A LATE BRONZE AGE HOARD FROM FOXBURROW FARM, NORTH ELMHAM, NORFOLK, 1970

By T. H. McK. Clough, M.A. and Peter Wade-Martins, B.A.

DISCOVERY AND EXCAVATION

(Fig. 1)

N January 1970 a ploughman, while working in a field near the Great Wood, Foxburrow Farm, North Elmham, picked up two bronze socketed axes. It was not the first Bronze Age discovery in this field, as about four hundred and fifty feet further west a socketed axe and a spearhead had been found in 1964 (Appendix, p. 18). These separate discoveries were too far apart to be from the same hoard; possibly two hoards were buried in the field, but unfortunately the western one cannot be located yet.

Following the discovery of the two axes in January 1970, the writer found a further five and an ingot on the surface. The eight objects now collected from the surface were numbers 1, 2, 5, 10, 11, 15, 18 and 43. On the basis of their distribution a square excavation, thirty feet wide, was laid out around their probable source. When the hoard pit was later located, it proved to be only a foot from the centre of the excavation.

The site was dug over the weekend of 14th–15th February 1970; the original thirty-foot square was later extended by ten feet to the east. A total of forty-eight objects, including both implements and ingots, was found. One surface find, number 2, lay just outside the excavation area. Nearly all the items were in the ploughsoil, and only the very base of the hoard pit had survived. The objects lay scattered up to twenty-eight feet away from the pit, but the predominant concentration was to the north. This can only be explained by the direction of ploughing over many centuries.

When the eight inches of ploughsoil was removed the surface of clay and gravel was scraped. The only feature found cut into the "natural" was the hoard pit itself, and this was no more than one inch deep. The original depth of the hole dug for the bronzes could never have been more than nine inches. The shape of the pit was irregular, but it was probably a rectangular scoop just over a foot long. In the bottom lay two complete axes (9 and 24), fragments of another (28), and two fragments of ingot (44 and 45). The precise location of the hoard pit in the excavation can be found by comparing the position of axe number 9 on the excavation plan with the drawing of the pit.

The only prehistoric occupation site known so far in this area lies on the north side of the Black Water valley, just under half a mile from the hoard.

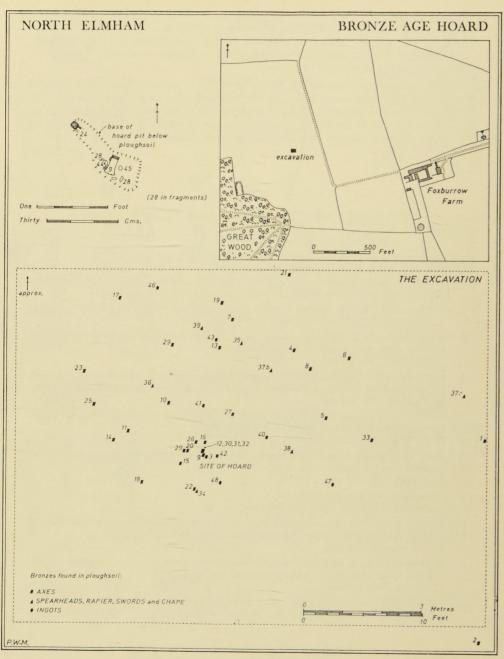


Fig. 1. Location of the North Elmham hoard.

There six patches of burnt flints, or "pot boilers", have been known for several years but never excavated.² One prehistoric sherd has been picked up from there by the writer. The sherds found in the excavation (p. 14), although probably prehistoric, are not in themselves sufficient evidence to point to permanent occupation near the hoard.

With an increased knowledge of the prehistoric and Roman activity in the parish, and with the excavation on the Pagan Saxon cremation cemetery on Spong Hill near Foxburrow Farm,³ together with the current excavations in the village (p. 25), it should be possible in time to build up a total picture of the archæology of all periods of human activity within this parish.

