K21

Figure 1a. Sword fitting K21.

The filigree decoration of this sword fitting combines beaded wires arranged in three-strand bands forming interlaced loops with beaded wires arranged in herring-bone bands with spines acting as borders above, below and between the interlace patterns, Figure 1b. The vertical division between panels is a variation of herring-bone carpet with three herring-bone bands, which consist of twisted beaded wire ropes and are oriented at an angle on each side of two plain wires, Figure 1b right.

The diameter of the two plain wire herring-bone bands around a plain wire spine varies between *ca.* 0.3 and 0.35 mm and *ca.* 0.25 and 0.30 mm respectively for each, indicating a relatively large variation within each wire. The bead diameter of the beaded wires varies from ca. 0.7 to 0.85 mm for broader wires and from *ca.* 0.35 to 0.4 mm for finer wires. This indicates that there are two to three different sizes of wires used for the filigree decoration on this piece. The plain wires appear finer than the fine beaded wires; however the process of beading the plain wire would produce beads of a larger diameter than the original wire. The distance between beads[5] varies between *ca.* 0.35 mm and 45 mm for broader beaded wires and 0.25 mm and 0.35 mm for finer wires, which suggests two beading tools with different gauges.

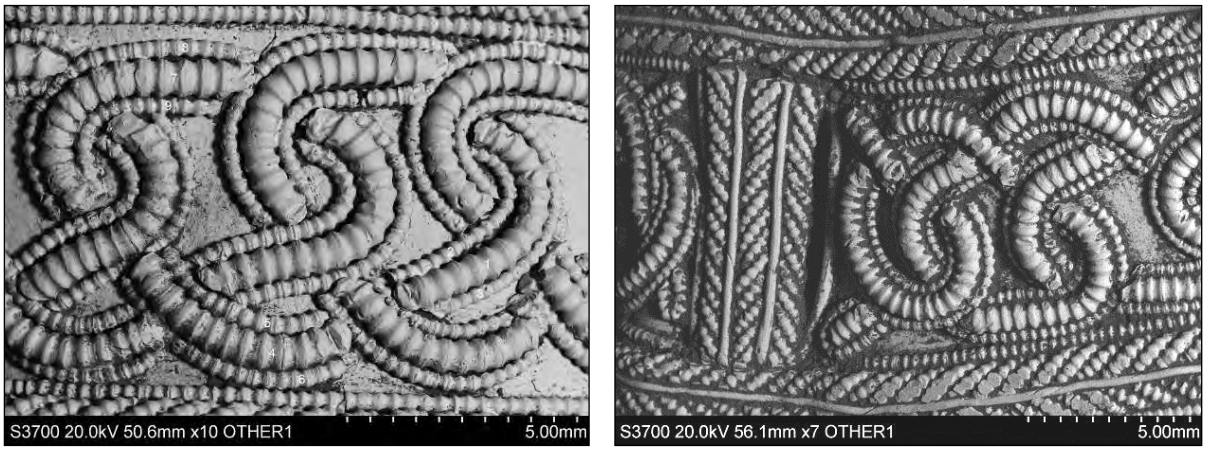

Figure 1b. SEM BSE images of sword fitting K21 showing the interlace pattern made of three-strand

[5] The 'distance between beads' has been measured between the crest of one bead and the next bead (see Figure 7 right)

bands of beaded wires (left, field of view *ca.* 12 mm) and the separation of interlace panels with lower and upper borders by herring-bone bands with spines (right, field of view *ca.* 15 mm).

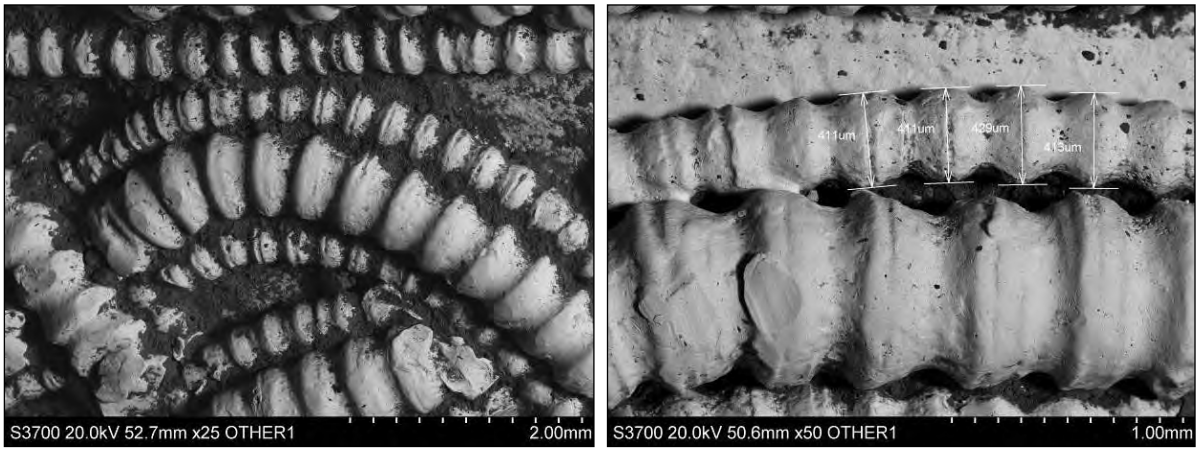

Figure 1c. SEM BSE images of sword fitting K21 showing: left, the regularity of the beading and the medial seam visible on almost all beads (field of view *ca.* 4.3 mm) and right, the distorted or asymmetrical beads of the broader wire (field of view *ca.* 2.5 mm).

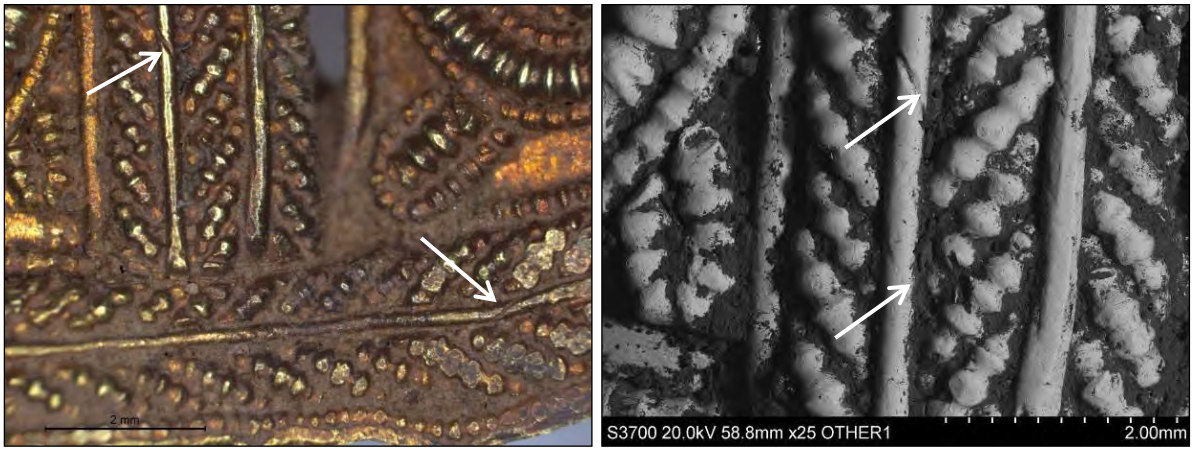

Figure 1d. Photomicrograph (left, field of view *ca.* 7 mm) and SEM BSE image of helical seams characteristic of block-twisted wires (right, field of view *ca.* 5 mm). Note also the twisted beaded wire ropes, possibly 3- or 4-ply.