposited in the County Museum, and I have to thank him for allowing me to publish an account of the collection, and for a description of the spot where it was found.

The road between Newport Pagnell and Wolverton crosses a brook which flows north to join the river Ouse. About 170 yards east of the bridge over this brook, a street called Wood Street is now built, running south from the road, and the hoard was almost in the apex of the angle eastwards between this new street and the main road; New Bradwell

^{*}This find is briefly alluded to by Mr. G. Clinch, in the Victoria History of Bucks, I. 183, from information supplied by the present writer.



A. H.C., Photo,

HOARD OF BRONZE IMPLEMENTS, FROM NEW BRADWELL.

Church is a few hundred yards further east, and Wolverton Station is about $\frac{1}{4}$ mile south, and slightly west of the spot.

Considerable attention has been paid of late years, by at least a few antiquaries, towards ascertaining the approximate date of the introduction into this country of the knowledge of casting metal implements of various kinds-first of copper, and later on, by the admixture of tin—of bronze. On Feb. 20, 1908, a paper by Dr. Oscar Montelius, Hon. F.S.A., Director of the Museum of Antiquities, Stockholm, was read at a meeting of the Society of Antiquaries, by Dr. C. H. Read, in the absence of the author. Dr. Montelius is an antiquary of cosmopolitan repute, and anyone who has had the privilege of inspecting the chief treasures of the Stockholm Museum under his guidance, holds it among his pleasantest memories. The paper is published in Archaeologia, 2nd ser., Vol. XI., 1908, and in it Dr. Montelius, as the result of his researches, divides the Bronze Age (of this country) into 5 periods, as follows:—

Period 1 (Copper Age). From the middle of the third, or from a more remote period, to the beginning of the second millenium B.C.

Period 2 (the first period of the Bronze Age, properly speaking). From the beginning of the second millenium to the seventeenth century.

Period 3. From the seventeenth to the end of the fifteenth century.

Period 4. From the end of the fifteenth to the middle of the twelfth century.

Period 5. From the middle of the twelfth to the end of the ninth century B.C.

Consequently, the Iron Age began in Great Britain and Ireland about 800 B.C. Dr. Montelius adds:—"I know very well that these dates differ considerably

from some opinions formerly expressed about the chronology of the British Bronze Age, but I hope that the results of my researches will prove to be as correct as the facts known at this moment admit."

At the time the paper was read, Dr. C. H. Read, followed in greater detail by Dr. Arthur Evans, expressed disagreement with the above conclusions. The remarks of the latter were published in the Proceedings of the Society of Antiquaries, 2nd ser., XXII., p. 121 (February, 1908). It is impossible, in the space available in The Records, to transcribe his reasoning in extenso, or even to give a satisfactory summary, and the following few sentences must suffice. Dr. Evans says (p. 122):—"The approximate chronology of various early phases of primitive European culture must largely rest on an Egyptian basis, and considerable uncertainty still attends Egyptian dates earlier than the eighteenth dynasty." He proceeds, however, to give certain items of evidence, and eventually concludes that the Copper Age in this country (and for which he suggests the name "Chalcolithic Period," from the survival of the use of stone long overlapping the primitive use of metal), begins some 500 years later than Dr. Montelius's estimate, and should be put at the beginning of the second millenium B.C. He dates "the beginning of the pure Bronze Age in this country" from the middle of the 14th century at the earliest; and without attempting so complete a detailed sub-division of the period as Dr. Montelius, places the beginning of the Îron Age at about 400 B.C.

The late Sir John Evans, in his Bronze Implements, 1881 (pp. 472, 473), summarizes his opinion of the chronology of the Bronze Age, and again half-adozen lines cannot do justice to this summary, but very briefly stated, Sir John divided the Bronze Age into three stages: 1st, characterized by flat or slightly flanged celts, and knife-daggers frequently found in barrows associated with implements of stone; 2nd, characterized by more heavy dagger-blades, flanged celts, and tanged spear-heads or daggers; 3rd, by

palstaves,* socketed celts, swords, socketed spearheads, and the many forms of which fragments are found in the ancient founders' hoards. He assigns a minimum duration of four or five centuries to this last stage, and about half as long a time to each of the two earlier stages, or eight to ten centuries to the Bronze Period. He believes that iron must have been in use in the southern parts of Britain not later than the fourth or fifth century B.C., and that by the second or third century B.C. the employment of bronze for cutting instruments had there practically ceased; and concludes that the Bronze Period began in this country some 1,200 or 1,400 years B.C. His son's chronology, as representing the additional knowledge gained in a further period of some 27 years, will probably be the one on which most antiquaries in this country will be inclined to pin their faith.

Naturally all the above dates can only be approximate, not only for want of knowledge, but because the introduction of each new type in turn would only

very gradually displace older patterns.

LOOPED PALSTAVE.

