

K1684 Condition Report

Conservation Started: 18/07/2011

Conservation Finished: 19/07/2011

Conservator: Cymbeline Storey

Time Taken: 3.5 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 18mm (W) 14mm (D) 7mm

Dimensions with K514: (L) 27mm; (L) (original est.) 32mm; (W) 22mm; (H) 15mm; (Th) 1.5mm

Weight before: 2.12g

Weight after: 2.07g

Catalogue number: 71

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: None

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

The object is part of K514, which is recorded as a 'sword hilt ring' in the BMAG catalogue; however, the shape and decoration, such as the oval-shaped decoration with an interlacing geometric design on the narrow side, suggests it could be a type of pommel cap.

K1684 is a triangular, convex wedge with a cartouche-shaped and zoomorphic decorative scheme on the outer surface. On the inner surface there is an incomplete protruding piece of metal. It is unclear if this is a break edge or a plug from casting – probably the latter, as the rough edge points downward.

The zoomorphic decoration shows an animal with a horse or dragon-like head, and a long thin body with a feather-like pattern. The mouth is open and biting the back part of the body.

Associated Objects: This object is part of K514.

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

There is a small amount of soil on the outer surface and a small clump of soil on the inner surface.

About 75% of the outer surface is covered with a dense, brown corrosion product (probably silver chloride + soil). This corrosion largely obscures the decoration in the areas where it is present. Areas not covered with this brown corrosion are covered almost completely with a speckled, light- to dark-green copper corrosion product. All corrosion appears inactive.

There are three deep, recent-looking scratches on the outer surface. Exposed metal is silvery-coppery in colour.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Display/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/interior surfaces were 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.

Corrosion products were left in situ; corrosion was not active and can be further cleaned or stabilised at a later date. A very small sample of green corrosion product was taken from the back of the object at the base of a large clump of copper corrosion situated at the top corner.

The paper K number was adhered to the interior surface with HMG brand cellulose nitrate from the tube, applied with a cocktail stick.

A new storage box padded with white polyethylene foam was constructed to house 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:

The break edges of K514 and K1684 join neatly. The two pieces could be adhered if desired. K1684 fits in the middle of the area of loss; there are still at least two pieces of this object missing. A quick check through the silver and copper alloy boxes yielded nothing, but the missing pieces could be in the collection.

Some areas of the break edges of this object look fresher/cleaner than others, indicating that the damage may have occurred at more than one point in time. All break edges look fresher/cleaner than the end of the 'plug' feature.

See 'K1684 Treatment Details' for an image of K514 and K1684 together.

Analysis undertaken

XRF analysis of the object was performed. See document 'K1684 XRF Report'.

Samples:

1. Soil from exterior
2. Green corrosion product taken from back of object at base of large clump of green corrosion in top right corner