SEQUENCE OF OPERATIONS

1. Inspect and assess the deterioration of the textblock and the binding. Think ahead about the major motive of your work: to make the book usable and durable without losing the feel and handle of the original. Try to avoid adding any stress to the opening or the flexibility of the binding.

2. Generally, the textblock should be removed from the case by cutting along the joint edge. If the ends are intact, lift them off of the textblock and cut along the joint.

3. Clean off the spine, remove all deteriorated glue, and check the sewing structure. If the spine lining and spine of the textblock look sound the old spine lining may perhaps be left intact.

4. Textblock consolidation can run the gamut from resewing to reinforcing weak sewing or strengthening the first and last signature. The type and condition of the textblock will usually determine the options.

5. Attaching original flyleaves or adding new ends are options that will vary from book to book. For joint attachment I generally prefer Japanese paper combined with the spine lining of linen. Attachment of endpapers to the textblock will again be determined by the condition of the textblock; e.g., if the paper is brittle, the Japanese paper hinge is wrapped over the shoulders of the spine. See Figure 1.
TIPPED ON ENDPAPER
Japanese paper
under tipped-on endpaper

SEWN ON ENDPAPER
Japanese paper
over original endpaper

Thickness of Japanese paper
is exaggerated for diagrams

Figure 1
6. Consolidate the spine with either a paste and PVA mix or with reversible PVA. I usually attach the linen prior to reshaping the spine because it helps to protect weak paper from the backing procedure. *Hammer softly.*

7. Attach the second lining to assist in holding the shape. Generally, I dampen the second lining very lightly before attaching it. By doing this, it will be more taut when dry.

8. Tackle the case now. Trim off all excess material on the spine edge of the boards. Cut the original case about 1/32" from the spine edge and remove excess. Lift the original cloth from the board approximately 3/4" from the edge.

9. If desired, lift the endpaper approximately 3/4" from the spine edge.

10. To alleviate the lump from the new spine strip that sometimes shows under the cloth, I remove excess board by using masking tape to evenly remove a small amount (generally about 3/8" from the spine edge). Use the handy gadget shown in Figure 2 to hold the cloth out of the way while you are working; this tool also prevents the cloth from creasing where you have lifted the material.

11. Cut the spine lining for the case; I sometimes use blotting paper as it is more easily shaped.

12. Select Japanese paper to match the color of the original cloth and attach it to a piece of linen. Sometimes dying the Japanese paper will produce a better color match. After trimming the paper to size, coat the paper with Klu-Cel G consolidant to harden its surface.
13. I generally attach the new Japanese paper/linen sandwich to the front board first, then attach the spine inlay in exact position. Remember that the gap between the spine and the board varies depending on whether it was originally a tight joint or a French joint.

14. Cut the new spine sandwich to exact width and attach it to the back board.

15. Apply adhesive to a polyester film strip, slip the strip beneath the original cloth, and rub it down. Then, slide out the polyester film. Tap the cover down carefully.

16. Case in by using new ends or by fixing the linen hinge.

17. Attach the old spine and rub it down carefully.
MINIMAL INTERVENTION FOR PRESERVATION
OF 19th AND 20th CENTURY COLLECTIONS
Don Etherington

SPLIT JOINTS ON LEATHER BINDINGS

Faced with the problem of determining the best use of the conservation dollar, preservation administrators are always looking for ways to minimize the labor-intensive procedures that have been prevalent over the last fifty years. While at The Library of Congress, I was instrumental in developing the concept of "phased preservation", a technique that protected, rehoused, and supported material en masse with, at times, some minimal treatment.

In pursuing this philosophy over the last twenty years, I have developed various techniques that are used extensively throughout the United States. The latest technique is to use Japanese paper for re-attaching or supporting the weakened joints of leather bindings, particularly of 19th and 20th century vintage, on books no larger than 10" high and 1-1/2" thick.

The procedure is relatively simple and has proven particularly effective on books that have a tight spine that would generally have required skilled expertise and extensive time to execute. Anyone who has contemplated rebacking a tight spine, especially on a thin book with raised bands, will appreciate the problems associated with this type of work.