Of the specimens figured in Sir John Evans's Bronze Implements, the New Bradwell example most nearly resembles fig. 74 (from Wallingford), but in the present case the flanges stop about half-way up the recess or groove for the handle, the stop is curved (instead of being a perfectly straight line), and the section is a little broader, that of the recess being slightly concave (instead of the reverse). Recess to stop $2\frac{1}{8}$ in.; blade $2\frac{3}{4}$ in. Total length $4\frac{7}{8}$ in. Width of blade at edge (in

^{*}The name was borrowed by Scandinavian antiquaries from paalstab, a kind of narrow spade or spud, still in use in Iceland (Yates, quoting Dr. C. J. Thomsen, of Copenhagen, The Archæological Journal, VII., 74, 1850, and Evans, Bronze Implements, p. 71.) The Swedish form (as used by Nilsson), is Palstaf, and the Norse (as used by Rygh) Paalstav. As å in Swedish, and aa in Norse and Danish $= \bar{0}$, the first syllable in English ought to be pole, whether we render the last one staff, stav, or stave. Herr Montelius (SverigesForntia) does not use the word, but calls the tool Skafteelt (= handled celt).

straight line) 36 mm. Outside width at stop 21 mm., and in section 28 mm. The flanges only extend $1\frac{1}{8}$ in., the remaining inch of the recess is flat (both sides) and quite smooth, while the portion bounded by the flanges (both sides) is rough. The edge of the blade for about $1\frac{1}{8}$ in. up, has been ground on both surfaces, especially on the outer edges of the curve; on one side the centre has hardly been touched. The centre of the loop is placed slightly on the recess side of the stop.

The date of this palstave, according to Dr. Montelius's chronology, seems intermediate between his fig. 88, of Period III., and fig. 114, of Period IV.

SWORD.

Has been intentionally broken by the ancient owner of the hoard, into short lengths for convenience of stowage and carriage. Two pieces fit one another at the point end, and two at the butt; their lengths are $5\frac{7}{3}$, and $3\frac{1}{2}$ inches for the first pair, and $4\frac{3}{3}$ inches apiece for the second pair, making, when butted together, an exact length of 18 inches; but the beginning of the third piece (from the point) is almost $\frac{1}{4}$ inch narrower than the end of the second piece, and does not fit, and a fifth piece of about 3 inches in length (or between 2 and 4 inches) is evidently missing. Part, probably the greater part, of the hilt-plate is also missing; there have been two holes on each side for riveting the hilt on, but a fracture has taken place through the two holes on one side, which extends diagonally through the centre of the plate, at that point about $\frac{3}{4}$ in. wide.

The blade has seven longitudinal facets, or alternate low ridges and furrows, on either surface, and is of the ordinary willow-leaf pattern, but narrower than usual in proportion to the length, which may be the result of much sharpening. The greatest breadth of the blade—34 mm.—is at a distance of $8\frac{1}{4}$ inches from the point. The greatest width of the sword, at the wings, at the forward end of the hilt, is 46 mm. The minimum width—25 mm.—is at the basal end of the third extant portion, or $13\frac{1}{2}$ inches from the point without allowance for a missing portion.

Of the swords figured in Sir John Evans's Bronze Implements it most nearly resembles fig. 343, but is narrower, has more facets (as above-mentioned), has only 2 instead of 5 holes on each side for rivets, has no flange on the sides of the hilt-plate, and its termination was probably unlike. That figure is reproduced, numbered 122, in Dr. O. Montelius's paper in Archæologia, Plate XV. (opposite p. 136), where it is used as typical of his Period IV.

SPEAR-HEADS.

There are two; each broken off some distance short of the socket. One of them, now $5\frac{n}{16}$ in. long by 36 mm. wide, has the ribbings something like fig. 381 in Evans's Bronze Implements. There is no indication as to the shape of the socket-end of the blade of either specimen, but so much of the blade of the present example as remains is rather narrower and straighter than fig. 381, and is in this particular more like fig. 382. The central rib is hollow to within 2in. of the point.

The other spear-head is now $5\frac{3}{8}$ in. long, by about 36 mm., if the shorter side of the fractured base is continued to correspond with the longer one. The facets are two of about equal breadth, on each side of the central rib, in this respect approximating to figs. 390, 391, and 394 of Evans; the sides are again almost straight. This one is hollow to within $1\frac{3}{4}$ in. of the point.

In the large size and prominence of the central rib, and in the facets, these specimens approximate to figs. 129 and 136, of Dr. Montelius's Period V. (Arch. Plate XVI.).

SOCKETED CELTS.

These now number ten, including one which is merely a fragment, being only the cutting edge of one, about an inch deep; and two others from which the cutting edge to a somewhat less depth is missing.

Fig. 116, in Evans's *Bronze Implements*, represents them all in type, though all are from different moulds.