P. W-M.

II

INVENTORY OF THE HOARD AND OTHER FINDS

(Figs. 2-4)

PLAIN SOCKETED AXES OF SUB-RECTANGULAR SECTION WITH SINGLE LOOP

- Heavy mouth moulding with lower moulding level with top of loop; corners of body slightly faceted; two internal ridges in socket; cutting edge damaged. Length 10.1 cm.; max. width at mouth 4.0 cm. Surface find.
- Similar to 1, but no facets on corners; cutting edge sharpened and damaged. L. 10.0 cm.; W. 4.0 cm. Surface find.
- Very similar to 2, although lower moulding less pronounced; loop badly cast; cutting edge sharpened and widely splayed.
 L. 10.0 cm.; W. 4.0 cm.
- 4. Very similar to 2; one internal ridge; cutting edge sharpened and damaged; a faceted effect has been produced by hammering on three corners of this axe. L. 10.5 cm.; W. 4.2 cm.
- 5. Similar to 2 but smaller; part of mouth missing; one surviving internal ridge; cutting edge sharpened, splayed and damaged.

 L. 8.7 cm.; (W.). Surface find.
- Very similar to 5; one face badly cracked, mouth badly cast and broken; possibly unsharpened. L. 8.4 cm.; W. 3.7 cm.
- 7. Upper part of axe similar to 5. Surviving length 5.1 cm.; W. 3.6 cm.
- 8. Similar to 5, but mouth mouldings more pronounced; two internal ridges; casting flaw opposite loop; cutting edge sharpened and splayed.

 L. 8.3 cm.; W. 3.9 cm.
- 9. Very similar to 8, but mouth mouldings closer together; two internal ridges; cutting edge sharpened, widely splayed and damaged.

 L. 9.2 cm.; W. 3.9 cm.
- 10. Similar to 2, but with single mouth moulding; cutting edge missing. Surviving L. 7.6 cm.; W. 4.0 cm. Surface find.

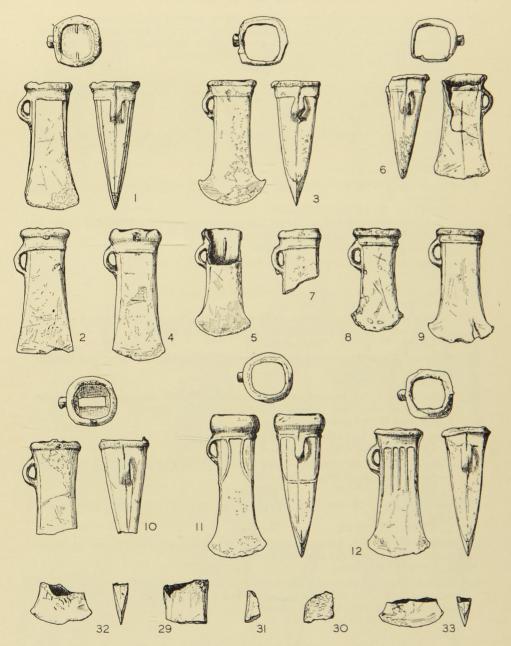


Fig. 2. Axes from the North Elmham hoard $(\frac{1}{3})$.

