VELLUM STRETCHING

Have ready:

- Small "bulldog" clips (1" or 2")
- Pieces of acid-free blotter the length of the clips by 1/2"
- Lead sinkers
- Pieces of cord or fishing line
- Photographic washing tray larger than the vellum item
- Sheet of plexiglas larger than the tray
- Plastic eraser

1. Attach a sinker to each clip with cord. The weights should hang about 8" away from the clips.
2. Place the tray on an object that will raise it at least 12" off the work surface. The object should be slightly smaller than the tray.
3. Put the vellum object in the tray and start attaching the clips, each lined with blotter, on the edges of the vellum. The clips should touch each other. (To avoid any possibility of staining, the jaws of the clips can be covered with duct tape before use.)
4. When all the clips have been attached, start gently setting the weights over the side of the tray. Start in diagonal corners, and work with two opposite weights at the same time.
5. When the vellum is suspended, carefully pour water into the tray with a watering can or other object with a spout.
6. Cut four pieces about 1/2" in length from the plastic eraser. Balance a piece of eraser on each of the four corners of the tray. The erasers can be attached with Anchor Wax or Quake Wax if desired.
7. Place the sheet of plexiglas on top of the erasers.
8. When the object has stretched completely, and is flat, remove the clips and place it between blotters in a press (if possible) until completely dry.
The Conservation of Limp and Hard Board Parchment Bindings

COVER

A. Clean
   1. Mars Plastic erasers
   2. Vulcanized Sponges
   3. Moistened Q tips or cotton balls, never over writing or gold tooling
      a. thick methylcellulose
      b. saliva

B. Flatten
   1. In-situ
      a. damp-pack, wrap text in saran wrap
      c. stabilize
         1. lift pastedown and line board, reuse pastedown
         2. line with Tengujo or Kizukishi (over pastedown)
   2. Off book, hard board binding
      a. damp pack or humidity chamber
      b. stabilize as above
      c. leave under weight to dry and reacclimatize
   3. Off book, limp binding
      a. damp-pack or humidity chamber
         1. flatten with suction table or clips and pins
         2. dry flat and allow to reacclimatize under weights

C. Mend Cover
   1. Materials
      a. parchment
      b. Japanese tissue
      c. conservation cotton
      d. tawed skin
   2. Adhesives
      a. PVA Jade 407
      b. paste
      c. gelatin
   3. Mechanical
      a. parchment strips
      b. linen or silk thread
4. Reback
   a. parchment
   b. tawed skin (large book sewn on cords)

5. Corners
   a. remake
      1. paper
      2. parchment
      3. Japanese tissue
      4. intestine

D. Toning
   1. Acrylics
      a. in situ
      b. pre tone Japanese tissue

   2. Pastels
      a. small areas

   3. Dyes
      a. large pieces of parchment
         1. dye bath and pin out to dry
      b. surface tone

   4. Colors most useful
      a. burnt sienna, raw sienna, burnt umber, raw umber, yellow ochre, green
         ochre, golden ochre, titanium ecru

SPINE

A. Clean
   1. methylcellulose, paste

B. Line
   1. tissue and paste
   2. cotton and PVA
   3. parchment, paste or mixture
ENDBANDS (structural component)

A. Save and Mend
   1. Paste, tissue and conservation cotton liner
   2. Anchor through liner, toned thread
   3. New slips added
      a. tawed or parchment

B. New Endbands
   1. Core
      a. tawed, or parchment
   2. Toned linen thread
      a. generally use a back bead

PASTEDOWNS

A. Lift and remove
   1. methods
      a. dry with spatula and Teflon stick
      b. wet
         1. humidity
         2. methylcellulose
         3. enzymes
         4. through Gore-tex

B. Lift at joint
   1. methods
      a. dry

C. Treat
   1. wash
   2. line with paste and tissue
   3. mend and reuse
SEWING

A. Stabilize
   1. paste and tissue lining spine

B. New Sewing Slips
   1. Materials
      a. tawed leather
      b. rolled tissue
      c. thread
         1. wrapped with tissue
         2. unwrapped
      d. parchment
   2. Methods
      a. whip stitched over original slips
      b. slipped under the existing sewing and over the original slips

HOUSING

A. Boxes
   1. plain, limp bindings
   2. pressure flap
   3. half cover
   4. wrapper, stiff board

B. Slipcases
Figure 1 Various kinds of limp bindings: A) Kassel, GHB – MB, 2° Ms. theol. 65 (link stitch sewing, bookblock 6th c., cover 8th c.; B) Admont, Stiftsbibliothek, Cod. 673 (laced-in sewing supports, 12th c.); C) Erfurt, UB, Dep. Erf. CA 4° 242 (simple long stitch sewing with link stitch as change-over, 14th c.); D) Trier, Stadtbibliothek, Hs 1876/1485 (link stitch sewing, 14th c.).
Limp bindings according to the attachment of cover to bookblock

- Tacketing
- Sewing
- Adhesive attachment
  - Direct
  - Indirect

Without sewing support
- Short stitch
- Long stitch
  - Link stitch-sewing
  - "Längsheftung" (simple long stitch sewing)
  - (Rampen-)archival sewing
  - Pamphlet stitch

With sewing support
- Inside
- Outside
  - Laced-in sewing supports
  - Cut off flush

Figure 2 Typology of limp bindings.

Figure 3 Spine pattern and fold patterns of long stitch sewings: A) "Längsheftung" (simple long stitch sewing, here with link stitch as change-over); B) "Rampenheftung" not straightened; C) "Rampenheftung" straightened; D) archival sewing; E) pamphlet stitch.
Figure 4  Link stitch sewing.

Figure 5  Back plates: A) continuous plate; B) two plates for several sewing stations (B1 meeting each other, B2 gaping); C) one plate for a sewing station with two holes (C1 covering all sewing stations, C2 covering only the inner ones); D) bar at a sewing station with one hole (D1 at all sewing stations, D2 only at the inner ones).

Figure 6  Tacketing a) direct Tacketing; b) indirect Tacketing.
Figure 7  Tacketing. A) Innsbruck, UB, Cod. 361: quire tacketing A1 as seen in the fold; A2 as seen on the spine of the quire  B) Bremen, SuUB, msc. 0046: Tacketing as a means of attaching the cover to a bookblock.

Figure 8  Salzburg, St. Peter, a I 23: laced in sewing supports C) from the outside; D) from the inside.
Figure 9 Erfurt, UB, Dep. Erf. CA 4° 186: simple long stitch sewing with link stitch as change-over; stiffened back plate from horn, with ornamental forms cut out.

Figure 10 Types of fastenings: A: wrap-fastening; B: knot-fastening; C: button-fastening; D: toggle-fastening.

Figure 11 Karlsruhe, BLB, Fragment 18: buttons, probably 9th c..
Figure 12  Toggle.

Figure 13  Berlin, SBB – PK, Ms. Sav. 6: Edge from thin folded strip of leather in a different colour G) from the outside; H) from the inside; J in cross-section, so that the (otherwise) invisible seaming can be seen.