

**CAT No. 45 - Pommel  
K401+K1018+K1025  
Condition Report**

**Conservation Started:** 12/08/2015

**Conservation Finished:** 14/08/2015

**Conservator:** Kayleigh Fuller

**Time Taken:** 2 hours

Including digital photography, report, conservation and packing.

**Dimensions:** 46mm(L) x 22mm(W)x 10mm(D)

**Weight before:** K1025- 7.09g, K1018- 5.44g, K401- 3.30g

**Weight after:**

**Digital photography:**

Taken with a Canon EOS digital camera under daylight bulbs and Photomicrographs taken using Keyence VHX-1000 3D digital microscope with LED and/or fibre optic lights, 20-200x magnification.

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

X-ray: L33, L53

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

**K401**

Gold dual rivet casing detached from a pommel cap. There are two tapered, barrel-shaped casings with a space between them decorated with two vertical, raised lines. One casing contains a gold, dome-headed pin with a straight, hammered shaft and blunt/broken tip. The casing has linear decoration on the front and sides.

**K1018**

Partial gold pommel cap consisting of one shoulder and a rivet casing; the remainder is missing. There are geometric (triangles with two straight edges and one stepped edge) cloisonné cells on the shoulder. There are two tapered, barrel-shaped rivet casings at the end with two raised lines between them.

**K1025**

Fragment of a gold sword pommel with incomplete surviving cell work. The apex is plain, the surviving shoulders is decorated with a row of square cells divided into two interlocking stepped triangles by an inner cell wall. One of the sides features the remains of a row of rectangular cells that would have decorated the upper border. The underside shows that the pommel is constructed by layers of gold sheet and that the shoulders borders are tubular & hollow. The base that support the cells, as observed from the underside, displays multiple linear intentional incisions. Traces of solder are visible where some of the cell walls were lost or became detached. K1018 joins K1025. A loose cell wall very similar to those in situ on the pommel was found embedded in the soil on the underside. K500, a loose cell wall may also be part of this object.

**Associated Objects:**

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

Three fragments make up this object with one of the pins being slightly loose.

**K401-** The back of the object can now be seen. There are protruding lips of metal where the object was torn from the pommel cap. These lips of gold are very fragile. They move when touched and are vulnerable to further damage with handling as they could catch gloves or packaging. **Handle with extreme care.** There is patchy tarnish on the back as well as some fine cracks in the gold.

There are distinct, old-looking, regular scratches on the top of the object that might be working marks.

There is general surface abrasion.

The pin is mobile in its hole and could dislodge with rough handling or transportation. **Handle with care.**

**K1025-** Incomplete but structurally stable. The area around the cells has suffered much abrasion, and the scratching here appears deeper and more intentional than the usual micro-scratching left by polishing. The inside of the cells hosts thin remains of a dark material. The gold itself appears quite dull, indicating a relatively high silver content. The part of the base that would have formed the outer, decorated shell, is torn and its edges are fray.

**K1018-** The cloisonné cells on the shoulder were completely excavated at the request of the conservation manager. There is a small amount of dark residue at the bottom of the cells; otherwise nothing apart from soil was found in the cells. The soil from the cells was retained in a separate sample bag for future study if desired.

A small piece of gold on the bottom of the object was partly detached and mobile. It required consolidation to prevent detachment with handling or transportation. See 'K1018 Treatment Details' for location of consolidated area.

**Treatment:** Carried out using a Meiji stereo microscope

**Purpose:** Study

**Aim:** Total cleaning/ re-assembly/ stabilisation

**Materials:** Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, cotton wool swabs, cocktail stick, Paraloid B72 10% in acetone, 40% w/v Paraloid B72 in Acetone, Reemay Polyester netting 30gsm.

***Prior conservation treatment***

The granular soil on all sides was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. IMS was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of IMS.

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.

### **2015 treatment**

Items were adhered together at joining edges with 40% w/v Paraloid B72 in Acetone. It is clear that the item is not structurally stable with adhesive alone, and therefore a supportive backing of polyester netting was adhered onto the underside of the break edges to help support it further.

A new piece of plastazote was constructed to house the item now that it is joined. Unfortunately it has not been possible to remove all obvious Paraloid B72 residue showing as this then destabilises the joins. Rivet pin was secured in its hole through use of a small amount of Paraloid B72 on the inner side.

### **Post-Conservation Condition/Findings:**

See pre-conservation condition from individual reports

### **Key Features:**

- Cloisonné and garnet pommel
- Interlocked stepped triangles within square cells
- Rivet pin still attached.

### **Samples:**

1. soil from all sides