DECORATED SOCKETED AXES OF SUB-RECTANGULAR SECTION WITH SINGLE LOOP

- Very heavy mouth moulding, lower moulding level with top of loop; decorated with two curved ribs (linear wing ornament) on each face; one slight internal ridge; cutting edge sharpened, splayed and damaged.
 L. 11.4 cm.; W. 4.0 cm. Surface find.
- Single mouth moulding; each face decorated with three ribs, and the corners also emphasized by ribs; top of ribs level with top of loop; cutting edge sharpened, splayed and damaged.
 L. 10.3 cm.; W. 3.9 cm.
- Heavy mouth moulding, lower moulding level with top of loop; three ribs depending from lower moulding on each face; cutting edge sharpened and damaged.
 L. 10.6 cm.; W. 4.0 cm.
- Similar to 13; mouth and upper part damaged; cutting edge sharpened and damaged.
 L. 9.6 cm.; W. 4.7 cm. (distorted).
- Similar to 13 but ribs finer, longer, and irregularly spaced; casting flaw between mouth mouldings; cutting edge sharpened.
 L. 10.2 cm.; W. 3.9 cm. Surface find.
- Similar to 13 but shorter; cutting edge sharpened.
 L. 8.9 cm.; W. 4.0 cm.
- Very similar to 16; cutting edge missing; two internal ridges. Surviving L. 6.0 cm.; W. 3.8 cm.
- Similar to 16, but ribs lighter and irregularly spaced; outer ribs close to corners of body; cutting edge probably sharpened but damaged.
 L. 8.6 cm.; W. 3.8 cm. Surface find.
- Very similar to 18; part of mouth missing; four internal ridges; cutting edge sharpened and damaged.
 L. 8.3 cm.; W. 4.0 cm.
- Very similar to 18; part of mouth missing; loop badly cast and pinched in an
 effort to close the gap; cutting edge sharpened and splayed.
 L. 8.5 cm.; W. 4.2 cm.
- Very similar to 18; cutting edge probably sharpened.
 L. 8.0 cm.; W. 3.9 cm.
- Very similar to 18; one face largely missing; cutting edge badly damaged; contained spearhead fragment, no. 34.
 L. 8.4 cm.; W. 3.9 cm.
- Very similar to 18; two internal ridges; cutting edge sharpened, splayed and damaged.
 L. 7.7 cm.; W. 3.7 cm.
- Similar to 18; two internal ridges; mouth damaged; casting flaw by loop; cutting edge sharpened and damaged.
 L. 8.9 cm.; W. 4.5 cm.
- 25. Similar to 18 but lower moulding and ribs very light and ribs very short; four internal ridges, two of which extend for full depth of socket; cracked down one corner; cutting edge badly damaged.
 L. 8.7 cm.; W. 4.0 cm.

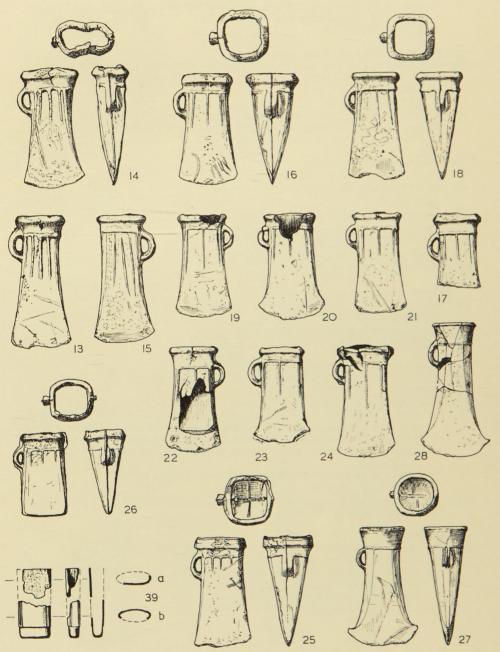


Fig. 3. Axes and chape from the North Elmham hoard $(\frac{1}{3})$.

Similar to 18 but smaller; lower moulding and ribs very light; flashings untrimmed and cutting edge unsharpened.
 L. 6.8 cm.; W. 3.8 cm.

FACETED SOCKETED AXES WITH SINGLE LOOP

- 27. Octagonal faceted axe, with light double mouth moulding; two internal ridges; lower moulding level with top of loop; cutting edge sharpened, widely splayed and damaged.
 L. 9.4 cm.; W. 3.5 cm.
- Very similar to 27, but broken into more than 20 pieces; two short internal ridges; cutting edge sharpened, widely splayed and damaged.
 L. 10.7 cm.; W. 3.5 cm. (reconstructed).

FRAGMENTS OF SOCKETED AXES

- 29. Body fragment, plain. Surviving L. 3.5 cm.
- Small body fragment; shows signs of hammering. Surviving L. 2.5 cm.
- 31. Another. Surviving L. 2.5 cm.
- 32. Cutting edge; sharpened and damaged. Surviving L. 3.3 cm.; W. 4.9 cm.
- 33. Another; sharpened and slightly splayed. Surviving L. 2.4 cm.; W. 5.1 cm.

FRAGMENTS OF SOCKETED SPEARHEADS

- Blade fragment from hollow-bladed spearhead found in axe 22.
 Surviving L. 2.2 cm.
- 35. Small fragment of socketed spearhead. Surviving L. 1.5 cm.

