## K1534 Condition Report

Conservation Started: 11-2-2013 Conservation Finished: 11-2-2013 Conservator: Suzanne van Leeuwen Time Taken: 3 hours, including digital photography, report, conservation and packing.

Dimensions: a: L. 17 mm; W. distorted 17 mm, b: L. 28 mm; W. 21 mm Weight before: a: 1.11 grams, b: 3.36 grams Weight after: a: 1.10 grams, b: 3.34 grams Catalogue number: 382 (K1534b silver fragment renumbered to K2028)

**Digital photography:** Taken with a Canon EOS 1100D digital camera, under daylight and with a Keyence VH-Z20R Digital Microscope, under artificial light. Taken before and after.

## Annotation on any of the storage bags or boxes:

**Description:** Cast silver-alloy, two end fragments of hilt-plate with flange. Bigger fragment 'b' has one large and two smaller rivet holes, part of the aperture is visible. Fragment 'a' shows half the outline of a rivet hole or aperture? Both surfaces may have remains of gilding. (Description SvL)

Fragment 'a' has now been re-numbered as K 2028, weighing 1.10g.

## **Associated Objects:**

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**Pre-Conservation Condition:** Visual and microscopic examination using Meiji BM 47941 stereo microscope 2-10x magnification.

**Treatment:** Carried out using a Meiji BM 46941 stereo microscope 2-10x magnification.

The granular soil on the front and back was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. A mixture of 50% IMS and 50% water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of the IMS/water mixture. A swab of IMS was used to neutralise the surface.

Corrosion products were left in situ; corrosion was not active and can be further cleaned or stabilised at a later date.

The paper K number was adhered to the back with a mixture of 30% HMG brand Paraloid B72 (ethyl methacrylate copolymer) and 70% acetone, applied with a cocktail stick.

A storage box padded with white polyethylene foam was made for housing the object.

Purpose: Study / Analysis Aim: Total cleaning **Materials**: Soft natural/synthetic brushes, thorn in pin vice/holder, 50:50 water/IMS on metals, cotton wool swabs, cocktail stick, IMS, 30:70 Paraloid B72/acetone

**Post-Conservation Condition/Findings:** Both fragments may have remains of gilding. De upper surface of fragment a has blackened, the back shows green (copper) corrosion products. Both front and back of fragment b are covered by green (copper) and purple/white/brown (Silver chloride) corrosion products.

Key Features: Cast silver

**Analysis Undertaken:** X-ray: L42

Surface and subsurface analysis was carried out using the Bruker Mistral M1 XRF. This analysis formed part of the silver pilot study for the English Heritage programme. To access the core (sub-surface) of the object a small area on the surface was removed from the inside of the hilt-plate.

Samples: One sample was taken, marked:

• K1534-b

**References:**