ARCHIVAL HINGES FOR MOUNTING PAPER OBJECTS: PART 2

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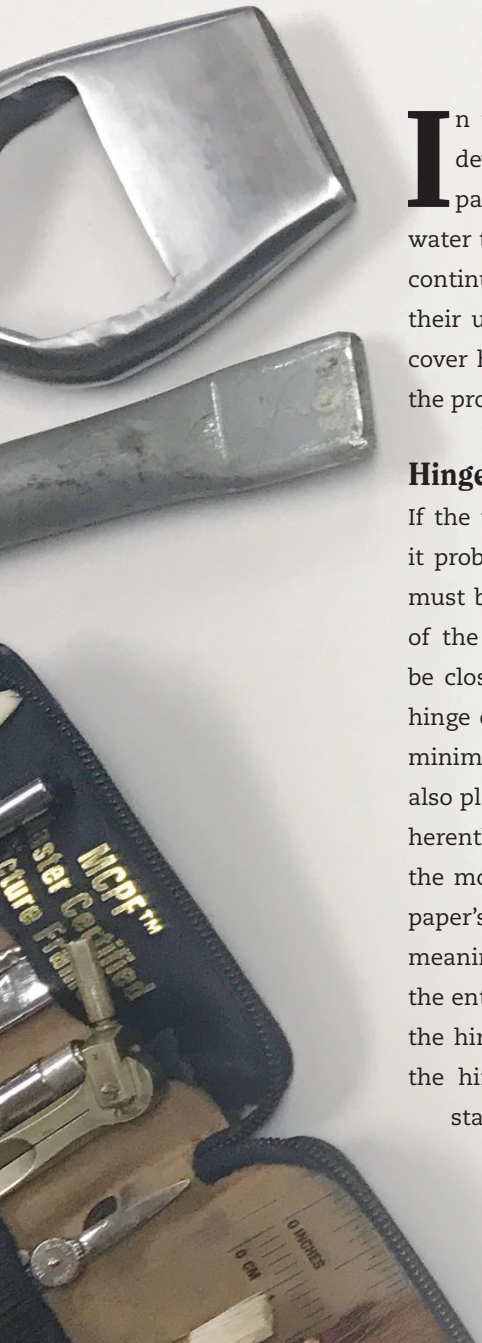

In the last installment, I discussed the development of traditional paste and paper hinges and provided a guide for water tearing a hinge and cooking paste. To continue this review of classic hinges and their use in mounting paper objects, I will cover hinge placement, setting hinges, and the proper mounting applications.

Hinge Placement

If the work cannot be perimeter mounted, it probably exhibits other sensitivities that must be carefully examined. The condition of the object's outer edges should always be closely examined. Although placing the hinge close to the outside corner may help minimize the potential of swaying if tilted, it also places a lot of stress on the corner—inherently the weakest area of the object and the most easily damaged. Determine if the paper's upper edge is in stable condition, meaning that the edge will readily support the entire weight of the object. It is not only the hinge but the edge of the paper where the hinge is attached that is under constant strain. For the corner's sake, place the outside hinge at least one hinge width away from the corner of the work. Sway potential can be controlled by the gentle friction of the over mat or side hinges if it is floated.

A very important consideration in the placement is what is opposite the hinge, the face of the object. Presentations often have a requirement to show the object almost or entirely to its perimeter, whether over matted or floated. Fulfilling this demand may mean placing the hinges opposite the image field. This is inherently risky.

Hinges work in pairs, as evenly divided as possible. There is no single weight of paper or one size of hinge. Small, flat objects on stable stock are easily mounted with a pair of lightweight hinges under 1" wide. Large, heavy, handmade papers will require multiple pairs of heavier, wider hinges.

Look for any cockling of the object—often very subtle, it may be perpendicular or parallel to the top edge. If the perpendicular cockle is pronounced, it is important to attach the hinges to the area prone to the most natural contact with the mount. The cockle will never be defeated; the sooner you learn to accommodate it, the better.

Setting Hinges

This is a very simple process. It is not difficult to control and will produce a strong, durable hinge. It basically involves manipulating moisture and controlling pressure. Of course, in this simplicity is a great complexity. The hinge must bond with the object, the fibers gently laminating without saturating the paper you are attempting to protect.

