

K1001 Condition Report

Conservation Started: 9th August 2013

Conservation Finished: 12th August 2013

Conservator: K. Fuller

Time Taken: 8 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 34.5mm (W) 20mm (D) 10mm

Weight before: 5.65g

Weight after: 2.97g

X-ray: L121

Catalogue number: 509

(K1001ii silver sheet renumbered to K1940)

Digital photography:

Taken with a Canon EOS digital camera under daylight or bulbs and a Keyence VHX-1000 3D digital microscope with LED and/or fibre optic lights (20-200x magnification). Taken before and after.

Annotation on any of the storage bags or boxes:

X-Ray plate L121

SSH 09 1001, 1971 k12 (location) 3/8/09, 258 (in triangle)

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification Full garnet and gold, geometric cloisonné design hilt fitting which has been folded over. Gold foil can be seen behind stones, although is clouded by soil. Item has been basically cleaned in prior conservation process on front surface. Lump of soil remains in the middle.

Associated Objects:

1366

Pre-Conservation Condition: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification. Most garnets are present although some are broken/ chipped within cell. Primarily loss and distortion of cell walls/ structure is near edges or middle of bend. Copper salts can be seen in empty cells on edges. Scratches to surface of gold and at least one garnet appears to have an imperfection in corner. Soil accretions primarily from lump on back, which includes a large stone and small rootlets.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Study

Aim: Total cleaning

Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on metals, water on garnets, cotton wool swabs, cocktail stick, Paraloid B72 in acetone 20%.

The granular soil on the front/back 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. The large lump of soil was only removed through careful excavation after the front surface was fully cleaned and stabilised. All samples were bagged accordingly.

An area of metal and garnet foil required stabilisation/ re-adhering; Paraloid B72 (ethyl methacrylate copolymer) 20% w/v in acetone was applied with a fine thorn at edge (see diagram below).

The paper K number was adhered to the back with HMG brand Paraloid B72 (ethyl methacrylate copolymer) 20% 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.

Post-Conservation Condition/Findings:

Small rootlets were found in soil lump and sampled. A very small fragment of bright and shiny silver/ tin coloured edge but strong dulled grey/ black patina was found. Under microscope you can see that it looks to have structured pressed shape. When excavating end cells of item, it can be seen that there are two pierced holes indicating attachment. Also copper salt deposits directly above the holes in soil. Holes are ~15mm in diameter. Rolled over and squashed cell walls. Cell walls are primarily attached to base rather than to other cell wall edges. Scratch/ indents on bend inner gold surface.

Key Features:

- Two pairs of holes for pin attachment on edges.
- Gold/garnet geometric cloisonné design
- Tiny pressed Metal fragment in soil lump with bright silver edge near break but very dark surface patina (Silver?)

Samples:

Sample 1b: Rootlets from surface of soil middle lump

Sample 2b: Soil from back/ side

Sample 3b: Soil from front

Sample 4b: Gold fragment from cell

Sample 5b: Green copper salt/ paste type material

Sample 6b: Gold foil fragments from soil in cell

Sample 7b: Green copper salt/ paste type material from over end pierced hole

Sample 8b: Pressed metallic fragment with dark patina (Silver?).

b= second conservation process

→
NOT TO SCALE / ACCURATE

