Syracuse University

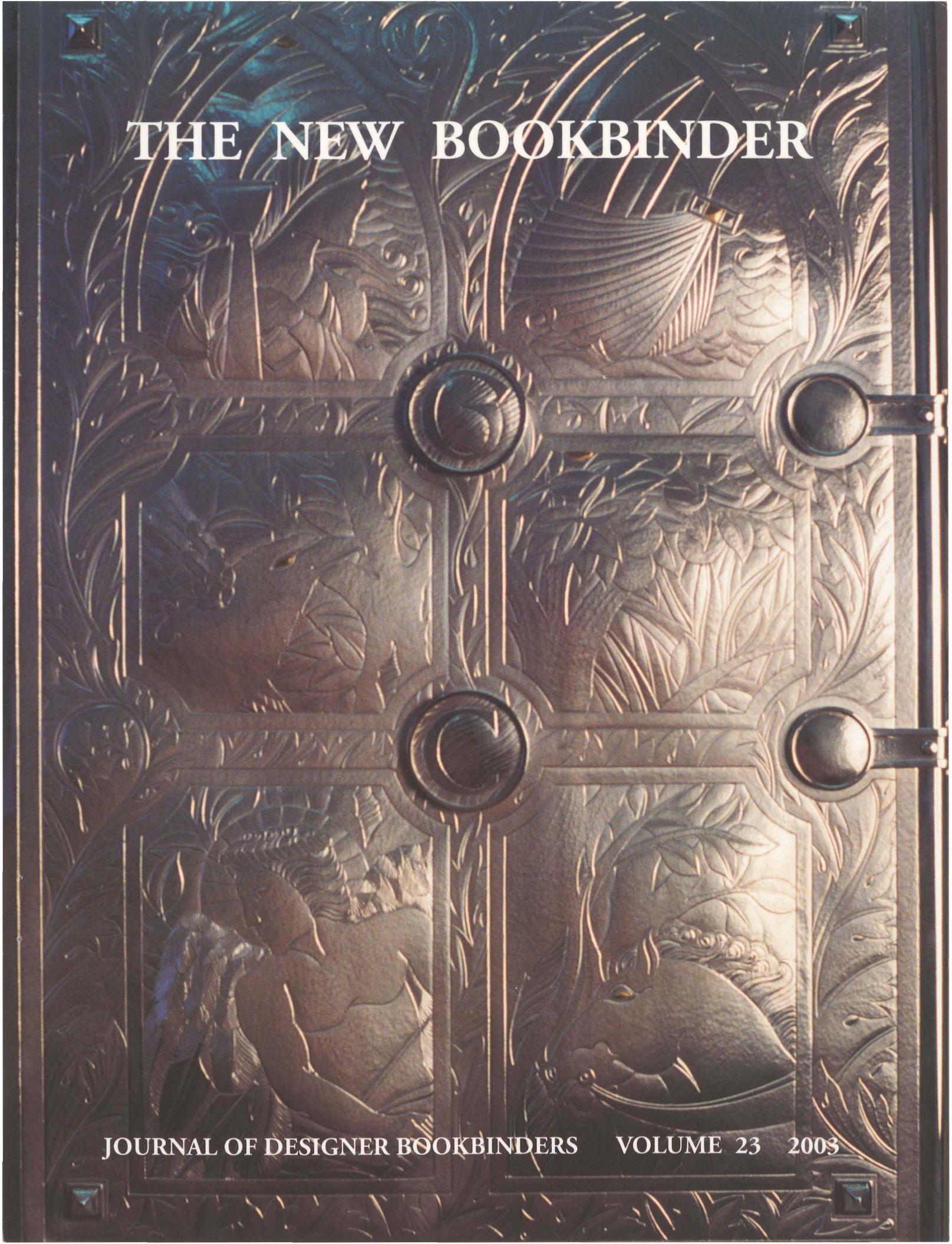
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2003

The Springback: Account book binding (German style)

Peter D Verheyen, *Syracuse University*
Donia Conn

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THE NEW BOOKBINDER

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Peter D. Verheyen, Donia Conn