The application of the top hinge is basically the same for matted and float mounts:

Place the object face down on a clean, firm surface. If necessary, gently weight the work so it will not easily move.

For most paper-based objects, hinges may be set using a continuous blotting action, carefully controlling moisture and application pressure. Warm, dry blotter cards (30-100 pt. cotton) approximately 3" x 5" are all that are required to set the hinge. A few seconds in a microwave will dry the blotter cards. If not using directly, promptly seal the cards in a plastic bag to keep them as dry as possible; the card should have a lower humidity than the surrounding environment.

Two 3" x 5" pieces of mat board are used to hold the hinge while applying paste.

The hinge is placed between the mat cards, offset so that about 5/16" of the tab, including the feathered edge, is revealed.

The paste is smoothed out, and the brush is thinly coated. The recommended brush for paste application is a clean and completely dry straight-edge bristle brush, ¼" to ⅜" wide.

Paste is applied in a short, direct stroke from back to front, being careful to keep the torn-edge fibers straight and evenly coated. Work quickly and evenly to paste the hinge.

How fast the hinge will dry depends on the humidity of the immediate area and how much water is in the paste. Wet paste does not form an effective bond and the extra moisture could cockle the object, so it is important to set it at the right moment. If the paste is the least bit shiny, it is wet; at the moment it dulls, it should be applied.

Remove the hinge from the card, holding it by the top edge, and gently drift the hinge down to the proper location and align it to the object's edge. Laying a hinge and laying a sheet of gold leaf are very similar in movement and concentration, both requiring a quick, accurate placement with an immediate and delicate tamping and blotting. It is not a lick-and-stick stamp.

The actual edge of the object is rarely pasted to the hinge. Instead, a small amount of space is usually necessary before the paste begins. New work is usually not a problem, but vintage works are probably in some state of compromise. Deckled edges, real or faux, should not be pasted. Deckled edges are the uneven and thinning edge of a handmade sheet, formed by pulp seeping under the edge of the deckle (removable frame) during manufacturing.

Using a warm, dry blotter card, lightly set the hinge to the object with even pressure. The idea is to lightly wick the moisture to the blotter card while applying just enough pressure to bond the paste. The area of the card under your palm brushes the hinge into the paper, slightly abrading and feathering its surface. Turn the blotter frequently and use a new one as needed. Let the bond form and the fiber lightly integrate.

As the weight of the hinge paper increas-

Cutting the pass-through slot with a leatherworking tool, the slot cutter, which is available in a variety of widths.

es, absorption rates will differ, as does the pressure to properly bond. The paste in the center of the hinge will tend to dry slower, therefore increasing the chance of excess moisture transfer into the object. This is controlled by applying slightly less paste to the center of the hinge. A heavy object with a heavy hinge will often benefit from tamping to set the hinge. Using a ½" diameter stencil brush, hold it at a right angle to the paper and gently tamp the hinge onto the object.

Not all hinges need to spend time under weights. Thin papers can dry very quickly, and weights do little but trap moisture. For those that do need a weight, not all hinges should be set under the same amount. Use the least amount possible to eliminate the potential of embossing. Like hinging paper, there is no universal weight. Round lead shot weights, sealed in smooth synthetic or traditional untreated leather, are standard for hinging. They can be safely stacked to create the proper amount of evenly distributed weight.

A heavy paper will generally require some pressure for a brief time, often only while the rest of the hinges are being set, and the weight will help hold the object in place. The weighted area should extend beyond the hinge, but not onto the back of the image field, to help even out the pressure. Weights require attention—check frequently for any sign of cockling, and when checking, rotate or change the blotter as needed.

Additional Considerations for Float Mounts

Contemporary designers use this technique to allow an image to stand alone for its full visual impact, to display a deckled edge, or when there would be a loss of important visual information if over matted. Float mounts are simply viewed differently than matted works; the edges of the object often become a focal point. The technique is primarily for paper-based works mounted with paper hinges on the back and presented so the image appears to hover, or float,

unrestricted on or above the mount board.

