

A Late Bronze Age socketed knife and textile from Nydie Mains,
Fife

by John Hedges

In 1966 the National Museum obtained a Late Bronze Age socketed knife of the Thorndon type¹ found in disturbed soil at Nydie Mains, Fife. Inside the socket of the knife was found a

small piece of rolled cloth (DO 52b) which had evidently been placed there to make the handle of the knife fit more securely. It is approximately 17 mm in length and has a maximum diameter of 6 mm. Although the fabric is distorted it can be seen to be plain woven but it is not possible to tell which system is warp and which weft. One system has eight threads to the centimetre and these consist of lightly 'Z' spun yarns (spun clockwise) which have been plyed in the opposite direction. The yarn as a whole is therefore 'Z2S'. The other system has ten threads to the centimetre; these are not plyed nor is the direction of spin discernible although they may have a slight 'Z' twist. All the yarns are evenly spun but the competence of the weaving cannot be commented on due to the distortion of the fabric.

A 5 mm sample of one yarn was taken in order that an attempt might be made to identify the fibre used in manufacturing the cloth. The ordinary optical microscope gave inconclusive results; the resistance of the fibres to staining can probably be attributed to their infusion with metallic salts. An attempt to take cross-sections of the fibres also failed, in spite of preliminary softening and embedding, due to their brittleness. Results were finally obtained by observing whole mounts using plane-polarised light for interference microscopy. The fibres have heavy transverse dislocations along their length and thin lumina. The fibre can therefore be identified as flax although none of the finer characteristic features could be observed. Plate 41a shows one of the fibres as seen under polarised light while plate 41b is of a modern flax fibre under the same conditions.

The textile owes its preservation and green colouration to its infusion with metal salts released from the knife. In this case the infusion has not progressed so far that the fibres are completely replaced as often happens (Henshall 1950, 130-1), but the accretion of oxide on the surface of the fibres can readily be seen under the Stereoscan microscope.

The Nydie Mains textile is closely paralleled by a plug of cloth found in the socket of a Late Bronze Age spear-head from Pyotdykes, Angus (Coles 1964, 197-8). These two fragments are the only pieces of cloth from Scotland that can be dated to before Roman times although a textile impression on a piece of Late Neolithic/Early Bronze Age pottery was found at Luce Sands, Wigtownshire (Henshall 1968, 236-7, pl viii). They are also the only textiles from pre-historic Britain which have been positively shown to have been made of vegetable fibres.²

ACKNOWLEDGMENTS

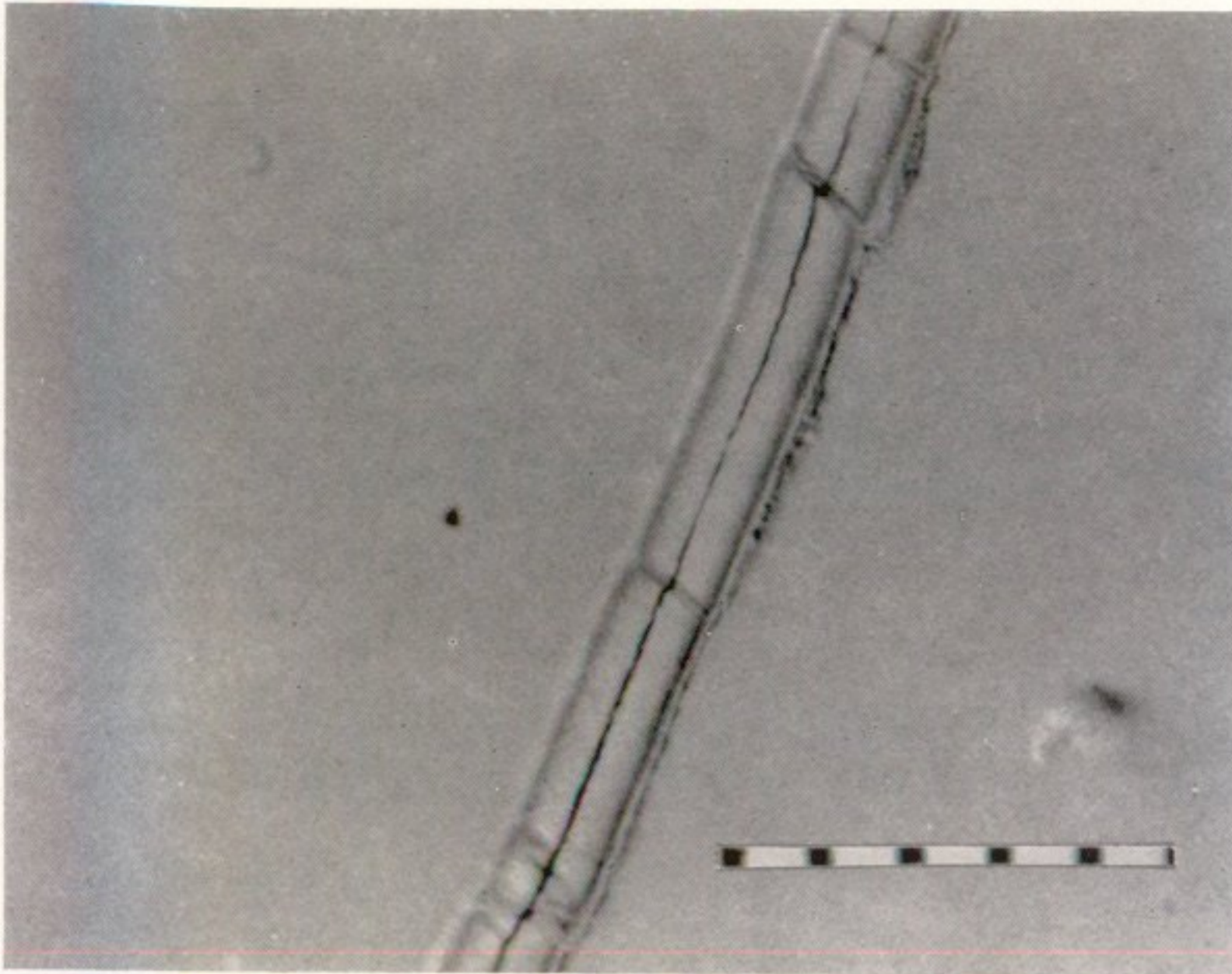
I am grateful to Miss A S Henshall for having brought the cloth to my attention and to Dr J Close-Brooks, National Museum, for having allowed me to see it and take a sample. I am also indebted to Mr M D Crane, Mr B Fearn, Mr L F H Merton and Mrs P Wilde of the Botany Department, Sheffield University for their readily given help in technical matters.

