

K1235 Condition Report

Conservation Started: 19/04/2012

Conservation Finished: 19/04/2012

Conservator: Cymbeline Storey

Time Taken: 4.5 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 39mm (W) 15mm (D) 10mm

Weight before: 4.12g

Weight after: 4.11g

Catalogue number: 571

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: On bag: SSH09, 1971, 143 (in triangle), M9, 1001, 29/7/09

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

Fragment of silver strip with niello inlay decoration in a geometric design on one side. The top border is 3.5mm wide, solid/undecorated silver gilt containing two intact and two partial (empty) fastening holes. The silver area is divided by niello channels into triangles and 5-sided, 'tooth-like' pieces.

Associated Objects: TBC

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

Some areas of niello inlay are missing; these areas are now filled with soil. The remaining niello appears to be stable but juts up proud of the surface in some areas. The profile of the object is largely flat except for the right side (as viewed from the front), which is bent upward sharply (almost 90 degrees).

Front: ~40% covered with sandy soil with no remarkable features or inclusions. Silver areas are heavily tarnished and the silver gilt border is moderately tarnished. There is a light deposit on some silver areas (possibly silver chloride corrosion). There are open cracks in the silver gilt border that do not go all the way through the object but appear to affect the gilding layer only.

There are widespread surface abrasions including some old-looking dents and one fresh/recent-looking scratch. There is a slightly raised lip around each of the fastening holes. All fastening holes are empty apart from a small amount of soil.

Back: ~10% covered with soil with no remarkable features or inclusions. There are open cracks in between the sections of silver where the object is bent; these are vulnerable and will require a support backing to reduce the risk of breakage during handling. The silver surface features fine scratches in a crosshatch pattern. These might be working/filing marks from manufacture. There is a significantly raised lip of metal around the fastening holes. There is a closed, apparently stable crack. See loan-out report.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Stabilisation / Analysis / Study

Aim: Partial cleaning

Materials: Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin vice/holder, water/IMS on metals

The granular soil on the exterior surface 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.

A crack required consolidation; Paraloid B72 (ethyl methacrylate copolymer) 20% w/v in acetone was applied. In addition, three cracks required a support backing. Japanese tissue was applied to the back using Paraloid B72 20% w/v in acetone. See 'K1235 Treatment Details' for location of consolidated and supported areas.

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 new storage box padded with white polyethylene foam was constructed to house the object.

Post-Conservation Condition/Findings:

The ungilt silver has uneven surface colour ranging from light grey to whitish/purplish (possible silver chloride corrosion) to areas dark with tarnish.

Cleaning revealed surface decoration and break edges, both of which will facilitate grouping. The object is now significantly more stable with the support backings and consolidation. This will reduce the risk of breakage with handling.

One niello fragment was present in the soil and retained in sample vial 2.

Key Features:

- Silver with niello inlay
- Silver gilt border with cracks
- Empty rivet holes

Analysis Undertaken:

XRF analysis of the object was performed. See document 'K1235 XRF Report'.

Samples:

1. soil – front

2. niello fragment