The Cambridge diamonds

A threaded-in pattern from an early Anglo-Saxon or mediaeval find

Description

A small piece of linen¹ tablet weaving was found attached to a bronze strap-end in St John's Cricket Field, Cambridge. Grace Crowfoot published an analysis of the weave in 1951. Unlike most historic bands, the tablets were individually threaded with different coloured threads.

The fragment is also unusual in being almost certainly a belt, the textile fragment being still attached to a broken strap end. Similar simple copper alloy strap ends are known from a number of early Anglo-Saxon sites including two women's graves (Lethbridge 1931). The weave is particularly suitable for use as a belt, being both thicker than most tablet-woven fabrics and double-sided.



Figure 1: replica belt woven in fine linen with a copper-alloy strap end.

The Museum of Archaeology and Anthropology in Cambridge very kindly allowed me to examine the fragment, and I could see the dark blue-green and light blue colours clearly. Although textile fragments often pick up blue colour from contact with metal, I cannot see how that would account for the colours of the specific threads — I think that the threads must have been dyed before being woven.

1 Linen or possibly some other plant fibre.

This pattern is woven with an "idling" technique, in which each tablet is only turned ever other pick².

Penelope Walton Rogers considers this fragment to be mediaeval based on weaving technique and the style of the strap end, but Gale Owen-Crocker accepts it as Anglo-Saxon. Although related weaves are known from an early Norwegian band and later mediaeval finds, I do not know of any other example of this exact pattern. In the absence of other examples of the same weave, it's hard to form a firm conclusion as to the date, but I suggest that it would be appropriate for any period of Anglo-Saxon re-enactment. Another tablet-woven belt fragment³ has recently been found at Saltwood; in combination with the strap ends in women's graves I think this provides good evidence for Anglo-Saxon women wearing tablet-woven belts with a simple riveted strap end. Being a diamond pattern, it would also be acceptable for Viking re-enactment.

There is no evidence for how the other end of a belt might be finished off. Suitable metal buckles don't seem to appear in the graves, so some kind of textile loop seems most likely.



Figure 2: closeup of sample band.

² One "pick" is a single unit of weaving, that is turn the tablets, clear and beat the shed, tighten and then pass the weft.

³ A twill-effect tablet woven fragment was associated with a copper-alloy strap mount. The grave also contained beads and a girdle hanger so presumably represented a female costume.

Difficulty	Easy
Authenticity	A An accurate copy of a specific band. Suitable for Viking and Anglo-Saxon re-enactment, medium to high status.
Date	Disputed. Early Anglo-Saxon, or mediaeval.
Location	Cambridge, England.
Number of pattern tablets	18
Number of border tablets	0
Weaving technique	The warp-twined pattern is entirely determined by the arrangement of threads in holes. The pattern tablets are turned alternately in two packs, first odd then even.

References

Crowfoot, Grace M. *Textiles of the Saxon Period in the Museum of Archaeology and Ethnology, Proceedings of the Cambridge Antiquarian Society 44, pp. 26-32.* 1951.

Lethbridge, T. C. *Recent Excavations in Anglo-Saxon Cemeteries in Cambridgeshire & Suffolk.* Published by the Cambridge Antiquarian Society by Bowes and Bowes, 1931.

Owen-Crocker, Gale R. *Dress in Anglo-Saxon England.* The Boydell Press, 2004.

Walton Rogers, Penelope. Cloth and Clothing in Early Anglo-Saxon England (AD 450-700) (CBA Research Report 145). York: CBA, 2007.

Walton Rogers, Penelope. *Costume in the Early Anglo-Saxon Cemetery at Saltwood, Kent. The Anglo-Saxon Laboratory, 2006.* Available online: http://www.aslab.co.uk/pangur-press/.

Threading

Pattern tablets

Thread and arrange the tablets according to Figure 3:

- 1. Thread the tablets individually with the correct colours.
- 2. Flip tablets as necessary so that they are correctly oriented, S or Z.⁴
- 3. Turn tablets as necessary so that the colours are in the correct positions.

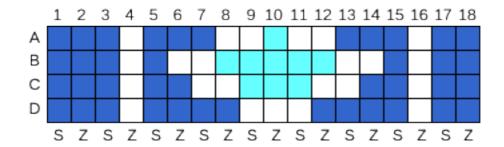


Figure 3: threading the tablets.

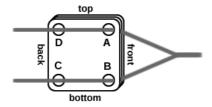


Figure 4: labelling the positions.

A, B, C, D show the positions of the threads in the threading diagram. Most weavers do not label their tablets because which hole is "A" changes as you turn them.

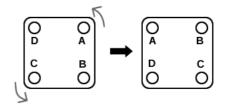


Figure 5: turning the tablets forwards.

If you work with the woven band on your side of the tablets, push the top of the tablets away from you with your thumbs.



Figure 6: flipping a tablet to change it from S to Z (top view).

4 Orientation refers to the direction the threads pass through the tablets (Figure 6).

Weaving instructions

Slide the odd-numbered tablets forwards to form a separate pack.

- Turn the odd-numbered tablets forwards a quarter turn.
- Beat, then throw the weft from left to right.
- Turn the even-numbered tablets forwards a quarter turn.
- Beat, then throw the weft from right to left.

Continue weaving, by repeating steps 1-4.

When the warp threads become tightly twisted, the weaving schedule can be reversed and the twist cancelled:

- 1. Stop weaving at the end of a repeat, i.e. after turning the even tablets and throwing the weft. Ideally stop when a diamond has just been completed.
- 2. Flip all the tablets.
- 3. Slide tablet 1 to the even pack.
- 4. Restart weaving but now turn the even pack before the odd pack.

Troubleshooting

Take care to turn the correct pack: turn the odd-numbered pack tablets when the weft is hanging out the left hand side of the band.⁵

The diamonds can be made to look smoother by beating less hard and making the band narrower by pulling the weft tighter, though be careful not to break the weft.

⁵ After reversal, remember to turn the odd-numbered pack first.