The Springback:
Account book binding

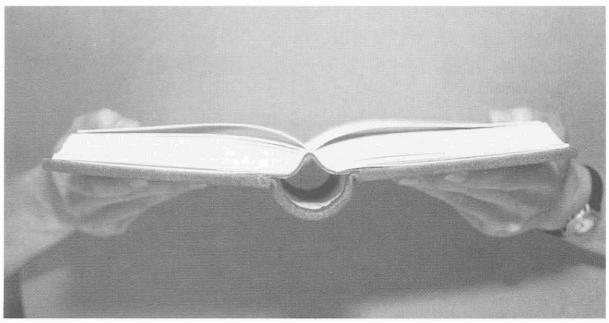


Fig. 1. Open book showing action of spine

These instructions for making a springback account book are derived from my notes as an apprentice at the Kunstbuchbinderei Klein, with adaptations over time. While my training is in the German tradition, the steps outlined should not be radically different from the English tradition. Although the technique was originally patented in Great Britain in 1799 by John and Joseph Williams,[1] the authors have found very few descriptions of this method in contemporary English language texts. Alex J. Vaughan describes the technique with great detail in Section II, 'Stationery Binding' of *Modern Bookbinding*. There is also an historical mention in Bernard Middleton's *A History of English Craft Bookbinding*, but it does not detail the steps required to complete a binding. The German binding literature, however, covers the springback quite thoroughly in such texts as Thorwald Henningsen, Paul Kersten, Heinrich Lüers, Gustav Moessner, Fritz Wiese, and Gerhard Zahn, and the technique is still required learning for all hand bookbinding apprentices in Germany. As a style, the springback is firmly rooted in the 'trade' binding tradition. The springback's robustness, and ability to lie open and flat for extended periods of time without unduly stressing the spine make the structure ideal for use as account and record books. These same qualities make it suitable for guest-books, lectern Bibles, and similarly used books. Regrettably the structure is rarely found on fine bindings or in contemporary book art, especially as the structure would be a suitable platform for many elements of design bindings. Its thick boards would provide a canvas for more sculptural or inset designs. With some minor modification it could also serve as a means of presenting pop-up constructions.

The mechanics of the springback are quite intriguing. Thin boards are attached at the fold of an unbacked textblock. A spine stiffener is attached to the thin boards upon which the 'spring' is either built up in layers *in situ*, as demonstrated in this article, or is attached premade. The latter, made of metal or moulded heavy cardboard springs, were also used, especially where springbacks were a large part of the business. The thick boards are then attached and the book covered. Upon opening, the thin boards push against the spring which then throws the text open, allowing the book to lie flat.

The authors hope that these instructions will inspire binders and book artists to learn more about the structure and experiment with it.*

Fold and press signatures.

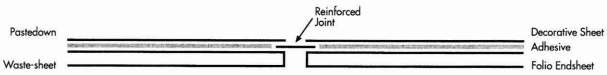


Fig. 2. Endpaper construction

Fold and cut four folios of plain endsheet paper and four single sheets of decorative or plain coloured paper slightly larger than the textblock to allow for trimming. Cut two strips of cloth or reinforced leather approximately 1 cm wide and greater than the height of your endpapers.

Glue up one of the strips of cloth (white or paper side if lined) and adhere two of the folios to the strip as shown, leaving a 1 mm gap between the folios.

Glue out decorative endpapers and put down, leaving as much of the cloth/leather strip exposed as desired.

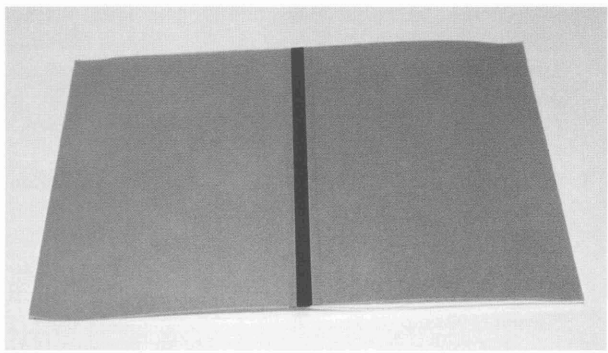


Fig. 3. Completed endpaper

Press and allow to dry.

