SOME RECENT ARCHAEOLOGICAL FINDS FROM NORFOLK

A Pair of Bronze Palstave Moulds from Harling (Figs. 1-3, Plate I)

by J. J. Wymer

In September 1984 Mr. C. H. Frost and his son, Tony, were making a routine survey with their metal detectors in a field on the north side of Telegraph Hill and west of Half Mile Belt in the parish of Harling (TM 01098706). Resulting from a signal, they found one half of a superbly preserved bronze mould for casting the type of axe-head of the Middle Bronze Age referred to as a palstave. It lay in the sandy ploughsoil, complete, undamaged and with a fine, smooth green patina. Realising that it was one of a pair, the Frosts diligently continued their searchings and some hours later recovered the other half of the mould, ten metres from the first one. It was also in the ploughsoil, in the same excellent condition. Both the Frosts are experienced and responsible operators of metal-detectors,

Plate I
Harling bronze palstave moulds. Exterior and interior views.

have made numerous previous finds and report their discoveries to the Norfolk Archaeological Unit. The moulds (Figs. 1-3 and Pl. I) were duly reported and brought to the Unit, where they were identified as being one of the finest examples ever found in Britain of this very rare class of prehistoric antiquity.

The site lies at 30m. O.D. on the southern slope of the dissected Till Plain which at this point is above the small valley of the River Wittle, fed by Quidenham Mere. The sub-soil is variable sand, gravel, silt or clay of glacial outwash. The moulds were found in a very gravelly, sandy area. In the course of their searchings the Frosts found a few other small items in the vicinity: five flint flakes, a bronze foot from a cast vessel and a piece of square-sectioned lead bar. The bronze foot is identified as coming from a medieval cauldron and it is equally unlikely that the other objects have any connection with the moulds. The only other object of Middle Bronze Age date found at Harling is a palstave (Norfolk Archaeological Unit Sites and Monuments Records No. 6026) from some

