

A Method of Mounting Parchment Using Hair Silk

BACKGROUND

Jeanne Pucelle's manuscript, *The Hours of Jeanne d'Evreux* (1320s) from the Cloisters Collection of the Metropolitan Museum of Art, presented a challenge when it was decided to mount over forty leaves in a variety of formats for the exhibition, *Prayerbook for a Queen: The Hours of Jeanne d'Evreux*, for loan to the John Paul Getty Museum and display at the Metropolitan Museum of Art.

The manuscript, which is tempera and ink on vellum, had been disbound for conservation and facsimile purposes. It is exceedingly small (page size 6.2 cm x 8.9 cm, 3-1/2 in. x 2-1/2 in.). Due to the extremely fine drawings and details, any method of securing the leaves that would cover the marginalia or illuminations was undesirable. In addition to the appearance, it was important to consider the highly reactive nature of the very thin vellum.

The leaves could not be inlaid or hinged with adhesive because they were to be rebound. Objects which cannot be hinged are often mounted with corners to a backboard and then overmatted to hold them in place. The manuscript pages looked too cramped when treated in this manner. If overmatted, there was the added concern that even if the mat board was sanded on the inside bevel, it might abrade the covered design areas. Another concern was that the objects and mounts had to withstand vibrations in travel and, as the show opened at the Getty Museum, possibly earthquakes.

In the decision-making process, a number of materials were experimented with in a variety of ways. Objections were found with all of them. Strapping made with regular silk, cotton, or linen thread was too thick and distracting. Invisible nylon thread was possibly too strong and under gallery lights it became visible and created shadows. Crepeline corners or straps tended to fray with any manipulation after cutting. Introducing a stabilizing material to the edges might have made them sharper and abrasive.

Stabiltex straps had the appearance of lingerie fabric on the pages and tended to curl softly. Japanese papers made into hanging corners or straps seemed too distracting. Polyethylene strapping and Mylar (polyester) corners were too shiny. Mylar encapsulation, considered for floating double-sided objects, was not appropriate, considering the potential problems of abrasion, static electricity, and surface reflections.

HAIR SILK (SILK THREAD)

After experimenting with numerous materials and methods of securing the objects, a solution was reached using hair silk. This very fine natural proteinaceous filament obtained from cocoons of silkworms is commonly known by textile conservators.

Hair silk is sold in a skein (fig. 1). To prevent tangles and numerous short ends over time, the skein keeps better if it is cut in one place and made into a long braid from which one strand can be easily pulled at a time (fig. 2). Cutting to create the braid might only be problematic if very long threads were required for a project.



Fig. 1. Skein of hair silk.



Fig. 2. Hair silk in braid form.



Fig. 3. Pin vise and drill bits.

To test the suitability of hair silk as a mounting material, a mockup of the inner frame package was created using a piece of repair parchment mounted with hair silk in a double step mat. The mat was placed above a piece of conditioned Art Sorb silica gel sheet material and enclosed with Plexiglas on the top and bottom of the package. The moisture barrier, Marvelseal, was adhered around the edges of this unit with J-Lar tape, creating a passepartout sandwich.

This package was shipped in bubble wrap to the Getty Museum in a Federal Express box. It arrived safely. After consultation, the Getty staff returned it in the same man-

ner. As an additional test, the box with the mock-up was intentionally dropped a few times. No changes were noted upon opening the unit on return.

Hair silk proved to be visually acceptable. It was almost invisible, soft enough so that it would not abrade design materials or cut the vellum, and strong enough to support the objects in presentation.

To further test the suitability of the material for storage and display an Oddy test was performed on the hair silk. Test data showed the sample and container decreased in weight from 153.4 grams in the beginning, to 153.3 grams when it was opened a month later. The lab report found "very very