Fold so that the decorative sheets are facing each other.

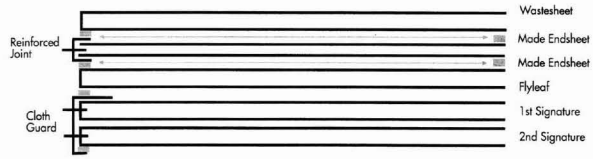


Fig. 4. Make-up of first and last signatures

Tip the cloth 'guard' to the bottom of the second and second-to-last text sections. Fold around first and last two text sections. Trim sections and endpapers to size and sew on tapes. (The textblock can also be trimmed after sewing.)

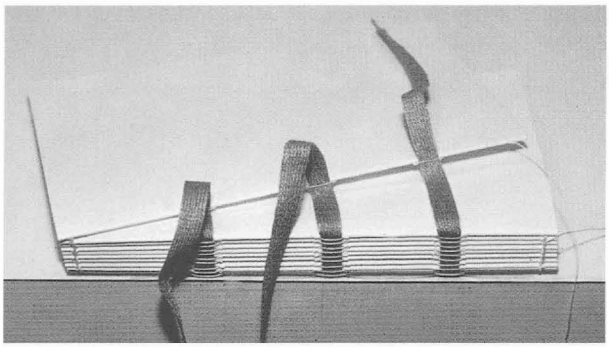


Fig. 5. Textblock during sewing

Sew on tapes. The final length of the tapes will be the width of the spine plus two times one-third the board width. Thread should be chosen so as not to introduce more swell than can be taken up during rounding (springbacks are not backed), which can be quite pronounced. A linked stitch is often used. The first and last leaves are waste-sheets and will be used later to attach the thin boards.

Square up the textblock and glue up the spine with PVA. Let dry. Round so that the shape is more pronounced than usual, and the swell eliminated.

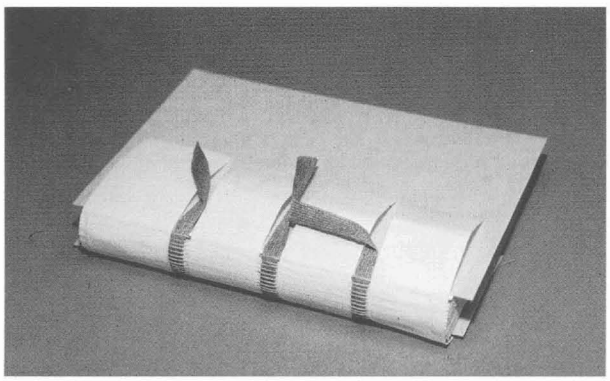


Fig. 6. Thin boards with tapes and spine linings

Cut the cloth for lining the spine strips the length of the tapes and the width of the space between the tapes and tape/kettlestitch. The spine lining can be linen, muslin [mull], or jaconette, and should be an appropriate weight for the size of the book. Glue to the spine with PVA.

The thin boards act as a lever and work with the spring to throw the spine upward.

Cut two pieces of board or chipboard larger than the final board size to allow for future trimming of the final square. I use Pressboard, a very dense, smooth board often used for simple ring binders etc., which I like for its rigidity. I prefer a 25 pt (0.75 mm) board, but use 1 mm if you can't find thinner. Glue out about one-quarter of the waste-sheet from the spine and attach the thin board about 1 mm back from the shoulder.