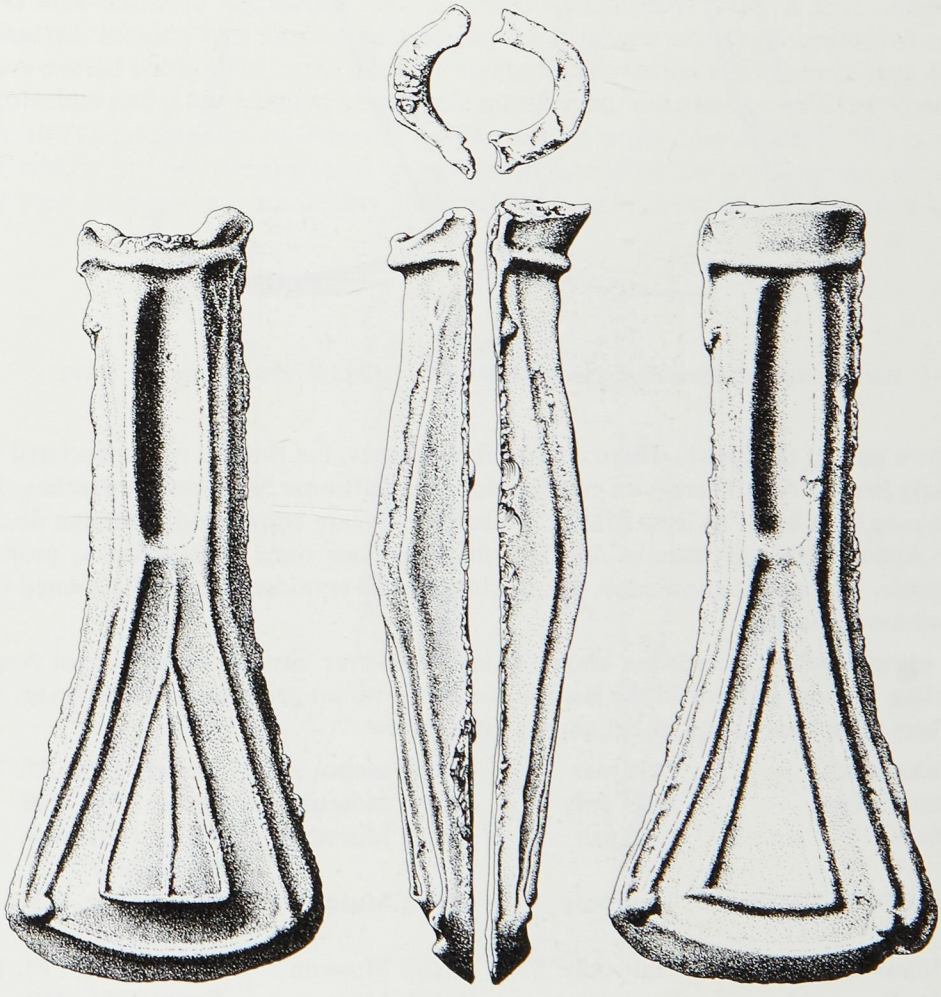

Fig. 1
Harling bronze palstave moulds. Exterior views. Scale 1:2. *Drawing by Sue White.*

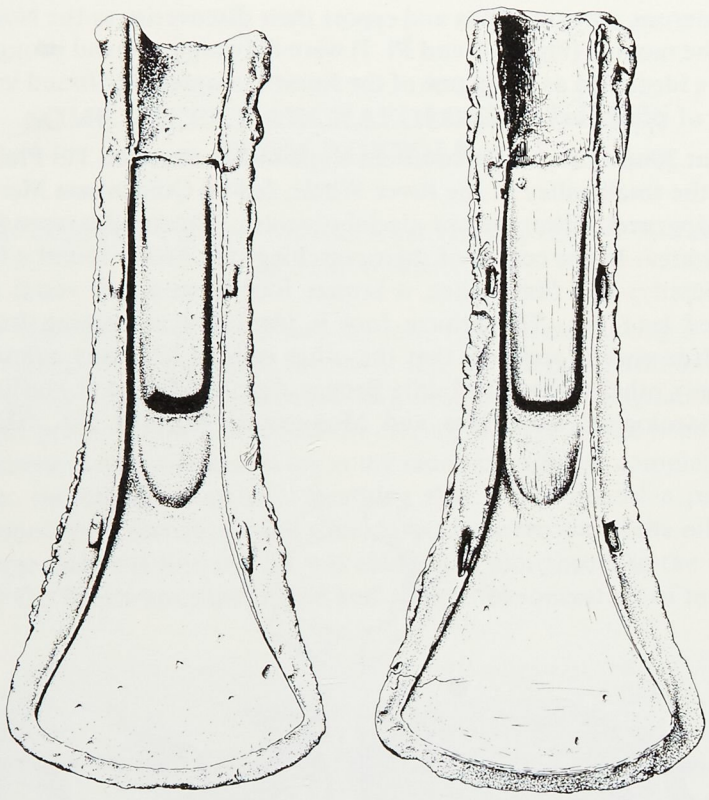

Fig. 2
Harling bronze palstave moulds. Interior views. Scale 1:2. *Drawing by Sue White.*

unknown part of the parish. There are two flanged axes, but this is a type associated with the Early Bronze Age. There is no evidence for Middle Bronze Settlement at Harling, likely as it may have been. At least fifteen 'pot boiler' sites are known and, although described by Apling (1935) as 'Bronze Age Hearths', they can only be regarded as probably prehistoric. On present knowledge, the moulds must be considered as stray, isolated finds with no associations.

No other palstave moulds are known from Norfolk or anywhere else in East Anglia. Excluding Ireland and one in the British Museum with no provenance whatsoever, only six others have been found in Britain, as listed below:

London (South)	One pair	Hull Museum	Hodges 1960, Pl. VD
Rochester, Kent	Half only	British Museum	Jessup 1930, 108
Wiltshire	One pair	British Museum	Evans 1881, 440. Figs. 528-9
Hotham Carr, Yorks.	Half only	British Museum	Evans 1881, 439, Fig. 527
Llyn Mawr	Half only	British Museum	Hodges 1960, Pl. IVB
Bangor, Gwynedd	Two pairs	British Museum and Cambridge (A. and E.)	Evans 1881, 440 Grimes 1951, 81

The Harling moulds were intended for the production of unlooped palstaves with a shield pattern at the top of the blade. Knobs on one half fit into pits on the other to ensure correct registration during the casting process. The moulds are longer than the length of the palstave to be cast, with a cup-shaped cavity at the top for the reception of the molten metal. On cooling, surplus metal within the so-called sprue-cup was broken or cut off. Such waste pieces, known at jets, were retained as scrap bronze and are sometimes found in bronzesmiths' hoards of the later Bronze Age. The outer surface of each half of the pair of moulds is well finished, with triangular patterns cast on them (Plate I), one distinguished from the other by a vertical line inside its triangle. Most of the other known moulds for palstaves as listed above have a rough exterior finish, although one of the Bangor examples, also for an unlooped palstave, likewise has a pattern upon it.