NOTES

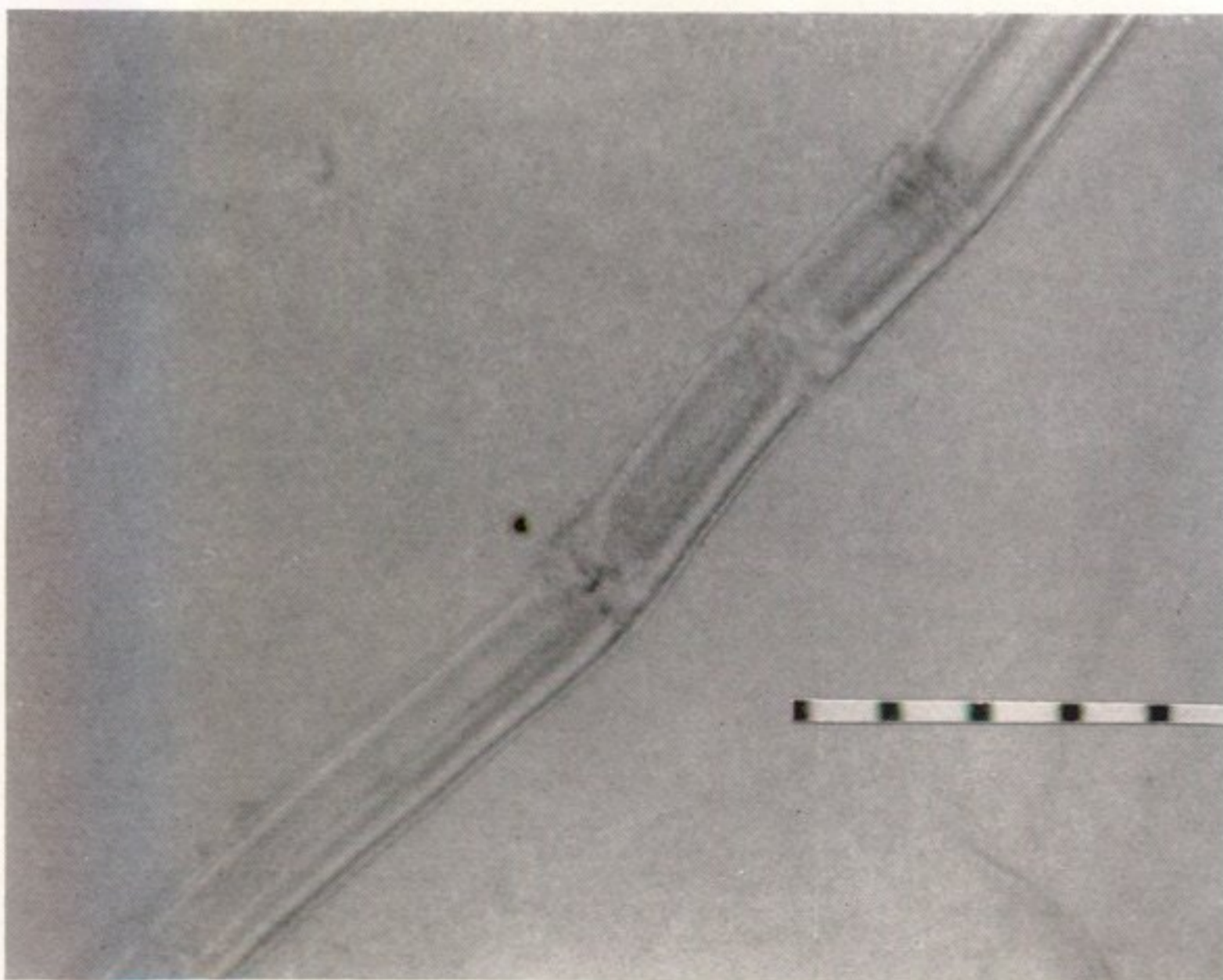
- 1 Although this was found completely unassociated, socketed knives are peculiar to the Late Bronze Age. They have been classified and discussed by Hodges (1956, 38), who also lists similar finds in Great Britain and Ireland (*ibid*, 51-2). Coles assigns the Thorndon type to the period 750-600 BC (1960, 46) and gives an enlarged and modified catalogue of those socketed knives found in Scotland (*ibid*, 86-7).
- 2 It is hoped that an article on the different types of vegetable fibres used in textile production in pre-historic Britain will be forthcoming in the near future.

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a Cloth fibre from Nydie Mains, Fife, under plane-polarised light (scale, one division: 0.01 mm; photograph M D Crane)



b Modern flax fibre under plane-polarised light (scale, one division: 0.01 mm; photograph M D Crane)