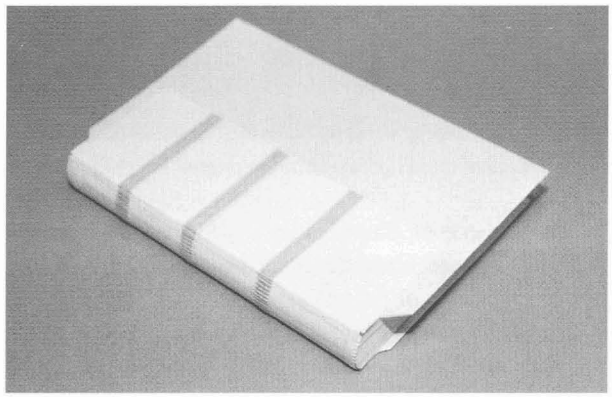


Fig. 7. Tapes and spine linings put down on thin boards

Apply glue to the top of the thin board and put down the tapes and spine linings so that they extend onto one-third of the boards.

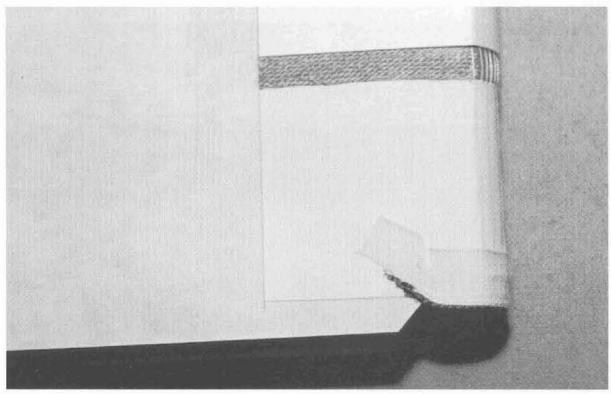


Fig. 8. Detail of endband and cut-out on thin board

Trim out the thin board to accommodate the endbands as follows:

Cut 1.5 cm from the shoulder along the head and tail edge of the textblock, then out at a 45° angle away from the spine to the edge of the board. While

machine-made or wrapped leather endbands are traditional for this style of binding, sewn endbands can also be used. In the latter case, do not trim out the thin boards, and sew the endbands as usual.

Glue made endbands onto the thin boards, angling below the board edge at the bevel. Cut a triangle out of the endband towards the bead to facilitate angling. Using a scalpel, pare down the excess to reduce thickness.

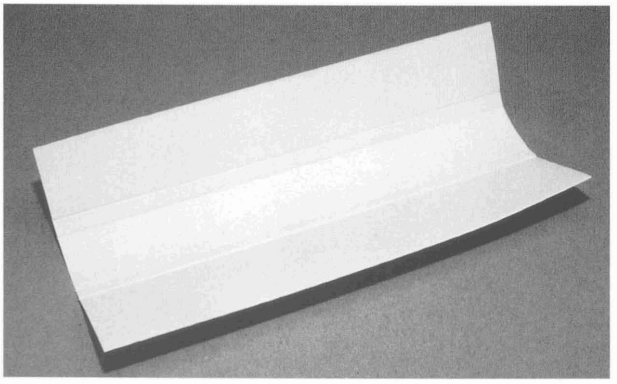


Fig. 9. Inside of spine stiffener showing creases

Cut a piece of 20 pt folder stock the length of the tapes and greater than the height of the book and line with hinge cloth or cotton muslin [mull]. Folder stock is a card, approximately 0.5 mm/400 gsm thick, we use the material used for making 'phase boxes'. The grain, as always, should be parallel to the spine.

This will make the spine stiffener and form the foundation for the 'spring'.

From the cloth side, round and crease the spine stiffener at the shoulders and 1 cm out from each of those scores.

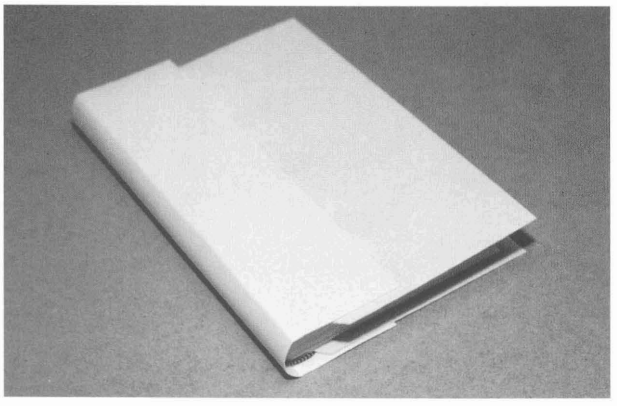


Fig. 10. Spine stiffener attached to thin boards

Glue up the cloth side of the spine stiffener from the edges to the 1 cm creases and place on the book. Give a quick nip in the press to ensure adhesion. Trim the tapes and cloth strips so they are even with the edge of the spine stiffener.

