

**CAT No. 381 and 382 – Hilt Plates**  
**K1823+ K2083 (CAT 381) + K1534 (CAT 382)**  
**Condition Report**

**Conservation Started:** 03/07/2015

**Conservation Finished:** 03/07/2015

**Conservator:** Kayleigh Fuller

**Time Taken:** 2 hours, including digital photography, report, conservation and packing.

**Dimensions:** K1534 - L 28mmx W 21mm, K282+ K1493 – L 23mm W 18.5mm

**Weight before:** K1534 -3.35g, K1823 (K282part) and K2083 (K1493part) – 2.10g

**Weight after:** n/a

**Digital photography:** Taken with a Canon EOS 1100D digital camera, under daylight and with a Keyence VH-Z20R Digital Microscope, under artificial light. Taken before and after.

**Annotation on any of the storage bags or boxes:**

X-ray L42

**Description:** Cast silver-alloy hilt plate in three pieces with large portion in middle missing.

Two pieces join together to make one end fragment of a hilt plate with a flange. The other fragment K1534 is already intact. Both ends have one large and two smaller rivet holes. Part of the aperture of the hilt plate is visible on K1534. Both items have some evidence of gilding on the surface.

**Associated Objects:**

A pair of dome-headed rivets fit [K1703, K1767]

**Pre-Conservation Condition:** Visual and microscopic examination using Meiji BM 47941 stereo microscope 2-10x magnification.

The three fragments have a worn and corroded surface on both sides. Copper corrosion product is visible near the rivet holes. On K1823 and K2083 the surface is uneven and flange and plate plane is bent out of shape slightly. Break edges are all old. Slight gap between K1823 and K2083 break but clearly joins together. Slightly darkened soil accretion on top side of K1823 which may be organic material so has been left in place.

**Treatment:** Carried out using a Meiji BM 46941 stereo microscope 2-10x magnification.

**Purpose:** Study / Analysis

**Aim:** Total cleaning/ Re-assembly

**Materials:** Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, cotton wool swabs, cocktail stick, HMG Paraloid B72

The granular soil on the edges were mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. The soil was softened with IMS to aid removal.

The two pieces K1823 and K2083 were adhered together using HMG Paraloid B72 (ethyl methacrylate copolymer).

A storage box padded with white polyethylene foam was made for housing the object.

**Post-Conservation Condition/Findings:**

Both fragments may have the remains of gilding. The upper surface of the fragment has blackened. The back shows green (copper) corrosion products. Both the front and back are covered by green (copper) and purple/white/brown (Silver chloride) corrosion products.

Possible old tool mark across top surface of fragments K1823 and K2083.

**Key Features:**

- Cast silver
- Hilt plate
- Tool Marks

**Analysis Undertaken:**

X-ray: L42

Surface and subsurface analysis was carried out using the Bruker Mistral M1 XRF. This analysis formed part of the silver pilot study for the English Heritage programme. To access the core (sub-surface) of the object a small area on the surface was removed from the inside of the hilt-plate.

**Samples:**

See individual fragment reports

**References:**

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