



---

Article: Conservation Tip A Modified Dacron Lining Technique for Photographs

Author(s): Sarah S. Wagner

*Topics in Photographic Preservation, Volume 4.*

Pages: 31-33

Compiler: Robin E. Siegel

© 1991, Photographic Materials Group of the American Institute for Conservation of Historic & Artistic Works. 1156 15<sup>th</sup> St. NW, Suite 320, Washington, DC 20005. (202) 452-9545, [www.aic-faic.org](http://www.aic-faic.org). Under a licensing agreement, individual authors retain copyright to their work and extend publication rights to the American Institute for Conservation.

*Topics in Photographic Preservation* is published biannually by the Photographic Materials Group (PMG) of the American Institute for Conservation of Historic & Artistic Works (AIC). A membership benefit of the Photographic Materials Group, *Topics in Photographic Preservation* is primarily comprised of papers presented at PMG meetings and is intended to inform and educate conservation-related disciplines.

Papers presented in *Topics in Photographic Preservation, Vol. 4*, have not undergone a formal process of peer review. Responsibility for the methods and materials described herein rests solely with the authors, whose articles should not be considered official statements of the PMG or the AIC. The PMG is an approved division of the AIC but does not necessarily represent the AIC policy or opinions.

---

## Conservation Tip

### A Modified Dacron Lining Technique for Photographs

By  
Sarah S. Wagner

#### Introduction

The modified Dacron lining technique uses polyester fabric which is stretched out and attached to a frame support. The lining method was introduced to the Library of Congress Conservation Office by Senior Conservator Ann Siebert who had seen the technique used at the Exconventro Churubusco (Escuela Nacional de Conservacion, Restauracion y Museografia) in Mexico City, Mexico. The method has been used successfully in the Library of Congress Paper Conservation Section for the lining of posters and other paper artifacts. Experiments on photographs revealed that the technique offers some advantages in certain situations when compared to the traditional Dacron lining method. For these reasons, it is presented as a useful variation on a technique to add to the repertoire of lining methods.

#### Overview of the Traditional Dacron Lining Method

In the traditional Dacron lining method, a rigid support such as Plexiglas or a table top is required. The support surface is usually sanded to increase the adhesion of the Dacron to the support. The Plexiglas is pasted out, then the Dacron, or polyester cloth is laid down and pasted out. The lining tissue or paper is laid down and pasted out. Finally the object, usually prehumidified, is laid down. The entire ensemble is allowed to dry either exposed directly to the air or under blotters and/or felts, with or without additional weight on top.

The method of lining means that the object dries only through the recto, while remaining in an expanded, stretched out state. This frequently results in tears opening up, tenting, or in a worst case scenario, actually splitting more.

Once the lining ensemble has dried, the fabric (with the adhered layers of lining paper/object) is peeled off of the rigid support. The fabric is then peeled off of the back of the lined object.

The lining procedure is quick, but the process requires three separate pasting steps. In addition, the Plexiglas sheets can be awkward and heavy in large sizes and they tend

---

Conservation Office  
Library of Congress, Washington, DC 20540

to bow if placed vertically. If table tops are used, the area is unavailable for other uses until the lining has dried. Cleanup involves washing the rigid support and rinsing out the fabric.

#### Overview of the Stretched Dacron Lining Method

In the modified Dacron lining, the polyester fabric is stretched out and attached to a frame, such as a painting stretcher. The frame is placed face down onto a table top so that the fabric is flush to the table's surface. The fabric is then pasted out. The lining paper is laid down and pasted out. The object is then laid down. The frame is then lifted from the table top and placed vertically against a wall or rested horizontally on blocks off of the table.

The method of lining means that the object can dry from both sides, if desired. The drying rate and the primary surface of drying/evaporation can be controlled by placement of blotters and/or felts, allowing free air circulation on one or more exposed sides, or in a more traditional manner, by sandwiching the lining ensemble between blotters and/or felts, with or without the use of weight. Lined photographs remain flat, but not as stretched out as with the traditional method which restrains the object more as it dries. The freely suspended cloth used with the stretched Dacron method allows for some contraction and movement of the object as it dries. Tears do not seem to open up much, if at all, so tenting and splitting is minimized or eliminated.

Once the lining ensemble has dried, the lined object can be gently delaminated from the fabric underneath using a teflon spatula. As with the more traditional method, dried paste remains on the back of the lining paper unless it is sanded off.

The entire lining process requires two pastings instead of three. The frame is lightweight and easier to handle than a Plexiglas sheet. For cleanup, the fabric is left on the frame and lightly sponged down or rinsed out under a faucet; the paste residue on the table is cleaned up.

#### Advantages of the Stretched Dacron Method

The stretched Dacron lining procedure is even simpler than the traditional method, requiring less set up (once the fabric has been attached to the frame) and fewer pastings. The method allows for variations on drying and for more uniform drying from both sides of the object, if desired. The lined objects are not as stretched out after drying and less tenting of tears occurs. In addition, very dry linings can be attempted if the stretched fabric is pasted out on either blotters or a suction table in order to withdraw water from the paste. Experiments with dry linings showed that lightly humidified photographs could be lined controllably and with success. Removal of the lined object from the stretched fabric appears to be gentler than with the peeling method used for the traditional Dacron lining technique.

### Variations on the Stretched Frame Apparatus

The simplest method for preparing a Dacron frame is to stretch the fabric onto a wooden painting stretcher and attached the fabric to the frame with staples. It is a good idea to seal the wood with paint or polyurethane before use so that the stretched fabric/frame can be hosed down with water during cleanup. Other possibilities may include using rigid metal window frames and attaching the fabric as one would window screening, that is, pressing the fabric into the grooved frame with the rubber tubing used for the purpose. Another possibility may be to attach one Velcro mate to the frame (with glue or staples) and sew the other Velcro mate to the edges of the polyester fabric. Either of the last two methods would allow for even stretching of fabric and ease in removing and re-using the fabric.