RAPIER AND SWORD FRAGMENTS

Part of rapier blade with three central ribs and bevelled edges.
 Surviving L. 4.3 cm.; W. 2.8 cm.

37. Two joining parts of leaf-shaped sword:

(a) part of blade and hilt with ricasso; on one side, one complete rivet hole and part of another, with between them the intended position of a third indicated by a depression on each face; on the other side, parts of two complete rivet-holes, with between them traces of the intended position of a third:

(b) part of blade, with broad flat midrib and bevelled edges. Surviving L. 26.9 cm.; W. 4.5 cm.

38. Part of leaf-shaped sword blade; edges originally bevelled, but very damaged. Surviving L. 8.7 cm.; W. 3.7 cm.

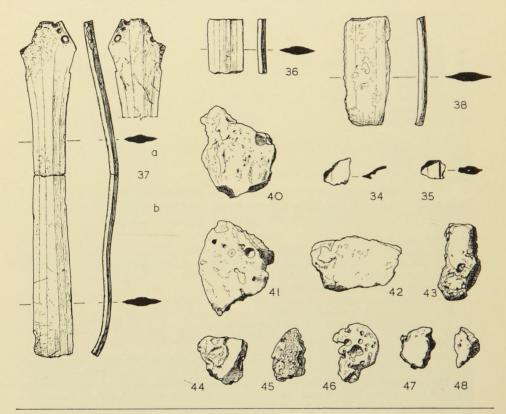
CHAPE

39. Two parts of straight-sided chape, which do not join:

(a) straight-edged top, and

(b) bottom of chape; rounded sides with vertical rib at each corner; edges diverge slightly; no surviving traces of pin-holes. Surviving L. (a) 2.3 cm., (b) 3.0 cm.

W. (a) 2.3 cm., (b) 2.5-2.6 cm.



1964 finds

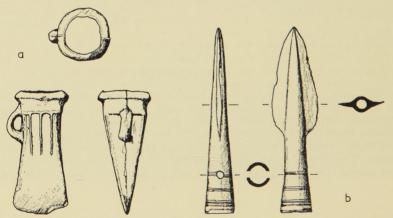


Fig. 4. Spearhead, sword and rapier fragments, and ingots from the North Elmham hoard with the 1964 finds $(\frac{1}{8})$.

INGOT FRAGMENTS

- 40. Weight 633.6 gm.
- 41. Wt. 397.6 gm.
- 42. Wt. 361.6 gm.
- 43. Wt. 277.7 gm.—surface find.
- 44. Wt. 109.4 gm.
- 45. Wt. 56 gm.
- 46. Wt. 45.3 gm.
- 47. Wt. 45.1 gm.
- 48. Wt. 18 gm.

All of these ingot fragments are from circular cakes, except 46, which is a flatter splash of metal.

OTHER FINDS

Three undistinguished flint flakes were found, together with several very small body sherds of a dark and slightly gritty ware; the latter seem to be prehistoric, although they do not exhibit any particularly diagnostic features.

ORGANIC REMAINS

The contents of the socketed axes were examined, and plant remains from six of them were identified by Mr. Peter Lambley (Assistant Keeper of Natural History, Norwich Castle Museum) as follows:

- 6: very small wood fragment, possibly oak.
- 9: fragment of carbonised hazel.
- 13: Atripex seed (a modern weed).
- 16; very small carbonised wood fragments.
- 26: fragments of bracken leaf and herbaceous plant remains.
- 27: fragments of bracken stem (?).

The overall impression gained from these remains is that they are of little or no archaeological significance with the possible exception of the hazel fragment from (9). Casual fragments of all the species represented could have been present in the ploughsoil and may have found their way into the axe sockets quite fortuitously in the course of repeated disturbance by the plough; but it is always worth searching for possible evidence.

A seventh axe (19) contained a very fragmentary unfused epiphysis from a foetal or young mammal of indeterminate species. This again could have been introduced by accident.

