



## Report on the Conservation and Stabilisation of Small Finds from Torksey

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Number of artefacts 7

Material	Quantity
Iron	7

### INTRODUCTION

This report describes the conservation of small finds from the site of Torksey. Please also refer to the assessment report (report number 2015/34). The work carried out has been the stabilisation, consolidation and selective investigative cleaning of the objects submitted. Following radiography and assessment the objects were authorised for treatment. Once the artefacts had been treated they would be packed appropriately for return to the client and for archive storage.

### DESCRIPTION

The table below lists the objects submitted for conservation:

SF	Material	Aim	Estimated time
1	Iron	Consolidate cracks and fragile areas.	3 hours
2	Iron	Consolidate cracks and fragile areas. Investigate central hole to reveal shape.	4 hours
3	Iron	Consolidate cracks and fragile areas.	3 hours
4	Iron	Removal of corrosion and old coating, consolidate fragile areas.	3 hours
5	Iron	Consolidate cracks and fragile areas.	3 hours
6	Iron	Removal of corrosion and old coating, consolidate fragile areas.	3 hours
7	Iron	Removal of corrosion and old coating, consolidate fragile areas.	3 hours

### METHODOLOGY

Iron




The iron objects were stabilised through the removal of old coatings and corrosion selectively using the air abrasive with 29 micron aluminium oxide powder. Cracks and fragile areas were consolidated using 10% w/v Paraloid B72 in acetone applied with a brush.




Further treatment notes can be seen in the table below, together with images before and after treatment. Further conservation work could be undertaken if the objects are required for display or publication.

#### **RECOMMENDATIONS**

The objects are stable but should be stored in a dry environment of less than 15% Relative Humidity to avoid active corrosion. The objects should be handled with care due to the fragile nature of the exposed surfaces.

**Treatment record table:**

<p><b>Photograph Before</b></p>	<p><b>After</b></p>	<p><b>Identification, Condition and Treatment</b></p>
		<p><b>SF1 (X8573)</b></p> <p>Sand and silt covers the entirety of the surface of the object, sitting in loose clumps around the head. The soil easily becomes dislodged during handling. Cracks and flaking are visible on the surface of the object.</p> <p>Treatment: Loose soil was removed with a stiff bristle brush to allow access to the cracks and fragile areas. Larger clumps were removed using the air abrasive with air only. Cracks and fragile areas were consolidated with 10% w/v Paraloid B72 in acetone applied with a brush. Once dry excess Paraloid on the surface was removed using a scalpel under the microscope.</p>
		<p><b>SF2 (X8573)</b></p> <p>Sand and silt covers the surface of the object forming a thin layer of concretion and filling the central hole of the cross guard. Cracks are visible throughout the surface of the concretion with some small areas missing.</p> <p>Treatment: The central hole of the cross guard was investigated using air abrasive with 29 micron aluminium oxide powder which removed the concretion and corrosion products. Cracks and fragile areas were consolidated with 10% w/v Paraloid B72 in acetone applied with a brush. Once dry excess Paraloid on the</p>

		<p><b>SF3 (X8573)</b></p> <p>Sand and silt covers the surface of the object over a layer of concretion. Various fragments of concretion sit loose in the finds bag. Cracks run along the remaining concretions on the object. Some areas of the metallic surface are exposed.</p> <p>Treatment: Loose soil was removed with a stiff bristle brush to allow access to the cracks. Cracks and fragile areas were consolidated with 10% w/v Paraloid B72 in acetone applied with a brush. Large loose fragments from the finds bag were reattached if the correct position could be ascertained. Once dry excess Paraloid on the surface was removed using a scalpel under the microscope. After consolidation the larger clumps of soil on the interior were removed with the air abrasive with air only.</p>
		<p><b>SF4 (X8574)</b></p> <p>Sand and silt sit in the shaft of the object. The surface is dark and shiny indicating the object has been cleaned and a coating applied. Patchy areas of concretion cover the surface with small areas of active corrosion visible in places.</p> <p>Treatment: The coating was removed using the air abrasive with 29 micron aluminium oxide powder. Cracks and fragile areas were consolidated with 10% w/v Paraloid B72 in acetone applied with a brush. Once dry excess Paraloid on the surface was removed using a scalpel under the microscope. The entire surface of the object was coated with 10% w/v tannic acid in 50:50 Industrial Methylated Spirits (IMS) and reverse osmosis water applied with a paint brush after which Renaissance™ micro-crystalline wax was buffed over the surface with a brush.</p>

		<p><b>SF5 (X8574)</b></p> <p>Sand and silt covers a thin layer of dark orange corrosion. Small areas of active orange corrosion are visible but this is in general limited to small areas. Cracks are visible throughout the surface of the object. A small area of metal is visible towards the end of the tang.</p> <p>Treatment: The overlying soil and concretions on the surface were removed using air abrasive with 29 micron aluminium oxide powder allowing access to the cracks and fragile areas. Cracks and fragile areas were consolidated with 10% w/v Paraloid B72 in acetone applied with a brush. Once dry excess Paraloid on the surface was removed using a scalpel under the microscope. The entire surface of the object was coated with 10% w/v tannic acid in 50:50 IMS and reverse osmosis water applied with a paint brush after which Renaissance™ micro-crystalline wax was buffed over the surface with a brush.</p>
		<p><b>SF6 (X8574)</b></p> <p>The surface of the object is dark and shiny indicating it has been cleaned and a coating applied. Dark sand and silt sit in patches on the surface in particular where the link attaches to the hook. The surface of the object is uneven which cracks visible throughout.</p> <p>Treatment: The coating was removed using the air abrasive with 29 micron aluminium oxide powder. The area connecting the hook and chain was investigated to the magnetite layer to reveal the shape and connection. Cracks and fragile areas were consolidated with 10% w/v Paraloid B72 in acetone applied with a brush. Once dry excess Paraloid on the surface was removed using a scalpel under the microscope.</p>



**SF7 (X8574)**

Sand and silt covers a thin layer of concretion which sits on the surface of the object. The surface is dark and shiny indicating the object has been cleaned and a coating applied. Cracks are visible throughout the concretion with a small area missing revealing the metallic layer underneath.

Treatment: The coating and selective areas of concretion was removed using the air abrasive with 29 micron aluminium oxide powder to allow full access to the cracks. Large flakes were quickly removed. Cracks and fragile areas were consolidated with 10% w/v Paraloid B72 in acetone applied with a brush. As many large flakes as possible were reattached to the surface of the object. Once dry excess Paraloid on the surface was removed using a scalpel under the microscope.