Seven (out of the nine with the socket preserved) have (like fig. 116) a lip and a raised band or bead just above it, in line with the lower end of the single loop which all the nine possess. One (No. 8), which is one of the two having the cutting edge missing, has two very inconspicuous beads above the lip, the nearer end of the loop being in contact with the bead farthest from the lip; while another one (No. 9) has a very roughly-cast edge to the socket which hardly forms an intentional lip, and has no bead above it, the loop being placed very close (a bare $\frac{1}{8}$ in.) above the edge of the socket. The section of this socket is circular, though very rough and imperfect in outline; about half the remainder in varying degree have square sockets rounded off, and the other half somewhat oval sockets showing more or less indications of corners.

Only two of the celts, and the fragment, retain the curved expansions like horns at the sides of the cutting edge; in the others the cutting edge is worn down or broken off beyond these excrescences.

Dr. Montelius naturally places socketed celts in general, in his Vth Period; his fig. 168 (tom. cit., p. 145) fairly represents all from New Bradwell. The only example of this class of tool which he figures in his Perod IV. is of distinct type.

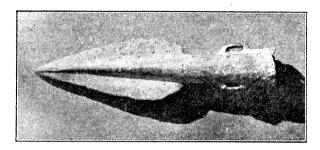
Spear-Head, from Medmenham.

A bronze spear-head in my collection was found about 2ft. below the surface in moved soil, near the so-called Danes' Dykes, close to the new house at Danesfield, in Medmenham parish; and although "one swallow does not make a spring," this goes a long way towards showing the error in the assignment of these earth-works.* The specimen is very similar to fig. 394 in Evans's Bronze Implements, except that my specimen has a perfectly flat blade (on either side the central rib), without the facet or chamfered edge of the figure, and is rather smaller, measuring barely

^{*}Mr. A. H. Allcroft, however ("Earthwork of England," 1908, p. 388), influenced possibly by the name, acquiesces without alleging any reason, in their Danish origin.

 $5\frac{1}{16}$ in. The blade measures $3\frac{3}{16}$ in., the socket $1\frac{7}{8}$ in. Greatest width, $1\frac{1}{4}$ in. Like the figure, it has a loop on each side, which have been flattened by hammering so as to reduce their projection as much as possible.

This specimen would be referred by Dr. Montelius to his Period IV., but except for the occurrence of loops, it much more nearly resembles his fig. 129, assigned to the Vth Period.



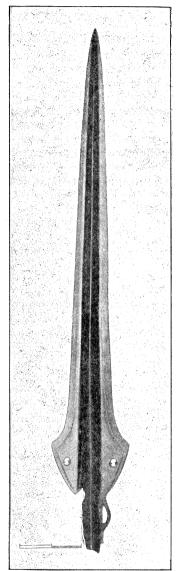
Spear-Head, from the Danes' Dykes, Medmenham. From a Photograph by A. H. C. $\frac{1}{2}$ Linear.

SPEAR-HEAD, FROM TAPLOW.

This paper ought not to close without a brief notice of quite the most remarkable bronze weapon yet found in Buckinghamshire—unique as far as England is concerned, and only approached by a single Irish specimen drawn as fig. 400 by Sir John Evans. It has been fully described by Dr. C. H. Read in the Proceedings of the Society of Antiquaries (2nd ser.), XIX., p. 287 (1903), and subsequently by Mr. G. Clinch, in the Victoria History of Bucks, I. 184, but has not been mentioned in our county RECORDS. It was dredged from the Thames near Taplow, and obtained by our member, the late R. E. Goolden, who sent it to the British Museum. The present length is $17\frac{1}{2}$ in., the blade being $15\frac{2}{4}$ in., but the end of the socket is broken off, so that it is impossible to ascertain

its original length. Ithas two points of peculiarity; it will be observed, on reference to the annexed figure, that were $_{
m not}$ the socket, and (perhaps) the prominent mid-rib, it exactly releaf-shaped sembles \mathbf{a} sword, from which its pattern is obviously de-To this extent it is matched, though by the less closely, Irish example. In the second point it is absolutely unique, namely, in having on each face of either wing a survival of $_{
m the}$ rivets ordinarily found on swords of period $_{
m the}$ for fixing on the hilt, and these rivets are of gold, conical in form, and apparently of nearly pure metal.

The studs do come exactly opposite one another on the two and it would faces. seem as if the holes in the bronze were in a diagonal direction. The weapon is ornamented with a herring - bone design. Below wings have been originally two loops of triangular section, only one of which now remains. This spear-head would



Spear-Head, from the Thames, from a Photograph given to A. H. C. by R. E. Goolden. Nearly $\frac{1}{3}$.

doubtless fall under Dr. Montelius's Vth Period.

Since the above has been in type I have received from the author a copy of "Chapters in the History of Cookham Berkshire," by our member, Mr. Stephen Darby (privately printed 1909). On p. 24, Mr. Darby claims this spear-head as a Berkshire antiquity: "As it was dredged from the river just below Ray Mill, Cookham, or if not Cookham, then Maidenhead, can, I think, claim to have been its resting place."