Fill in the remainder of the thin boards so they are even with the spine stiffener.

Levered out by the thin boards, the spring causes the textblock to throw itself upward upon opening.

Do not open book until after the spring has completely dried. The book will need to be opened in order to complete the turn-ins.

Determine the thickness of the 'thick' board. Account books generally had thicker boards, so a 96 pt board may be appropriate. The spring will equal the thickness of the 'thick board'.

There are two styles of built-up spring. The one described in this article has all the layers lining up so that the edge is perpendicular to the board. The other style builds up the spine in layers which are cut to the same width. As the layers are built up, the spring will develop a rounded edge which is mirrored by the board and smoothed by sanding.

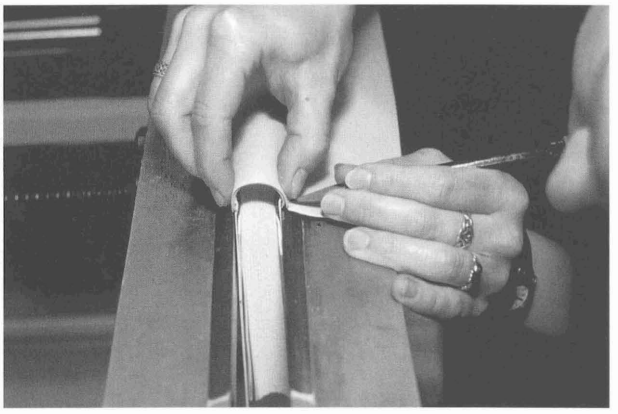


Fig. 11. Measuring width of spring layers

Using a pencil, mark 3-4 mm from the shoulder creases onto the boards. This will indicate the width of the first layer of the spring.

Using a heavyweight paper or thin folder stock, cut a strip to wrap the spine the width of the space between the marks (I use *Stonehenge*, a 'fine art' paper used for printmaking, a nice hard/dense 250 gsm

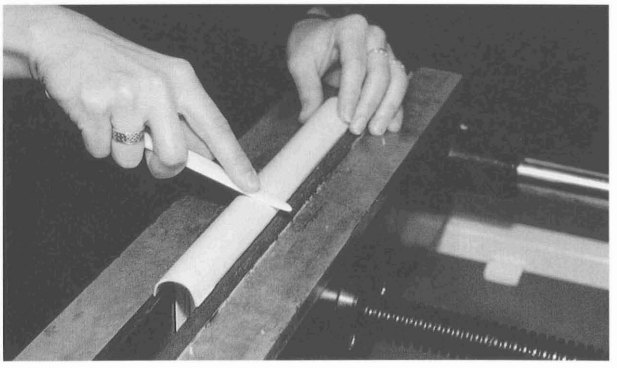


Fig.12. Rubbing down layers of spring

paper). With a folder, score the 3-4 mm on each side of the strip which will extend onto the boards. This will make it easier when rubbing down the layers of the spine. The length should be longer than the height of the boards and will be cut down later.

Dampen the strip and adhere to the spine with PVA making sure everything is even and boned down very well.

Build up the spring in layers, measuring each layer individually to ensure that they line up, and rubbing down well each time until the thickness of the thicker board used for the boards is reached.

