K1026 Condition Report

Conservation Started: 29/10/2012 Conservation Finished: 25/07/13 Conservator: Cymbeline Storey & Deborah Magnoler Time Taken: 7.5 hours Including digital photography, report, conservation and packing.

Dimensions: (L) 15mm (W) 13mm (D) 4mm (Rivet L.) 2mm (Head diam.) 1mm Weight before: 0.97g Weight after: 0.90g Catalogue number: 188

Digital photography:

Taken with a Nikon Coolpix 4500 digital camera, under daylight or bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before and after.

Annotation on any of the storage bags or boxes: None noted.

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

Fragment of silver gilt fitting with cast or incised decoration. The fragment is slightly convex when viewed from the front and has one finished edge and three break edges.

Associated Objects: K53 and possibly others (TBC)

Pre-Conservation Condition: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

All of the breaks look old and are covered with soil. Visible metal has moderate, dark tarnish and surface abrasions. Most of the abrasions look old, but one or two might be recent. Some silver chloride corrosion might be present.

The decorative scheme is difficult to see because of soil coverage; ~90% of the front surface is covered with soil. The soil has no remarkable features or inclusions.

It looks as if there is a recessed, gilded area with one partial fastening hole containing one pin with a gilded, domed head and straight, truncated shaft. The end of the pin is bent slightly.

There is a finger-shaped decoration down the centre that might be surrounded by a niello channel. There may also be a circular, empty setting of some kind. There is also an area with raised ridges. Soil removal is necessary to describe the decoration.

The back of the object is ungilded and has a purplish film on the surface (silver chloride corrosion?). There are several patches of green corrosion products on the surface. There are

three recent-looking scratches and a patch of unremarkable soil. One corner of the object is bent upward.

Treatment: Carried out using a Meiji stereo microscope Purpose: Study / Analysis Aim: Partial cleaning Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on metals, cotton wool swabs, cocktail stick, Paraloid B72

The granular soil on the front and break edges was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. IMS or water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of IMS. Soil was reduced on the back of the object to check the condition of the metal.

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 HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a cocktail stick.

A storage box padded with white polyethylene foam was made for housing the object. A strip of Tyvek (spun bound polyethylene fibres) was used as a cushion for the object and to help lift it out of the foam.

25/07/13: The back of the object was cleaned using the same materials and method as on the first phase of conservation. The front was also swabbed with IMS. DM

Post-Conservation Condition/Findings:

Two small fragments of silver gilt surface detached during conservation; see 'K1026 Treatment Details' for location.

The pin that was lodged in the partial fastening hole became detached when soil was removed from the surrounding area. It was decided that the pin would not be adhered back into place but retained in a separate glass vial (housed with the object) so that they can be studied independently. There also may be some kind of organic residue on the pin and in the fastening hole. This was left in situ for future study; handle with care.

Soil removal revealed a gilded front surface with an area of raised ridges, a finger-like shape surrounded by an empty channel, and a recessed plain, gilded area with one partial fastening hole.

The channel around the finger-like shape is now filled with silver chloride corrosion, but it might at one time have contained niello.

There is a raised ridge along the finished bottom edge of the fragment.

The fragment has patchy, dark tarnish and substantial deposits of silver chloride corrosion, particularly in the recessed, undecorated area and in the channel surrounding the finger-like shape.

The green corrosion product on the back appears to be inactive and was left in situ.

Key Features:

- Silver gilt fitting fragment
- Associated with K53
- No niello present but might have had niello at one time
- Silver chloride corrosion and green corrosion
- Decorated fragment with finger-like area and a series of raised ridges
- One finished edge

Samples:

- 1. soil front
- 2. soil back ADDED TO SAMPLE 1
- 3. silver gilt fragments front

Analysis:

Surface XRF analysis was undertaken on the gilding.

A sub-surface area was prepared on the back of the fragment to allow analysis of the core alloy.