

Analysis and Basic Conservation Treatment of Glass Plate Negatives

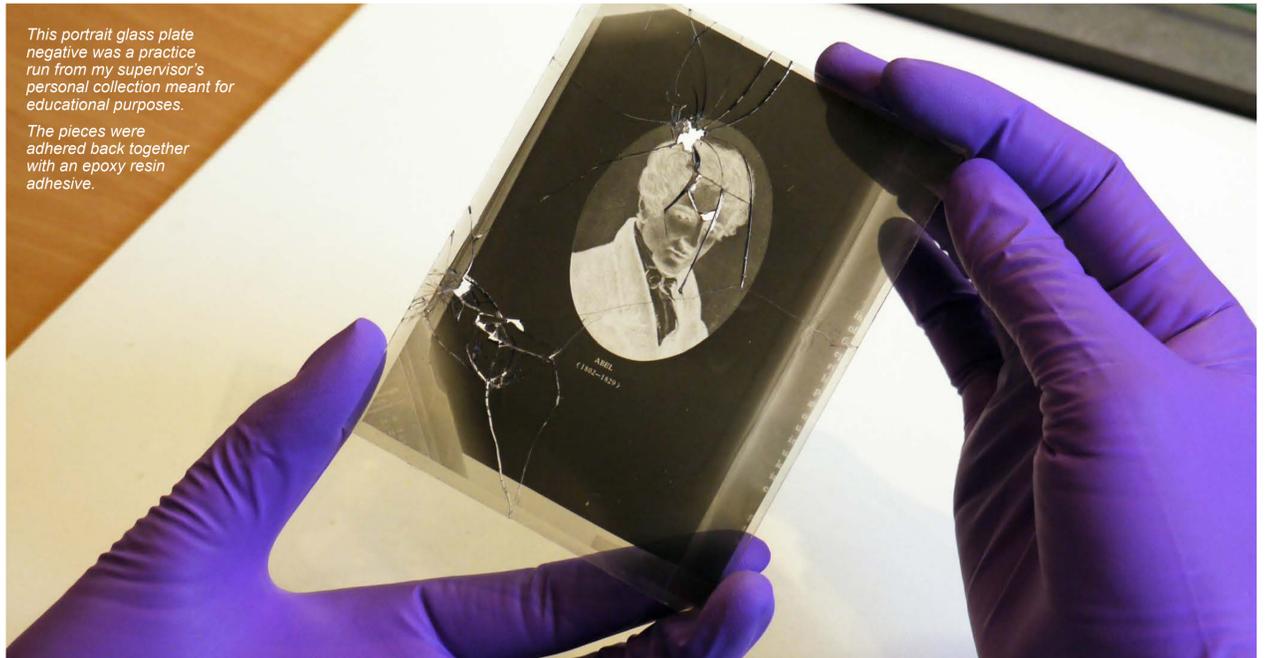
Raquel Mendez | *Technical Art History: Making & Meaning // University of Glasgow Archive Services*

COLLECTION INFO & HISTORY

INTRODUCTION

The University of Glasgow Archive Services holds a large collection of gelatin dry plate negatives. Some had suffered from deterioration and were in need of basic conservation treatment. Common damage included broken fragments, adhesive residue from past conservation attempts, and dust and debris build-up on the surface. My work placement focused on the analysis and treatment of these objects — specifically from a collection by John Cochrane & Co (Barrhead) Ltd, a company specialising in boiler making and pump manufacture, whose goodwill was purchased by Andrew Barclay Sons & Co Ltd, locomotive manufacturers and engineers, in 1930. These photographs were taken circa 1910-1950, although the popularity of gelatin dry plate negatives ranged from 1878-1925.

Gelatin dry plates were the first negative medium to be mass produced and commercially manufactured. The gelatin binder allowed an exposure time of less than one second on



ready-to-use light sensitive plates. The medium is composed of a photographic emulsion with a long shelf life, which eliminated the need for a portable darkroom. Photography was now much more accessible to the general public. With a large demand in manufactured photographic

papers, gelatin dry plates marked the beginning of the modern photographic industry.

Gelatin dry plates have a two-layer composition: gelatin binder on glass support. It is on the glass layer where my conservation treatment was executed.

A STEP-BY-STEP INSIGHT ON ITEM GD329/6/1/78

METHODOLOGY & RESULTS



I FIRST ASSESSED the condition, noting the damage/properties of the plate before deciding upon a remedy. The state of the object was recorded in a detailed condition report, including a full photographic record before, during, and after treatment. The glass side (versus the emulsion side) was identified on this type of negative.



THE GLASS WAS broken into ten pieces that were held together loosely by pressure-sensitive tape from a past conservation attempt. During analysis I could see the tape had become yellowed and brittle, with the adhesive layer detached and stuck to the object. I first removed all tape, which left behind crusty remnants.



WORKING ON a clean, flat surface with nitrile gloves, I dusted all loose particles with a soft brush. With a Swann-Morton scalpel, I delicately removed all adhesive/dirt residue, and with a soft cloth removed the leftover powder particles. The photo above shows the original surface (left) against the cleaned surface (right).



AFTER ALL TEN pieces were cleaned, I used small strips of archive-quality tape to join the fragments in their original positions, placing the tape in even increments. The object was too delicate to be glued. The plate was now ready to be packaged in a window frame and four-flap folder.

THE SIGNIFICANCE OF ANALYSIS

DISCUSSION & CONCLUSION



Knowledge of the technique and materials was and is a significant part of the decision-making process in conservation treatment. This is why historical and technical understanding of glass plate negatives was essential.

By the end of the placement, eight plates were successfully analysed, conserved, and properly packaged for storage. The purpose of this cleaning is to provide better access, minimise further deterioration, and preserve these historical objects.

THE CONDITION REPORTS

A selection of pages from my condition reports. They contain detailed descriptions of the object, along with photographs of details including any deterioration. They also include mounting, handling, and display instructions for the glass plate negative.