Todd Pattison

## **Outline Summary**

- 1. Remove any spine cloth still attached to the volume.
- 2. Lift cloth from boards without trimming.
- 3. Remove old spine linings but keep any board attachment.
- 4. Reattach any loose pages, signatures or treat entire text block if necessary.
- 5. Round the text block as necessary.
- 6. Line the spine with an extended Japanese paper spine barrier that extends onto the boards to attach or consolidate board attachment.
- 7. Create a tube and attach to spine to simulate hollow of case binding.
- 8. Apply Japanese paper finish layer that extends beyond edges of spine and onto boards.
- 9. Turn in spine ends.
- 10. Re-adhere lifted covering cloth on boards. Remove previous spine stiffeners on original spine cloth and apply spine piece to binding.
- 11. Repair interior hinges using Japanese paper and starch paste.

This technique is most appropriate for the treatment of 19th century publishers' cloth bindings that retain a majority of their spine cloth. It can be used on volumes with or without detached boards or a combination of one board attached/ one loose. In this procedure, the original endpaper construction will be retained; it does not involve sewing on new endsheets to attach the repaired binding. The goal of the technique is to save as much of the original binding materials as possible while creating a sympathetically repaired binding in a minimal amount of time. This makes the procedure an option for production oriented general collections conservation labs.

(1) The first step in the process involves removing any parts of the spine cloth that are still attached to the volume and (2) then lifting the cloth from the boards to allow for the repair material. Do not trim any cloth from the boards and retain as much cloth as possible from the hinge area of the binding. Lift the cloth on the boards back far enough to enable the cloth to turn back in a gentle curve without creasing or causing damage. In most cases, it is better to lift more cloth instead of less to avoid having the cloth folded back at too sharp an angle. For bindings that still have boards attached, a waste piece of binders board can be placed between the text and cover board to lift it above the spine to assist in lifting the cloth. Any stamping to the boards may make the cloth more difficult to lift in those areas so special attention should be taken there.

(3) Old spine linings should be removed with methylcellulose when appropriate. For volumes where the boards are still attached, remove only secondary linings while maintaining the lining that connects the boards to the textblock. Placing the book in a finishing press and taping back the cloth can be useful to minimize the chance for getting methylcellulose on the cloth if either of the boards is still attached.

**Please note:** (4) While paper repair and reattaching loose pages/signatures is not covered in the demonstration or write-up of the technique, this should be done before rounding and backing. In fact, the entire textblock can be treated and resewn if that is required – it will still be possible to perform the same rebacking procedure.

(5) If the text block still has a board attached, round and back the spine with fingers and/or a bone folder while the spine is still softened from removing the secondary lining. If the text block is free and requires shaping, place in a job backer or finishing press and round and back with fingers, folder, or

hammer - whichever is required. If the text block does not hold its shape, leave it in the job backer or place it in a finishing press while lining.

(6) Once the book has been rounded, the spine will need to be lined. To improve the efficiency of the repair, the spine lining and board attachment or consolidation are done at the same time. Position the original cover boards on the text block if they are not already attached. Carefully place the volume into a finishing press, maintaining the alignment of boards and textblock.

For the primary lining of the textblock a medium weight Japanese paper should be used. The thickness of the paper may vary depending on the size and weight of the volume being repaired. The Japanese paper should be slightly shorter than the height of the textblock and should be about two inches wider than the spine. This lining will not only provide a barrier for the textblock but will also act as the primary board attachment or a consolidation of an existing board attachment so it will need to be wide enough to extend over the spine onto the boards by at least one inch.

Gently turn back the cover cloth on the boards and restrain by taping to the finishing press. Paste up the Japanese paper and also lightly paste up the spine, joint area and exposed cover boards. In particular, the cover boards may be quite dry and the Japanese paper could have a hard time sticking to them if they are not first sized with paste. Adhere the Japanese paper across the spine and onto the outside of the cover boards, boning in the joints. Working it into the joint area is extremely important to achieve proper board opening. Allow the Japanese paper to dry completely before removing from the press to prevent the boards from shifting.

(7) To simulate the opening of a case binding, a hollow tube is attached to the spine before the final covering material is applied. Larger books may require additional spine lining before the application of the tube to provide more support for the sewing. The tube should be made from handmade paper whenever possible with the thickness of the paper being determined by the size of the book and how much you need to control the opening. The tube should be made off the book and applied to the spine with the single layer down and the double layer acting as the spine stiffener of the binding.

(8) Another piece of medium weight Japanese paper (depending on the size of the volume) should be used for the final covering. This piece should be slightly longer than the height of the boards to allow for a turn-in at the head and tail but should not be as wide as the primary lining. This will stagger

where the edges fall on the board to minimize bulk at one point. This lining provides another consolidation of the board attachment and acts as the finished binding layer wherever the original cloth is missing. Since some of it will most likely show when the repair is complete it will need to be color matched to the original cloth color at some point. This can either be done before application, after application but before putting down the original cloth, or as the very last step in the repair process. Paste up the Japanese paper and apply it to the spine and onto the boards, again paying special attention to working it into the joint area. (9) The turn-ins can be done before the paste has set up or after it has dried by applying a small amount of PVAc to that area and working it around the boards and spine edges.

(10) After the Japanese paper has dried completely the lifted cover cloth can be re-adhered using PVAc. This can be done by brushing out the adhesive on Mylar, inserting it under the cloth and pressing down to pick up a smooth, minimal layer of the adhesive. Work the cloth into place with a piece of Reemay or Mylar in between to protect the surface of the cloth. The cloth spine can be applied using the same technique. All remnants of the previous spine stiffener should be removed from the spine cloth, if possible, before applying it back on the volume.

(11) The last step in the repair procedure involves the repair of the interior hinge area. Since many endpapers on 19th century volumes are quite thin, fragile or even brittle, it often makes little sense to try and lift them. Instead, a fairly thin Japanese paper can be applied over the original endpapers in the hinge area to consolidate and repair the interior joint. This paper can be toned to match the original if the endpapers are colored. Best results are usually achieved by staggering two (or more) thinner pieces of paper rather than applying one thick piece. The hinges should be dried while the boards are open. They can be allowed to air dry or a tacking iron and Reemay or a hair dryer can be used to dry them quickly.

A final inspection should be made by opening and closing the boards several times to make sure that everything is well adhered and not likely to work up during use. If any cloth does become loose during inspection use a little PVAc to re-adhere those areas.

## Images:

http://www.flickr.com/photos/bookandtile/sets/72157608102976879/

Email: pattison@fas.harvard.edu