Many research libraries have, in their special collections, large groups of 19th and 20th century bindings bound by French and English trade houses. These bindings exhibit detached boards or weakened joints, both inside and out. This is caused by poor quality leather at the outset and by the trade practice of paring leather very thin for aesthetic tastes and ease of working. Usually, the spine itself is intact and the sides of the boards are in good condition; it is only at the joint that the damage is apparent.
To alleviate the time-consuming practice of lifting the leather spine and the leather from the sides of the boards, I have used a Japanese paper strip, which is placed over the joint and extended slightly over the spine and the boards. Another strip of Japanese paper serves to strengthen the inside joint. The paper used for the outside is a very strong solid-dyed paper with good tear strength; for the inside, I use Japanese paper to match sympathetically with the endpapers or textblock. If it is necessary to match the original color of the leather cover, some dying of the colored paper can also be attempted.

Ideally, the dyed paper as produced by the manufacturer can be used as there are some thirty-five or so colors to choose from.

The strips for the inside are attached to the textblock before attempting the outside repair. This is to make sure that allowance has been made for ease of opening at the joint. The other portion of the inside hinge will be attached to the board at a later stage.

A strip of Japanese dyed paper is cut to size using a technique that allows for a slightly feathered edge. I use a sharpened bone folder dipped in the water jar where the brushes used for PVA adhesive are standing. This mixture gives a well-defined line for tearing the paper strips. The strip is generally no more than 1/4" to 5/16" in width, extending about 1/2" longer than the boards.

The boards are placed in position on the book and a weight is placed on top. Use paste, or use a mixture of rice starch paste and reversible PVA to attach the strip across the joint, rubbing down lightly with the palm of the hand so that the paper sinks into all the undulations and across the edges of the raised bands. The feathered edge of the strip blends into the leather nicely. Let dry for an hour and then turn in the strip at the head and the tail. In most instances, I turn it down only to the height of the square of the board and then cut it off by the edge of the endpaper.

The Japanese paper strip is now attached to the inside of the board. This attachment can either be over the original endpapers or slid beneath them. I generally let the structure of the book indicate what is possible. Obviously, attachment under the original endpapers (both the free-fly end and the board paper) is a more sophisticated method. In general, if the need to lift the inside board paper is purely cosmetic, the added cost should then be evaluated carefully.

After the book has been repaired, the leather and the repair strip are given a light application of a surface coating. This wax coating is available from the Leather Conservation Centre. It is a wax plasticised acrylic polymer SC6000 which seems to enhance the look and feel of the repair. If the book is valuable and heavily gold tooled on the spine, I sometimes remove areas of the strip that may be covering some of the tooling, and lift any original leather labels along the
extremity, slipping the edge of the Japanese paper underneath. These techniques are more a visual improvement than anything else.

If a leather binding exhibits red rot, treat the leather with Klu-Cel G, a consolidant produced by the Hercules Chemical Company, and obtainable from the usual conservation supply houses. This treatment is necessary, as books with friable red rot will reject the Japanese strip.

For books that are broken only at the joints, the rationale for making repairs with a strong Japanese paper instead of with a pared strip of leather comes down to one word: "strength". The application of two strips of Japanese paper, one outside and one inside, tends to create a strong board attachment to the spine, and is a method of minimal intervention with the original binding, which normally takes about an hour.
Bibliography of books and articles on 19th century cloth bindings and cloth grain.

All of the following books were selected from a bibliography prepared by Sue Allen for her Rare Book School (Virginia) course “Publishers' Bookbindings, 1830-1910”.


Gaskell, Philip. A New Introduction to Bibliography (London: Oxford University Press, 1972; corrected ed. 1974; reprinted several times)


More information:


Library Company of Philadelphia Website (will provide links to Conservation Department site)
www.librarycompany.org

E-mail questions and comments to Andrea Krupp and Jennifer Rosner,
Bindery@librarycompany.org.
Each student should bring to the class at least two leather and two cloth bindings in need of repair. Text block should be sound. If this is not possible, Hollander's will supply you with appropriate books for repair at a nominal cost of $10 per book.

Required tools, materials and equipment:

- Scalpel handle (#4) with blades (#23 & #25)**
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**Items marked with a double asterisk are available for purchase at Hollander's.

Hollander's provides some materials that are included in your course fee (enough for you to complete your two required bindings). These include conservation mat board, klucel G, SC 6000 wax, ethanol, Renaissance wax, PVA Jade 403, and rice starch paste.

A selection of various materials and tools is available for purchase at Hollander's during class; check out their website.
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