Conservation Binding Guidelines for Recasing

The following Guidelines are designed to act as general specifications and procedure instructions for the recasing of books. In general, the books will have sound paper, good sewing, and will be of lasting value. For this reason, the methods and materials are selected for their reversibility and non-damaging nature.

The guidelines are divided into three main areas: Preparation, Forwarding, and Finishing. The descriptions of processes apply whether the work is done in the Library or by a commercial binder. It is expected that exceptions will be dealt with in the spirit of the guidelines and that they will be applied sensibly.

1. Preparation. This category includes all processes up to, and including, gluing up the spine, and consists of seven basic steps. It is most important that the instruction slip be followed, particularly in regard to the saving of inscribed fly leaves, bookplates, etc. However, if in doubt, save it!

Collation.
Before proceeding with the removal of the original binding structure, carefully collate the book to ensure that it is complete. Check the beginning matter (half title, title, dedication, preface, table of contents, etc.) up to page arabic number five, then commence to "count off" the leaves in groups of five by fanning, each group beginning with a page number ending in five (e.g. 5-15-25-35...). A missing leaf will become immediately evident. Separate plates should be checked by list or table of contents. During the collation process, the eye should be alert for tears or missing corners, which should be marked by insertion of a japanese tissue strip.

1.2. Removal of Outer Binding.
The original binding should now be cut away by carefully slicing through the open board hinge with a knife. While most endsheet structures should be discarded, care should be taken to retain notes or signatures and non-brittle marbled fly leaves. The loose boards should be placed back on the book and any loose backlining material pulled off dry.

1.3. Page Repair.
The tears noted during the collation process should be repaired at this stage before the linings are soaked off the back (see next step). Two methods of repair may be used: wet, which involves the use of japanese tissue strips and a "wet" adhesive such as paste or methylcellulose; dry, which involves the use of L.C. heat-set tissue. Generally, the wet method should not be used if the paper is porous as a result of poor sizing, as a repair is likely to produce a ring stain or "tidemark." It is most important that page repairs be done before the back linings are removed, as the sewing may split during the repair process if the back is unsupported.
1.4. Removal of Back Linings.
Making sure that the loose boards are firmly in place, a damp sponge is dabbed onto the backbone to thoroughly dampen the linings, followed immediately by a generous layer of inexpensive paste such as Stek-O. After the paste poultice has sufficiently softened the linings, they are peeled away with a blunt knife, which should also be used to scrape away as much of the original adhesive layer as possible. Great care must be taken to avoid damaging the sewing structure, particularly if the cords or threads are raised. When clean, the sponge should be employed to smooth out the back surface. At this point, it is important to make sure that books are pushed into the correct shape to allow them to dry in an even, square condition.

1.5. Leaf Consolidation.
Loose fly leaves should now be attached by hinging with Japanese tissue. It is important to ensure that the first and last sections are firmly connected to the text block; if loose, they, and the fly leaves, should be lightly overcast through a new single endpaper leaf (see Overcasting, Manual Guide No.26). Adhesive should be paste, methylcellulose, or mix (see Adhesives, Manual Guide No.29).

1.6. Endsheet Attachment.
The single folio, strip-lined, acid-free endsheet should be attached by laying a thin line of adhesive (approximately 2 m/m or 1/16") along the back edge with a guard sheet, and rubbing the endsheet down into the backing groove with a folder (see Tipped-on-Endsheet appendix Manual Guide No. 13). It is important that the adhesive line not exceed or equal the width of the Japanese tissue hinge. Excess endsheet is carefully trimmed to the book edge.

1.7. Gluing Up.
The final preparation step is the application of an adhesive layer to the backbone. To ensure flexibility (though with some loss to reversibility), a PVA mix may be brushed on, ensuring that loose threads or loops from overcasting are firmly secured. Information on size, color, etc. must now be pencilled onto the front endsheet as a quick guide for the later forwarding processes (see attachment).

Variations to the basic steps are usually the result of minimal sewing breakage and/or the need to provide additional endsheet reinforcement for large and heavy books.
2. Forwarding.
This category includes all the processes from rounding and backing up to, and including, case making. In all forwarding operations, it is useful to remember that many books published before 1850 are not "square," that is, the edges are not necessarily parallel or even. As this category of binding precludes the trimming of edges, some accommodation should be made in fitting and cutting.

2.1 Rounding and Backing.
Because of the tenuous nature of some of the original sewing structure, it is most important that rounding and backing be done with great care, preferably by light hand rounding and rollerbacking. If appropriate, the back may be lined with stretch cloth before backing to avoid thread breakage.