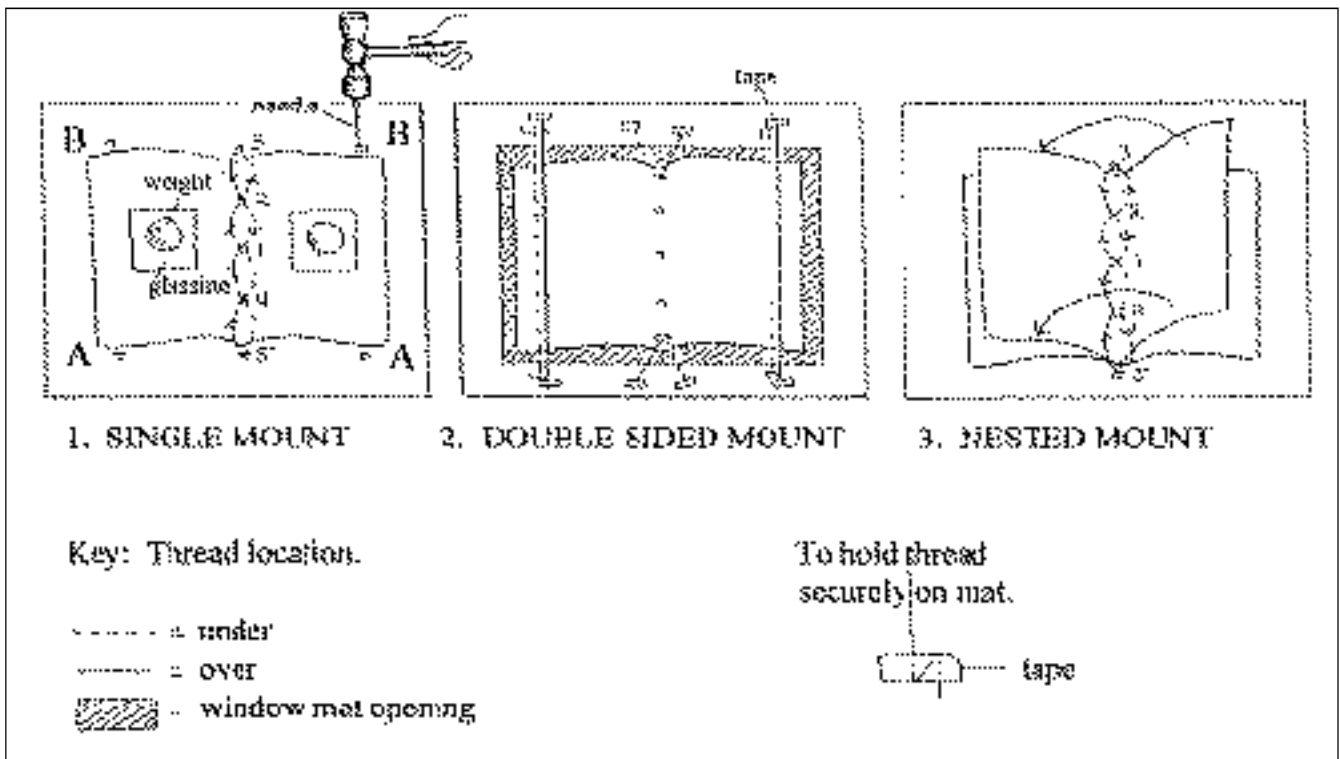


Fig. 4. Three types of mounts.

slight tarnishing of the silver edge, and very slight copper and lead tarnishing and a high pop from the vacuum when the container was first opened.” (Bamberger, MMA). The test rated a “pass” for exhibition purposes.

MATERIALS

Materials needed to accomplish the hair silk mounting procedure include: a sewing needle with a strong but small eye, a small soft headed hammer, linen tape, a burnisher, pin vise (fig. 3), light box, loop, small scalpel, and hair silk (available from Talas in two- and four-strand skeins; we used two-ply). Hair silk can be easily toned with watercolors to make it less visible in colored areas.

MOUNTS (FIG 4)

Three separate kinds of mounts are utilized: (1) single mounts, (2) double-sided mounts, and (3) nested mounts.

1. Single mounts are used to exhibit a single bifolio. The bifolio is stitched to the four-ply rag backboard. A double-step or eight-ply upper window mat provides protection for the floating object.
2. Double-sided mounts permit a bifolio to be centered and floating in a double-sided mat. The ragboard window mount is eight-ply on both sides for the window opening. One window mat is selected as the back mat and all taping is done on the back mat.
3. Nested mounts allow two separate bifolia to be shown together as they would appear in the book and utilize



Fig. 5. Nested mount. Deposition/Presentation, Jean Pucelle, *Hours of Jeanne d'Evreux*; Paris, between 1324 and 1328. The Metropolitan Museum of Art, The Cloisters Collection, 1954, 54.1.2, fols 75v-76.

the same format as single mounts. The two bifolia are stitched together on the spine fold to the backboard; the top bifolio is folded over to show the appropriate facing pages, holes are drilled for the side straps, and straps are stitched on the single side and the folded-over side (fig. 5).

METHOD

1. Single Mounts

The object is centered and weighted in place. Holes are marked with a needle and hammer at the center of the sewing stations and close to the outside edges of the art,



Fig. 6. Marking holes with a needle and hammer.



Fig. 7. Drilling holes with pin vise.

but not touching it (fig. 6). The art is removed and holes are drilled with a pin vise (fig. 7).

The hair silk is threaded through a needle and knotted. The knot is taped to the middle of the backboard with linen tape. Working over a light box to match up drilled holes with sewing stations, the needle is drawn up the center hole of the mat at number one and through the middle sewing station of the bifolio.

At number two, the upper middle hole, the needle passes down and under the backboard (fig. 8). At number three, the top hole, the needle comes up to the front and passes back down at number two, the middle upper hole. The needle and thread continue under the backboard to the center hole, number one, where it comes back up.

The needle and thread pass down to number four, and back up at number five, the bottom hole. Passing over the front the needle goes down one last time at number four where the end of the thread is wrapped around a piece of linen tape and taped to the back mat to hold the object gently but securely in place.

