

K1247 Condition Report

Conservation Started: 13/01/2013

Conservation Finished: 15/01/2013

Conservator: Ciarán Lavelle

Time Taken: 6 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 38mm; (W) 13mm; (H) 5.5mm; (Th. edge) 2.5-3mm

Weight before: 5.82g

Weight after: 4.38g

X-ray: L6

Catalogue number: 172

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, during and after.

Annotation on any of the storage bags or boxes: K1247.

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

Gold and garnet cloisonné hilt-collar fitting of sheet-metal construction, probably from the bottom of grip; torn open and folded flat, some cloisons ruptured and some garnets lost and sunken. Garnets backed by stamped gold waffle-patterned foils. Stepped, square and mushroom shaped garnets. [cf K380]

Associated Objects: None known at present.

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

A curved object (semi-circular as it does not join into a circle any longer). The object is constructed of gold plating (two sides and the inner back portion), with gold partitioning cell walls in the interior which are then filled with garnets in the cells/partitions. The two ends overlap on top of each other and show signs of damage with break edges visible. The object has suffered inward compression damage, which has resulted in damage visible across the length of the object with nicks, warping, bending and the possible loss of garnets visible. The object is covered in a moderate/heavy layer of loose and compact soil, obscuring the view of garnets. Some garnet cells appear filled in completely with soil.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Display / Study / Analysis

Aim: Total cleaning / Stabilisation

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

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.

An area of metal, a thin sliver on the side of the object, near one of the ends, required consolidation; Paraloid B72 (ethyl methacrylate copolymer) 10% w/v in acetone was applied with a glass micropipette.

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.

Post-Conservation Condition/Findings:

During treatment:

During the conservation process the removal of the exterior soil has resulted in 3 garnets and three foils coming loose from their cells. These garnets and foils were placed in a plastic sample tube and stored in the objects casing.

After Treatment:

The object is a wide and thick gold hilt collar with garnet inlays. The object has suffered a break, with jagged edges visible and compression damage which has resulted in the break edges becoming overlapped and the two sides of the interior pressing against each other. The other arm with a break edge can be seen over-lapping at an angle over the inner arm with a visible break edge, which in turn butts up against the inner wall of the opposite side of the object. The severe compression damage and break edges the object has suffered has resulted in the loss of and damaging of the garnets and the foils. The garnets still in-situ appears in good condition with some damage visible across the object, especially where the surrounding metal has been damaged. There is a loose fragment of foil still visible insitu near the break edge on the outer arm.

The sides and the back of the metal are unadorned and appear highly polished in appearance. There is dirt visible within the interior of the object, where the gold surfaces have been compressed against each other and within a majority of the garnet cells which has been left insitu to prevent causing further damage to the object. The removal of all the soil not undertaken due to the limitations of the microscope on hand and due to the fragility of the object, specifically the potential for further garnet loss. The gold surface is yellow/orange/ red in appearance with black tarnish visible across the surface.

Key Features:

- Wide and thick gold strip with garnet cells and garnets insitu.
- Compression damage and break edges visible on one side of the object.
- Damage to the metal along the length of the object, resulting in the loss of garnets and foils.
- Unadorned but polished gold surface on the sides and the back.

Samples:

Sample 1 – Soil from the exterior of the object.

Sample 2 – Soil from the interior of the object..

Sample 3 – Sample of the black putty (?) from the cells with the loose garnets/gold foil.

Sample 4 – Loose Garnets/Gold foil