Rounding should be accomplished by gently shaping the book into its original round with light taps of the hammer. Backing should produce a shoulder similar in depth to the original, but no higher than the thickness of the cover board. The shoulder should not be too acute to avoid breakage at the joint.

2.2 Endbanding.
If endbands are to be sewn into the book, they should be sewn at this point.

2.3 Back Linings.
All books in this category should have both first and second linings, irrespective of thickness. The first lining should be a cotton stretch cloth (similar to Holliston Mills unbleached stretch cloth), one centimeter (3/8") shorter than the book, to extend no more than four centimeters (1 1/2") onto each endsheet. The cloth should be glued with PVA and set well into the joint.

The second lining should be kraft paper (such as Process Materials Archivart Wrapping Paper) the same width as the back and same length as the book height. As with all lining and covering materials, the machine direction (or grain) should be parallel with the joint. The second lining should be glued with PVA and adhered firmly to the back.

2.4 Cutting Boards.
The Davey Red Label boards should be cut on the correct grain, and should be appropriate in thickness to the height of the shoulder and thickness of the book. In general, .074" and .098" will serve for most books. As previously noted, older books may not be square, so boards may have to be cut to accommodate an uneven edge. Although squares should be appropriate to the size and thickness of each volume, they may be standardized at 2.5 millimeters (3/32"). This means that each board should be .5 centimeter (3/16") longer than the height of the book, thus a book 33 centimeters (13") in height, would have a board 33.5 centimeters (13 3/16").
2.5 Cutting Cloth.
The buckram of choice is starch-filled (similar to Joanna Western Mills D-Grade buckram). The colors should be as specified according to sample book, and the size should allow for a 1.5 centimeter (5/8") turn-in. In cases of unusually thin volumes, a bookcloth rather than a buckram will be specified.

2.6 Covering.
The case should be made in the normal way, but the gauge should be checked to ensure that the standard dimensions are appropriate to the book. If necessary, the glued cloth should be drawn onto the positioned boards to ensure an accurate fit.

Corners should be cut at a 45° angle rather than made "library style", and the squares should be uniform at 2.5 millimeters (3/32") on all three edges. The joint should be even, appropriate to the square size, and (eventually) well set-in.

If endbands have not been sewn, a reinforcing strip (string or paper core) should be placed at the head and tail of the case, the buckram set evenly around it.

2.7 Finishing.
All lettering should be in gold and should follow the general guidelines set forth in the manual guide (see Lettering Books and Boxes, Manual Guide No. 23).

When the case is glued down, the squares should be even, and care taken in opening the endsheets after pressing. Any glue spots should be removed from the cover and edges. Original bookplates and other materials set aside to be saved from the original binding, should be replaced in the book.

APPENDIX

ENDSHEET INFORMATION FOR ROUTINE WORK
To avoid the need to repeatedly consult the binding instruction slip, and to alert oneself and others to oddities, certain relevant pieces of information should be written in soft pencil on the outside of the front endsheet. This should normally consist of: size, color and type of cloth; number of volumes and location of slip (if part of a set); whether Hollow; and various cautionary notes.

Size. Indicated at the top right-hand corner, the size (the height of the book plus 0.5 centimeters for books with untrimmed edges) should be indicated in centimeters. Thus a book with pages measuring 23.0 c/m would have 23.5 c/m written on the endsheet, which is the actual size of the cover board.

Color and Type of Cloth. The appropriate cloth should be indicated by code (see current chart) at the center of the endsheet. If color and type of cloth is immaterial, only a check mark need be made.
Multi-Volume Sets. Only one instruction slip is normally supplied for a multi-volume set, the total number of volumes sent for binding being indicated in the appropriate space on the slip. The number of volumes should be written on the endsheet at the center below the color cloth code, and enclosed in a circle. The presence of the slip in one of the volumes of the set should be shown by writing the work "slip" at the bottom of the endsheet.

Oxford Hollow. If the size and weight of the book merits the added reinforcement of an Oxford Hollow, the work "Hollow" should be written, both as a reminder in forwarding and an alert for the finisher.

Cautionary Notes. Information warning of peculiarities, such as "Fragile paper" or "Map to be Added", should be written at the bottom of the endsheet.

An example of an information-bearing end sheet is shown overleaf.

These notes indicate that the finished size of the book is to be 28.5 centimeters; that it is to be covered in B 6 cloth; it is on of ten volumes in process; this particular volume contains the binding instruction slip; that the backbone must be reinforced with an Oxford Hollow.

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