Palstaves and other objects are known to have been cast in stone moulds as well. Clay moulds were also used but rarely survive for archaeological retrieval, although a few rare examples have been found, mainly from the Late Bronze Age, such as those found in recent excavations at Springfield, near Chelmsford (Buckley 1986). It is reasonable to assume that moulds were usually made of clay for they were easily replaceable, whereas a bronze mould was an elaborate piece of equipment requiring considerable time for its manufacture and a fair quantity of valuable metal. Also, experiments (cited by Rowlands 1976, 10-11) indicate that such moulds only have a life expectancy of about fifty castings, after which they become distorted or broken. Presumably the complete moulds which have been found, which are neither distorted nor broken, were lost or discarded before

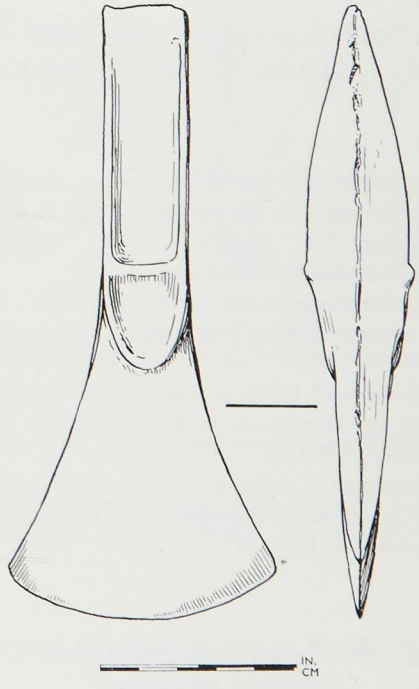

Fig. 3
Harling bronze palstave moulds. Modern casting from the moulds to indicate the type of palstave they would have produced. Scale 1:2.

their useful life was over. Otherwise they would almost certainly have been melted down as scrap, which could explain why they are such a rare class of object. It is difficult to see why they were made at all, although it would have meant that the smith who possessed one could always cast a palstave at any time with the minimum of preparations, or make good use of any spare molten metal at the end of a series of planned castings.

Shield pattern palstaves, are classified as Class I Palstaves by Rowlands (*op.cit.*) in his comprehensive survey of Middle Bronze Age metalworking. They belong to the Acton Park stage of Burgess (1980). Both would see the early forms of these palstaves some time in the 15th century B.C. Rowlands further classifies the Shield Pattern palstaves into six groups, of which Group I is presumed to be the earliest on the basis of typology. Of the 43 Class I palstaves which he lists from Norfolk, ten are from this group. 27 are of Group 3, 4 of Group 4 and 2 of Group 5. The Harling moulds would have produced palstaves of Group 3, only differentiated from his Groups 2 and 4 on the basis of size and general proportions. Group 3 palstaves, as noted above, are the commonest form of this tool in Norfolk, and their distribution is restricted to southern England from Lincolnshire to Devon, with a particular concentration in the Cambridgeshire Fenlands and Norfolk. As pointed out by Butler (1963, 66-73, 215-218), such palstaves occur in North German and Dutch hoards and the type is regarded as an East Anglian one. It is thus of great interest to record this discovery of a mould for them from the eastern edge of the Breckland.

The Harling Palstave Moulds have been purchased for the Norwich Castle Museum by the Friends of Norwich Museums (Accession no. 58.986). Norfolk Archaeological Unit Sites and Monuments Records County number 21469.

Acknowledgements

The co-operation of the Frosts is gratefully acknowledged and I am grateful to Dr. Stuart Needham and Mr. A. J. Lawson for reading my original draft and making constructive comments.

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A Ringerike-style Mount from Stoke Holy Cross (Fig. 4)

by Sue Margeson

A fine cast copper alloy mount in the form of an animal head was brought into the Castle Museum recently for identification. It is in private possession.