For centuries, the western tradition was to print to or trim the print to the image edge. When galleries began formally exhibiting prints in the mid-nineteenth century to show the entire piece, the images were "tipped in" to the mount or mat. The technique originated in the bookbinding practice, which meant to permanently mount an image into a book by applying adhesive to only the image's corners, or tips. Bound artwork spends most of its time in the tight, dark confines of the closed book. When continually exposed and at the mercy of gravity, the tipped-in print has proven temporary: the mount routinely fails, and an inordinate amount of twentieth-century preservation text was devoted to failures from such mounts and how to conduct the necessary repairs.

With a float mount, the supportive pressure provided by the mat is gone, so the hinges that secure the work to the mount must be substantial. The hinge used for float mounting is a modified T-hinge that passes through an opening in the mount board. It is usually about 1 ½" wide—the same as a standard hinge—but much longer. The hinging technique allows for some movement when there are changes in humidity.

The pass-through slot, not a slit, needs to be able to swell without placing pressure on the paper hinge. Avoid pinch points that might inhibit the free movement of the hinge.

When designing a float presentation, it is important to consider the inherent side-to-side movement or pendulum action that may occur and design the mount to prevent possible damage. The heavier the substrate, the more momentum it develops, even with a slight tilt. Vertical mounts are more susceptible to this than horizontal ones.

The Pedestal Float Mount

A platform of appropriate mount board, often cotton rag over foam center board, is cut slightly smaller than the image and positioned behind the art to raise it so the object appears to float freely. This platform is bonded to the mount with a pH-neutral adhesive. The hinge is passed over the upper edge of the platform and through a slot in the mount board and is cross-tabbed to the back. Passing the hinge through the mount back is much more accessible than burying it behind the platform—a technique we no longer recommend. It is often necessary to bottom hinge the object to prevent it from curling forward, especially if there may be

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a static attraction between glazing, medium, or substrate.

Side and Bottom Hinges

Most float mounts will require at least one set of side hinges. Side hinges are usually made of the same paper as the top hinges, with the chain lines perpendicular to the image edge. The most common pattern is the accordion-fold hinge, also known as a Z-hinge. It may be surface mounted or a pass-through.

These are positioned on the vertical edges to limit extreme side-to-side movements. Place the first side hinge about 20 percent of the overall height up from the bottom. Then evenly divide the remaining distance to the top of the image with at least one hinge every foot.

Bottom hinges are not generally recommended; however, they may be needed from time to time to control a horizontal cockle or outward roll on heavy sheets of paper. When this is the case, use pass-through slots rather than surface mounting. Pull and secure the hinge toward the center of the mount.

Book Hinging and Cross-Tabs

This traditional procedure is to join the mount and mat with pressure-sensitive linen tape along the longest edge, left or top, to form a book hinge. The front and back must align perfectly and the tape must not make contact with the object.

The tabbed object is placed on the mount and the object is aligned with the mat opening. If needed, weight the work to hold it in place. Then the cross tabs are installed.

Cross tabs hold the hinge in place. They are usually about two-and-a-half times as long as the hinge is wide. They may be made of the same or a different weight of hinging paper and attached with hinging paste. Usually about ⅜" of the top of the hinge is covered.

The cross tab for a pass-through mount is basically the same, except on the back. In this application, pressure-sensitive tapes are very handy and are frequently used for float mount cross tabs. If a traditional paper tab is to be used, a removable pressure-sensitive is often used to temporarily hold the tab during paste up.

Although we try our best to avoid hinging by using perimeter mounts when appropriate, the increasing popularity of float mounts requires hinging expertise. **PFM**

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Paul is an internationally recognized master framer and industry historian with more than 30 years of hands-on experience. His work is found in public and private collections in the Americas, Europe, and East Asia. Paul is the founder of Art Preservation Resources, a consulting and training organization working with fine art preparation professionals, businesses, and institutions worldwide. He is the author of numerous industry articles, procedural manuals and essays, and he lectures on fine art and framing at The National Conference in Las Vegas. He is also the author of "Framing Works of Art on Canvas," published by PFM Books.