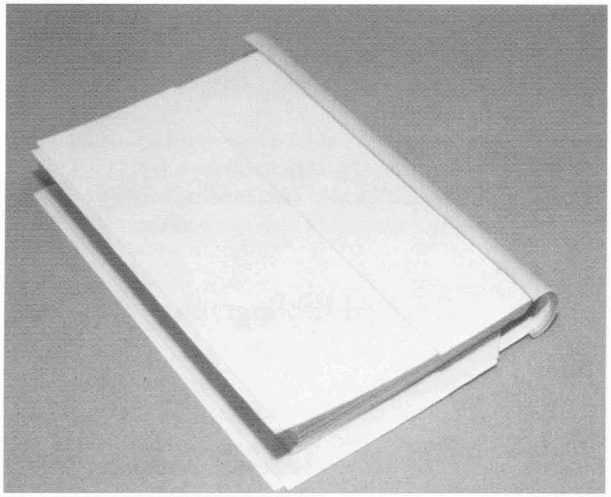


Fig. 13. Completed spring on book

Cut the two pieces of thicker board to be used for the boards to the size of the thin boards, less the distance to the 1 cm crease by the spring. At the 1 cm crease, adhere the thick board to the thin board with PVA making sure it is parallel to the spring on the spine. Place in the press and give a good nip.

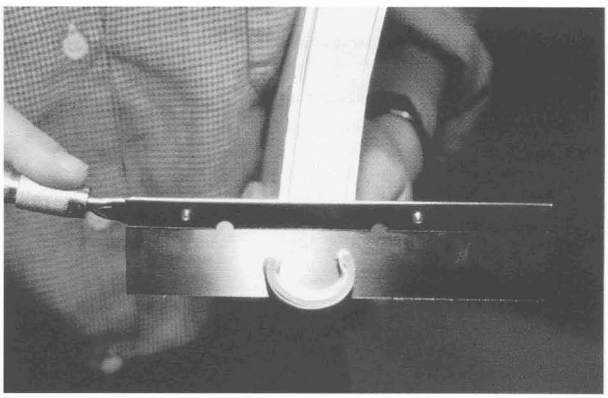


Fig. 14. Cutting spring ends

Trim the boards leaving an appropriate square. Using the boards as a guide, cut the ends of the spring with a fine-toothed saw and lightly sand edges.

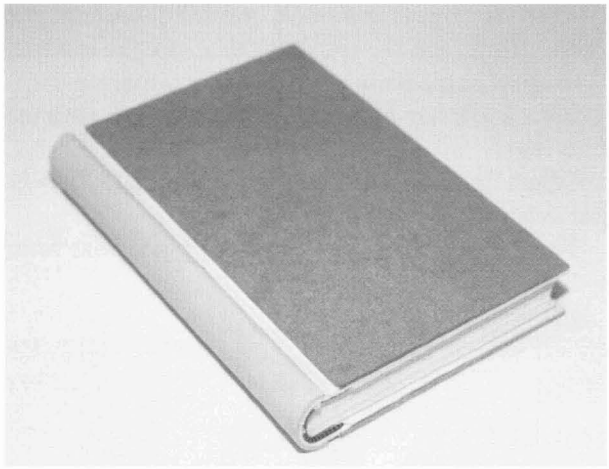


Fig. 15. Book after trimming of spring and squares

Cut the cloth or leather to size. If cloth is used, it should be an unsized cloth such as linen, moleskin, or denim to make it easier to work the turn-ins. Cloth can be left natural, or coloured with acrylics or fabric dye. With unsized cloth, it may be necessary to apply the adhesive to the spine and boards rather than to the cloth. The covering process will be similar to other books bound 'in-boards'.

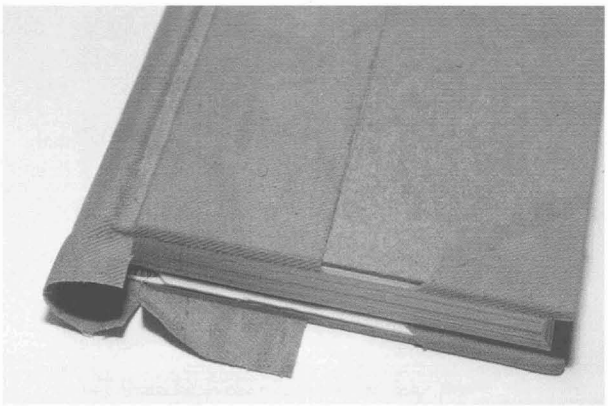


Fig.16. Detail showing cuts to covering material at spine

Tear off the waste sheet that initially held the thin boards and sand smooth.

