The Components and Fabrication of a Modified Limp Vellum Binding: "Alum-tawed Chemise/Vellum Binding"

Robert Espinosa

1. Endpapers.
The endpapers are composed of a single sheet of heavy hand-made paper hooked around a double folio of book-weight handmade paper, cut to the height of the textblock and wider than the textblock. The heavy weight hooked sheet is marked and scored for pleating at the shoulder after sewing, and is generally pared at the hook.

2. Supports.
The supports are alum-tawed thongs. Single thongs are cut 4mm wide and double thongs 8 to 10mm wide. They can be tapered from the grain side to the flesh side. The length of the supports is the thickness of the textblock plus approx. 12cm. Supports may be single or double but will always be single at the kettle station (there is no traditional kettle). All supports are cut to the same length for ease of stringing on the sewing frame. Double supports are slit to within 2cm of each end. A small hole at one end of each support will accommodate a paper clip which can then be tied or hooked onto the frame. Duct tape easily secures the bottom of the supports onto the frame.

See diagrams. One-step linked herringbone produces a solid spine with minimal swelling. The kettle station stitch is very similar to a one-step linked herringbone.

4. Rounding & Backing.
After jogging up, the signatures should be glued with a 15 percent solution of gelatin which is warm enough to be liquid but cool enough to resist absorption by the textblock. When dry (5 minutes), the spine is gently rounded with the hands and fingers and put into the press. The backs of the signatures are shaped and flattened with a folder. They are glued with a second light coat of gelatin. More linings may be applied at this point, but heavy lining is discouraged because the sewing and endband system controls the opening.

5. Primary Endbands.
The primary endbands are sewn-on strips of vellum which extend from the kettle station to 2mm beyond the head or tail of the textblock and whose length is rough-cut beyond the thickness of the textblock. Sewing holes are pre-punched with a tracing wheel 2mm from the top of the vellum strip. The vellum is trimmed to the width of the textblock after sewing with flush-cut nippers.
6. **Set-up and Steps for Covering with Bonnet.**

The bonnet is made of alum-tawed pig or goatskin and should be cut 1cm longer than the height of the textblock plus primary endbands and 5cm wider than the thickness of the textblock. The leather is boarded and lightly pared from the spine toward the edges.

**Set-up**
1. Hooked endpapers pleated into position
2. Textblock capped and placed in tying-up cradle boards
3. Leather strip pared
4. Tying-up cord and tying-up velcro ready
5. Thongs cut and tapered
6. Punch ready: 2 to 2.5mm for 4mm thong

**Steps**
1. Measure width of spine on vellum strip, transfer to leather and mark
2. Bands impressed in spine leather, width of supports marked
3. Holes punched in leather adjacent to and outside of spine width line
4. Leather laced on
5. Spine dampened over bands/supports with salt water (5% solution)
6. Velcro tied-up
7. Cord tied-up

**Steps for Secondary Endbands.**
1. Trim head and tail of bonnet 1mm above endband, taper sides
2. Wax the threads if linen (linen works well because of thickness and strength)
3. Cut threads about 16 to 20 inches
4. Double thread over leather-point needle, knot on end of threads
5. Lace thread through bonnet on sides, knot on inside - both colors
6. Begin with colored thread two turns away from vellum endband, from inside looping over the leather bonnet
7. Cross over with other color to form bead, then go through bonnet to outside
8. Repeat pattern, going through the holes in the vellum primary endbands.
9. End with one wrap of each color beyond primary endbands
10. Tie off by knotting the thread on inside of bonnet flaps as at start

**Making the Vellum Sides**
1. Cut two vellum rectangles 1.5 x the height and 1.75 x the width of textblock
2. Mark the height of textblock from endband to endband on vellum and divide remainder in two with dividers
3. Mark the head and tail creases, score and crease
4. Mark spine edge crease 10 to 15mm from edge; cut out excess corners, score and crease
5. Trim out inner curves on head and tail turn-ins near joint
6. Position covers on book next to thongs and mark center of each thong
7. Use dividers to mark position of thong holes approx. 7mm from spine edge
8. Insert paper in cover and punch holes
9. Lace vellum on
10. Measure and mark first foredge crease 3mm wider than width of textblock
11. Measure yapp creases 6 to 8mm apart
12. Trim out excess corners, leaving tongue to insert in yapp
13. Score and fold yapp creases
14. Mark and make 45° slits for corner tuck on foredge turn-in, beginning 8 to 10mm from inside corner of yapp, beginning and ending slits with 1mm hole punch
15. Mark head and tail turn-ins for placement of interlocking corner with needle through hole nearest corner, punch 1mm hole and cut corner notch
16. Remove kettel lacing and position heavy endsheet in cover, invert and make spine edge hole through paper, re-lace thong to inside
17. Mark and make second hole for kettel laces through turn-ins and endsheet.
18. Lace-in kettel laces with aid of forceps
19. Close foredge
20. Fit ties or clasps (not covered in demonstration)
Single Support in place of Kettel

Double Support
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Pleated-end Paper
B8 heavyweight
Univ of IA - Papermaking Facilities
The Iowa Center for the Book
Iowa City, IA 52242
319-335-4410

Gelatin - bookbinder's glue
Sanofi Bio Ingredients
8 Neschaminy Interplex, Ste 215
Trevose, PA 19053
215-638-7801

Kremer Pigmente, Inc.
61 East 3rd Street
New York, NY 10003
212-995-5556

#503 and #519 Needles
Silver State Suppliers
240 East 600 South
Salt Lake City, UT 84111
1-800-662-5916
2 inch ($.60 each)

Pounce Wheel
Woodcraft - p46 - #04R61
41 Atlantic Avenue, Box 4000
Woburn, MA 01888
1-800-535-4482
3 @ $11.50

Leather & Vellum
William Cowley
97 Caldecote Street
Newport Pagnell
Bucks MK16 0DB
England

Japanese Hole Punch
BookMakers
6001 66th Avenue, Ste 101
Riverdale, MD 20737
301-459-3389
approx $60

End Nippers
Rio Grande - p10 - #111-258
6901 Washington NE
Albuquerque, NM 87109
1-800-545-6566
approx $24

Knives, Shears, Other Cutting Instruments
The Japan Woodworker
1731 Clement Avenue
Alameda, CA 94501
1-800-537-7820

Tying-up Cord, Duct Tape, Velcro
K-Mart, Wal-Mart, etc