T. H. McK. C.

III

DISCUSSION

Socketed axes. The hoard consists almost entirely of socketed axes, of which ten are plain (1–10), one is decorated with linear-wing ornament (11), 15 are decorated with vertical ribs (12–26), and two are faceted (27 and 28). In addition there are several fragments (29–33). The plain axes, all but one (10) with double mouth mouldings, are familiar from many other Late Bronze Age hoards. Features of special interest are found on (1), which has slight facets on each corner, produced in the mould, and on (4), where a similar effect is pro-

duced by hammering, but in this case on three corners only. Plain axes with a single moulding like (10) are less common, although they are found in the Foulsham⁴ and Aylsham hoards among others.⁵

The single axe with linear-wing ornament (11), a device reminiscent of winged axes, is of a type often found with Carp's tongue material, as in the Bexley Heath, Kent, hoard.⁶ A distribution map of the type shows that they are heavily concentrated in south-east England, particularly in southern coastal areas, the Thames valley and the fen edge.⁷ Other Norfolk finds include examples in the hoards from East Dereham (broken, mouth missing), Foulsham (with triple mouth mouldings) and Unthank Road, Norwich (very faintly decorated, possibly with pellets as well),⁸ and also Snettisham Late Bronze Age hoard III.⁹ These do not have the greatly swollen mouth moulding which is present on the North Elmham axe, and for this one must turn to an axe like that in the Wickham Park, Croydon, hoard.¹⁰

Of particular interest in the North Elmham hoard are some of the threeribbed axes (18-26). These are short and a little squat in appearance, and are characterised especially by the wide and often irregular spacing of the ribs, with the outer ones lying very close to the corners of the axe. These features are known on axes in some other Norfolk hoards; there are several in the Foulsham hoard, with a singleton in the Eaton hoard. However, they are intrusive in these contexts, and one must turn northwards to the so-called "Yorkshire" type to find their true fellows; these occur in, for example, the Heathery Burn hoard from Co. Durham.¹² None of the North Elmham axes can be shown to be mould-duplicates, but they are so very similar in style that they are almost certainly the work of one man. There is one untrimmed example, an unusually small axe (26), and its presence may suggest that the maker was actually the owner of the hoard, even though this suggestion cannot be supported by further evidence. On comparing these axes with those in the large Foulsham hoard in Norwich Castle Museum, it was obvious that a number of axes in that hoard were exact parallels to the North Elmham ones. Unfortunately it was again impossible to demonstrate the existence of mould-duplicates linking the two hoards, but this very close relationship between them, together with their overall similarity, raises the possibility that the same man's work is represented in both. The findspots of the Foulsham and North Elmham hoards are only about $5\frac{1}{4}$ miles apart. It is worth pointing out that there are no natural sources of copper, tin or lead in East Anglia, and that all metal therefore had to be imported; this is one of the most important factors to be considered in accounting for the frequency with which Late Bronze Age hoards are discovered in Norfolk. Even so, it is only rarely that one can break away from the constricting embroidery of Late Bronze Age typologies to illuminate, however dimly, the real human activity which lies behind it all.

Two other axes (16 and 17) are close to this Yorkshire type, but the remainder are more at home in eastern and southern England. Between them they exhibit some noticeable features, such as the rather heavy ribs on (13) and (14) or the long, fine and irregularly spaced ribs on (15). The ribbed edges and absence

of lower mouth moulding on (12) are unusual, but one or two of the Foulsham axes have these features.

One of the octagonal faceted axes (27) is complete, but the other (28) is very badly broken. Nearly all the existing fragments were found at the bottom of the pit in which the hoard had been buried. Some of the breaks are certainly ancient, but some could be comparatively recent, possibly caused by the passage of heavy modern agricultural machinery over the spot. Enough of the axe survives for a reconstruction to be possible. Similar faceted axes, without additional decoration, are known from other Norfolk hoards, such as Aylsham and East Dereham, but on this occasion there are no good parallels in the Foulsham hoard. The faceted axes there are much squatter in proportion, like the series in the hoard from Bagmoor, Burton upon Stather, Lincolnshire.¹³

Several general points arise from the North Elmham axes as a whole. Between them they demonstrate that there is no consistency in the appearance of internal ridges (none in 15 axes, one in two axes, two in eight or nine axes, and four in one axe); they seem to reflect merely the condition of the particular core that was used rather than any technique of casting. There is some evidence for the way in which the axes were sharpened; the cutting edges of several axes, like (3), (4), (15), (19) and (33), show marks of abrasion from side to side, these being parallel to the edge, while others, like (5), (18) and (27), show similar marks running at right-angles to the cutting edge. The former is in fact found more frequently, although the latter suggests a far more efficient way of sharpening the edge.