Adhere the material to the spine first, then work into the grooves and across the boards. Cut strips of board to fit and press to ensure good adhesion in the groove. If working in leather, take precautions so as not to crush the grain. Take out strips, and let dry under light weight.

Next, make an incision into the covering material about 1cm from the shoulder. The incision should stop slightly more than a board thickness away from the edge of the board to allow the material to be turned in.

Carefully open the book, working towards the centre. Turn in at the spine, making sure the material is smooth, particularly under the spine stiffener.

Turn in the remainder of the head and tail, then the fore-edge.

When dry, trim out. Fill in as appropriate. Finally, put down the paste-down/boardsheet.

Finally, carefully leaf through the book from front to back, and back again.

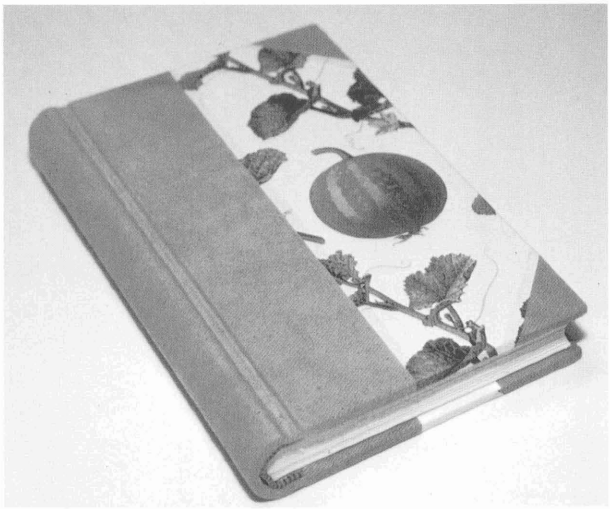


Fig. 17. Completed full cloth binding

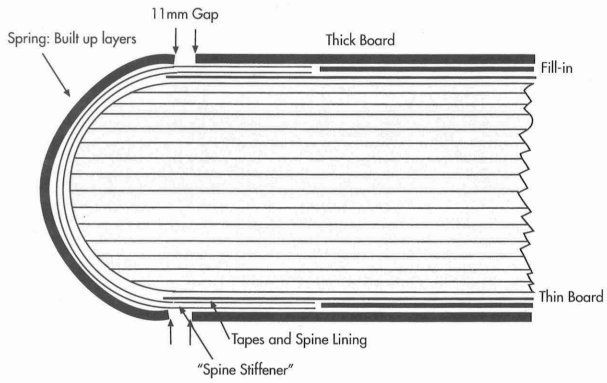


Fig. 18. Cross section showing make-up of boards and spine

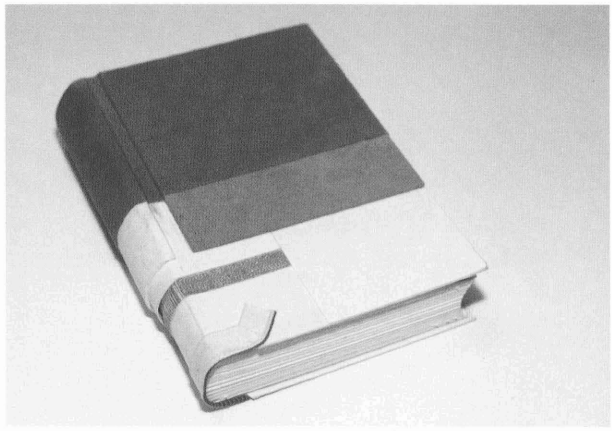


Fig. 19. Cut away model of springback showing structure

Notes

1. Middleton, Bernard C. (1996) *A History of English Craft Bookbinding*, New Castle, DE: Oak Knoll Press, pp. 114–116.

* The Editors would be very interested to hear from anyone using springback techniques in design bindings.

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