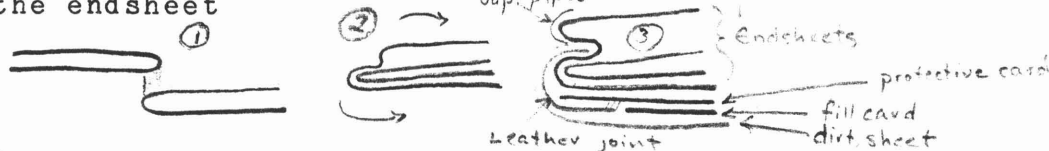


# The Logic and techniques of German bookbinding presented by Frank Mowery

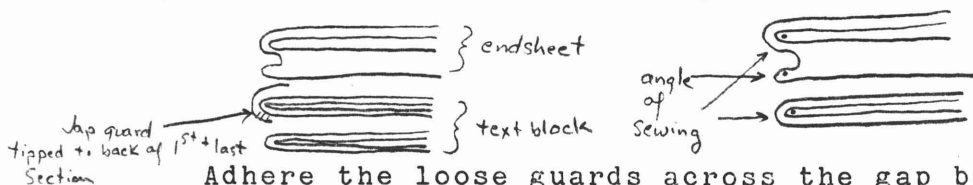
## Steps:

1) Align the print of the textblock, the first line should flow evenly across pages. Insert 5 blank pages evenly throughout textblock placing them within a section but not in the middle of a section. Make "Zig-zag" endsheets, which is a double folio with a leather joint which is structural as it is sewn as part of the endsheet



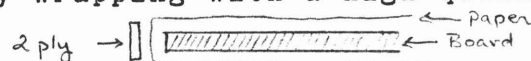
(details of the endsheet and why). Add loose Japanese guard around first and last textblock section. Trim the endsheets and sections to a uniform size and dimension, this could be the finished edges or only preliminary to other edge treatments. Press overnight.

2) Mark up the sewing stations and sew onto cords or untwisted cord, sew the endsheets through both folds making sure that the first and last fold are sewn at an angle, to prevent seeing holes or thread when the book is opened.



Adhere the loose guards across the gap between the first and last section and the endsheets. Paste up the spine (making sure that the textblock is perfectly square), let dry. Gently round and back, using fingers and bone folders instead of hammers if possible. If no edge treatment is to be done then line with one layer of thick Japanese paper (Okawara, with wheat starch paste) between cords and kettle stitch, not above or below kettle stitch. If edge treatments are planned then do so, after which replace in press and line spine. Allow to dry.

3) The boards to be used are selected to match the height of the shoulders after being lined by wrapping with a high quality paper/ PVA may be used.



Tip a strip of two ply to the gutter edge of the board (later to be removed), trim the boards to the desired height, leave the fore-edge long. Tip a folded piece of paper into the shoulder of the textblock for space. Apply two dots of adhesive onto the boards and adhere them into their correct place. Fan the cords and apply paste to them (being very generous), apply gelatine or fresh hot glue to the board along the top surface at the joint and work the pasted cords into the glued surface, fanning the cord very evenly. Apply more paste over the cord and tear a

piece of scrap paper and cover the adhered areas, do both front and back covers and place book between smooth boards and press tightly in a standing press (overnight or till completely dry).

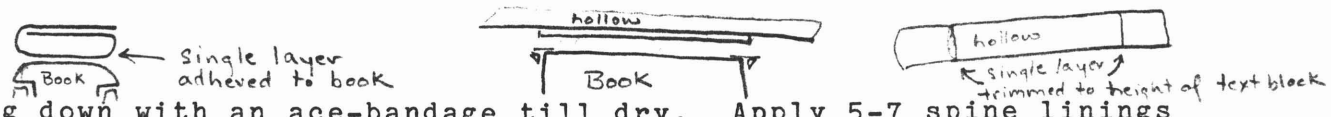
4) Carefully remove overhanging paper from the boards there should be a layer of the paper covering the cords. Apply moisture to the cords at the joints and mark with a bone folder, gently begin opening the boards, this defines where the board will open from now on.

5) Endbands are made from strips of leather lined to vellum cut into triangular strips, wrapped twice in thin tissue using PVA (traditionally the paper used to interleave gold leaf).



Adhere into place on the spine. The cores should be just a fraction lower than the squares of the boards (describe aesthetic and how & why). Sew endbands using two needles creating a front bead. Trim excess cord and line with a thin tissue, making sure that the paper is shy of the top edge.