Spearheads. The surviving fragments of spearhead are so small that little can be said about them. The larger piece (34) is part of a hollow-winged (? barbed) spearhead; the smaller (35) is rather squashed and it is difficult to see whether the socket was originally circular or elliptical in section. However, both pieces are consistent with Late Bronze Age types.

Rapier. A single short fragment of rapier blade (36) with triple arris and bevelled edges possibly represents a Middle Bronze Age weapon of Burgess' Group III.¹⁴ It is not unusual to find earlier weapons in a fragmentary state in Late Bronze Age hoards after their general replacement by the more substantial leaf-shaped sword.

Swords. In many hoards there is some feature or object which sheds light on the workmanship of a particular smith, and in the North Elmham hoard this takes the form of a sword hilt (37a). Seemingly he had intended to pierce each side of the butt with three rivet holes, and shaped his mould accordingly. However, when the sword had been cast, he may have thought that to do so would weaken the edges so much that the metal might easily fracture with the holes so close together. Instead he completed the perforation of only two holes on each side; the surviving dents show the intended position of the others. A second fragment of the same sword (37b) joins this piece, so that about two-thirds of the blade length is present. This weapon belongs to the common Ewart Park series (Group V) although it is a comparatively small example.

Another sword is represented by a blade fragment, simpler in section; this may be part of a Wilburton sword (Group IV).¹⁵

Chape. The two fragments of straight-sided chape or scabbard-end represent one object (39). This can be seen from their metal and shape, even though the two fragments do not join. A careful examination has made it possible to suggest the original dimensions of the chape. On the upper fragment, the smaller of the two, the top edge retains faint traces of a riser or pouring jet; these are usually central, and on this assumption, which is supported by various measurements, the most likely width at the top is 28 mm., compared with the actual width of 25 mm. at the bottom. The original length is more difficult to estimate. The lower fragment shows that the sides taper outwards very gradually; by comparing this with the upper fragment and taking into consideration the proposed width at the top, it is possible to suggest an original length of about 55 mm. The noticeable flat ribs and shallow grooves which run up each corner differ slightly from one another, and on the basis of these it seems that the upper fragment comes from the side opposite the highest part of the lower fragment. There is no sign of any peg-hole, but there would be room for one in the gap between the two pieces. The metal has not been analysed. but from its appearance it is obviously a highly leaded bronze of a bright, almost silvery complexion, of very pleasing appearance.

The chape is the most difficult piece to relate to other material because of its individuality. It does not belong to any of the well-known series of tongue, bag-shaped or winged chapes of the period, and it is not even comparable with the shorter tongue chapes of the Broadward tradition. It bears little resemblance to other exotic chapes like those from Stoke Ferry or Isleham.

Ingots. All the ingot fragments are from the usual circular cakes with one exception (46), which seems to be a small splash of metal. It is not yet known whether they are of copper or bronze, but analysis of ingots from other hoards suggests that most of them will prove to be of copper.¹⁶ Their presence shows that the hoard is that of a bronze-worker.

Conclusion. The dating of a hoard depends more on its composition than on the circumstances of concealment or discovery. In this case it proved possible to examine the site by excavation. It was clear from the surface finds that the hoard was at least partly disturbed, and indeed when the traces of the hoard pit were found only a few pieces remained in a more or less undisturbed state. No sign of any old land surface survived, and it is impossible to known how deeply the hoard had originally been buried; the surviving part of the pit was rather more shallow than one might expect. There was no evidence for a lining to the pit, nor was there any suggestion of a container of any kind, although it is likely that the bronzes would have been in a sack or bag. Thus the evidence from the excavation remains negative in these respects.