Side straps are attached separately as single stitches on each side. The thread is taped to the back and passes up to the front bottom at A and down at B on the left, where it is attached to the backboard with linen tape. The same procedure is followed on the right side.

Sewing holes on the outside edges can be visually minimized by using a scalpel to push a few disturbed fibers around the edge of the hole into the hole (fig. 9). All tape on the backboard is burnished with a burnisher.

2. Double-sided Mounts

On the double-sided mounts, the bifolio is centered in the mat window on a small piece of glassine which can be removed midway during the mounting process as the object becomes secured.



Fig. 8. Passing needle down upper hole (see fig. 4.2, Single Mount).

The knotted end of the hair silk is taped near the mid-top center of the back window mat, a little to the left. The threaded needle is passed through the top kettle stitch hole of the object and pulled slightly to the right of the mid-top forming a V-shaped stitch which can be attached with tape near but not on top of the first side of the V-shaped taped thread. The same procedure is followed mid-bottom.

Thread tension is readjusted as needed by gently increasing or decreasing the V-shaped angle of the thread at the top and bottom and retaping so the bifolio floats precisely in the desired position within the mat window. It may be necessary to jiggle the arrangement several times or add a second thread before it balances perfectly.

One hair silk thread is taped on the back mat as a strap under the left side and one thread is taped on the back mat as a strap on the right under side of the bifolio.

Similarly one thread is passed over on the left and one on the right top side of the bifolio and taped to the back mat so that the vellum pages are supported recto and verso. All taping is carried out on the back window mat. Burnish the tape when all the elements are perfectly balanced.

3. Nested Mounts

The nested mount is accomplished in the same manner as single mounts, except the side holes are drilled after the two bifolia have been stitched to the back mount at the spine fold and the top page has been folded over. This is because the size and shape of the pages vary slightly. Following final taping and burnishing of the tape on the back, the outside holes in the backboard can be diminished in appearance as mentioned previously by using a scalpel to tweeze a few paper fibers back into the hole.

CONCLUSION

The approach outlined above was devised for the safe and aesthetically pleasing display of the very precious vel-



Fig. 9. Scalpel blade pushing fibers into drilled hole.

lum leaves from the fourteenth-century manuscript, *The Hours of Jeanne d'Evreux*, but various adaptations of the method have since been used on other objects for special exhibitions. There are many advantages of using passive mounting systems. The hair silk is easily reversible and it can be readily toned. Hair silk is not a perfect material for all objects but it does provide unique advantages for illuminated manuscript leaves and related problems. Perhaps this will inspire others to use hair silk when it is appropriate and to try other materials and think of additional useful passive mounting systems when hair silk is not the answer.

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MATERIALS AND SUPPLIERS

Pin vise and drill bits: Mascot Precision Tools. #H812 Pin Vise Drill Set (2 collets) and 6 popular steel drills. For catalog: Mascot Precision Tools, Division of Grobet File Company of America, Inc. 750 Washington Avenue, Carlstadt, NJ 07072. Purchased from Pearl Paint, 308 Canal Street, NY, NY 10013, tel. (212) 431-7932. Regular price: \$16.75 Pearl price: \$13.40. See additional examples in Micro-Mark catalog.

Linen tape. Neschen Filmoplast SH. Neschen Corporation, 2201 Brentwood Road, Suite 114, Raleigh, NJ 27604, tel. (919) 876-4198, fax (919) 876-9484. Ordered from: United Mfrs. Supplies Inc., 80 Gordon Drive, Syosset, NY 11971, tel. (800)-645-7260; item: U3319 Filmoplast SH Tape: \$15.75 per roll.

Silk Thread (Hair Silk). 100% silk thread, imported from France, used in textile repair. Same thread as that used to weave crepe-line; natural color, 100 gm. skeins. Available in two-strand and four-strand. (We used two-ply). Price/skein: \$45.00. Talas, 568 Broadway, NY, NY 10012, tel. (212) 219-0770, fax (212) 219-0735.

Needles and weights (wonder weights). Purchase from a sewing store or Clotilde, 2 Smart Way B8031, Stevens Point, WI 54481-8031, tel. 800-772-2891.

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REBACKING OF CLOTH BINDINGS ESPECIALLY 19TH CENTURY PUBLISHER'S CLASH

TYPICAL CLOTH CASE and REBACKING

NEW BINDING

Boards are joined during covering; groove formed afterwards.

Note the shape of the groove.



CONVENTIONAL CLOTH REBACK

Embossed/stamped area may be damaged during rebacking.



GERMAN BRADEL STYLE BINDING and REBACKING

NEW BINDING

Boards are joined with paper in cords before covering; covering material adheres to the edge of the boards to form groove.

Note the shape of the groove.



USING BRADEL FOR REBACKING

Outer bookcloth not filled; boards joined under the original pulled-down

Colored Japanese paper hides the exposed edge of the board before the covers are joined. Embossed/stamped area is not damaged.

Alternative style to soften slope of groove. Boards are joined, cord inserted at center, then covered with colored Japanese paper. Embossed/stamped area is not damaged.