6) Construct a hollow (describe how) adhere to the spine,



tying down with an ace-bandage till dry. Apply 5-7 spine linings with hot glue and good quality paper, getting progressively wider with each layer of paper (describe how and why, not forgetting the color coding)



Tie down till dry (overnight). Sand the spine untill the perfect rounding is achieved, with no raised areas esp. at the head and tail. Sand the overhang creating a crisp edge defining the end of the spine and the beginning of the boards.

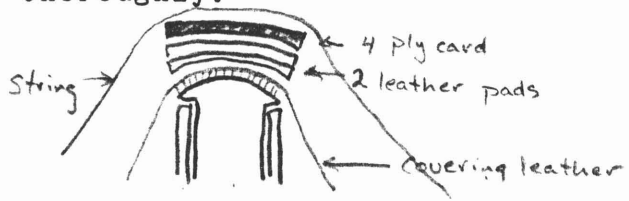


The paper covering the cords is lightly sanded during this stage being careful not to sand or abrade the cord itself, simply smooth any bumps or ridges that might appear through the covering leather. Trim the spine linings to the exact height of the boards. Back corner the boards. Mark and trim the fore-edge of the boards to be perfectly even with the head and tail.

Covering in the German tradition requires the covering procedure to take place over 4 distinct stages. The leather is tailored to the book which requires each step to dry before proceeding to the next step.

7) Prepare leather, measuring the book with a strip of paper and transferring the measurements to the flesh side of the leather,

leaving a 2cm turn-in. Pare the turn-ins only if needed. Hand pare the turn-in at the head and tail till no bumps are felt when turned on itself. Moisten the leather, Paste up the spine area only, applying the paste at least twice and adhere to spine, tying up left and right of raised cords if extant, otherwise just at the head and tail protecting the leather with pads of two rectangular pieces of scrap leather the same as what is being covered and a 4 ply card. (describe how and why). Allow to dry thoroughly.



7) Moisten the leather and apply paste again twice before adhering the sides down, aligning the turn-ins to begin exactly at the edge of the boards. (describe how and why). Place between clean blotters and boards and give a light nip in the standing press, This simply levels out the layer of paste giving a smooth surface. Do not press too hard that might crush the grain of the leather. It remains in the press for only a moment then it is removed and left between the blotters and boards and weighted till dry.

8) Moisten the surface of the leather at the joints and slowly begin to open the boards, this will define the opening and prevent the joints from possibly cracking. The head and tail turn-ins are next giving plenty of time and calm to shape the caps perfectly. First the hollow needs to be opened one centimeter or so either side at the head and tail to accept the turn-ins. The 2 ply strip along the edge of the board is cut away at the head and tail again to accept the turn-in. Moisten the turn-ins and apply paste twice and turn the leather in laying it smoothly in the inside working any excess towards the joint area (one doesn't want the leather ever to be stretched in the Joint areas). Tie a string around the books joints laying it into the recesses where the boards have been back-cornered, Work the caps till perfect, use the nail of your index finger along the inside of the cap to help create the crescent shape. Wet the table surface and slide the edge of the book along the surface and work with your bone folder to sharpen up the edge of the cap. Place the book in a finishing press between felts to avoid marring the covers, retie with the leather pads and 4 ply card rectangles at the head and tail, this applies a gentle pressure while the caps dry preventing the leather from lifting and flaring up at the head and tail. Allow to dry.

9) Moisten the joints at the head and tail both on the outside as well as inside at the turn-in, making sure that you gently open the boards only a little to get the brush int the joint. This prevent the leather from cracking upon first opening the book. The fore-edge is now turned in and allowing the corners to be worked carefully.

10) The 2 ply card strip along the board edge at the joint is now completely removed as are all the dirt sheets and space sheets on top of the endpapers. The leather joint is moistened and pasted up twice and worked over the joint, making sure the board is supported at a sharp right angle at the joint. Miter the overlap of the leather joint and the turn-in. Infill the boards with a card exactly the thickness of the leather turn-ins and leather joints (both have been pared to the same thickness). Allow the leather joint to dry in an opened position. Once dry carefully close and do the other side. Once done insert a 2 ply card between the boards and press firmly.

11) Do any and all finishing, gilding, tooling, titling. Once done cut and adhere the doublures at the front and back, press lightly. Once the book is completely done open the book in gradual increments starting at the front and going to the back, turning it over and repeat this time from back to front. During this opening procedure locate the five extra sheets and remove.

The book is done