Certain types of implement are of greater significance than others in dating a hoard. The series of socketed axes in the North Elmham hoard exhibits some features unusual in Norfolk, principally the presence of the Yorkshire type in quantity, but the overall combination of types is quite normal in the wider context of the British Late Bronze Age as a whole. Connections, perhaps slender, with the Carp's tongue industry, with its wide variety of implements, are implied by the axe with linear-wing ornament (11). The Ewart Park sword (37) fits well into such a context, and so would the fragmentary spearheads. None of the other objects presents problems except the chape (39); although parallels for it are elusive, it gives the impression that it too belongs to the same period. Thus the North Elmham bronze-founder's hoard can be dated to around 700 B.C. T. H. McK. C.

ACKNOWLEDGEMENTS

The writers are most grateful to Mr. F. T. Nicholson of Foxburrow Farm for permission to excavate and for making the finds available for study; to the Norfolk Research Committee for the loan of equipment and financial help; and to the staff of Norwich Castle Museum for their assistance, especially Mr. W. F. Milligan for making the final drawings of the bronzes.

APPENDIX—SURFACE FINDS, 1964 (Fig. 4)

In October 1964, two bronze implements were found in the same field as the 1970 hoard, but their findspot (TF 97342005 approx.) is too far away for them to be accepted as part of it. They were discovered separately on the surface of the ploughsoil. There is as yet no further evidence to suggest the presence of a second hoard in what is now one field.

- (a) Socketed axe of sub-rectangular section with single loop; heavy mouth moulding with smaller moulding level with top of loop; three parallel ribs depending from lower moulding on each face; cutting edge damaged.
 - Length 9.8 cm.; Width 4.9 cm.
- (b) Socketed spearhead with leaf-shaped blade; edges of blade damaged; peg-holes through socket, which is decorated with three bands of three (or at one point four) incised lines, and with two zones of hatching at the socket mouth. Length 14.7 cm.; Width 3.7 cm.

The axe is again of a type familiar in East Anglia, and the spearhead with its incised decoration can be well paralleled in the Eaton hoard in Norwich Castle T. H. McK. C. Museum.

Ordnance Survey 25 inch map: field number 107; National Grid Reference TF 97452002.

²Norwich Castle Museum records.

³Peter Wade-Martins, "Excavations at North Elmham, 1967-8: An Interim Report", Norfolk Archæology, XXXIV

Peter Wade-Matturs, 1960-1.

(1969), 360-1.

*Bronze Age Metalwork in Norwich Castle Museum (1965) 27.

*Not yet fully published, but briefly noted in Clough, Norf. Arch., XXXIV, iv (1969) 348.

*Inventaria Archaeologica GB 53. 1, no. 10.

*Burgess, Arch. J., CXXV (1968) 23, fig. 14.

*B.A. Metalwork in N.C.M., 26f., 29.

*Clarke, Norf. Arch., XXX, ii (1950) 156-7. The L.B.A. hoards from Snettisham (not to be confused with the Iron Castley are:

treasures) are:
I—found 1779, National Grid Reference TF 686345; socketed axes; details uncertain.
II—found 1930, TF 707337; socketed axe(s) and spearhead; details uncertain.
III—found 1948, TF 716341; six socketed axes, class II razor, sword fragments, chisel, tracer, three gouges and jet;
York Cottage Museum, Sandringham.
IV—found 1962, TF 702328; two socketed axe fragments, ingot fragment, and fragment of Central European
antenna-hilted sword; King's Lynn Museum.
In addition several stray finds of metalwork have been recorded in the parish.

¹⁸ Addition several stray mass of metawork have been recorded in the parish.

18 Inwent. Arch., GB 39, no. 9.

18 J.A. Metalwork in N.C.M., 28 and fig. 60.

18 J.A. Metalwork in N.C.M., 28. and fig. 60.

18 Junent. Arch., GB 55. 7, nos. 74–81.

18 Jungess, Trans. Archit. Archicol. Soc. Durham, Northumberland n.s. I (1968) 3ff.

18 Dennis Britton, lecture on the Isleham hoard to the Prehistoric Society, 14th March, 1970.