

# 15<sup>th</sup> to 16<sup>th</sup> Century Alum Tawed Binding

Presented at the 2008 GBW Standards

By

Don Etherington

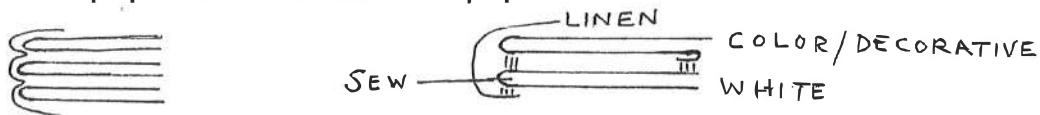
Notes presented by Brenda Parsons

Alum tawed skins are prepared in an alkaline solution, where as leathers are processed with acidic tannins . 12<sup>th</sup> century alum tawed bindings have lasted longer than some of the more modern 19<sup>th</sup> and 20<sup>th</sup> century leather bindings due to the alkalinity. Made with goat, calf and pig skins, pig skins can often be harder or stiffer to work with than goat or calf. Often times these alum tawed skins were dyed with cochineal making them pink toned.

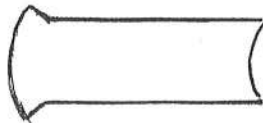
Early on the boards were paste boards made from layers of scraps of manuscript waste sheets. This made the boards very light. To recreate this now, we use layers of rag mat board that are alkaline.

## Textblock Preparation:

- Sew textblock on split alum tawed thongs with concertina guard of *kyo*, Japanese paper. Sew on flexi-endpapers.



- Glue spine between the bands. Round and back textblock with slight shoulder.



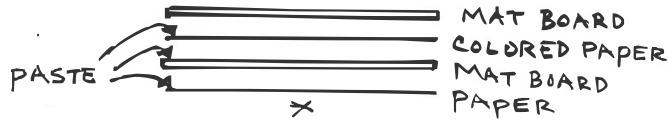
- To allow for the shrinkage of the leather in the joint, lightly tip a strip of 10 pt. card onto shoulder, short of turn-ins.



- Sew end bands on cord or rolled alum tawed strips in a German Primary style, leaving ends long enough to lace into boards.
- Line spine panels with Japanese paper and mix of PVA/paste or methyl cel.

**Board Preparation:**

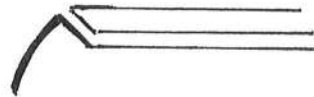
- Paste boards together with a colored sheet in-between to act as a sanding guide. Nip in press. Line inside of board with paper. Mark inside.



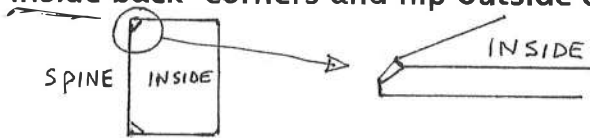
- Cut height of boards with squares slightly larger than height of the end bands.

*Cut bds 1st. than sew end-bands*

- Before cutting fore edge squares, back bevel inside spine edge of boards to match shoulders.



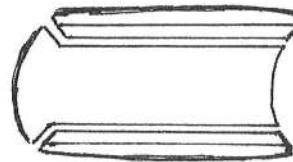
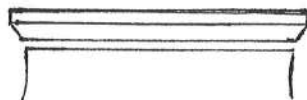
- Cut inside back corners and nip outside corners of boards.



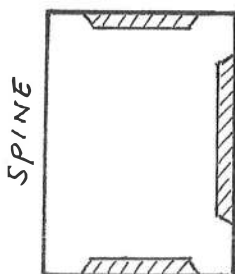
- Slightly chamfer the outside head, tail and fore edge of the boards.



- Sand the inside board squares into a bevel up to the textblock.



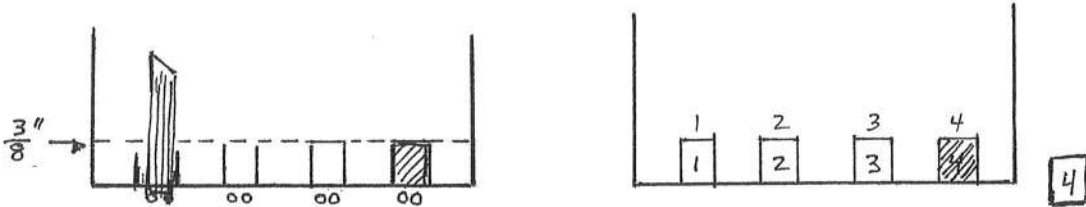
- Sand beveled notches into the outside edges of the boards 1/4" wide.



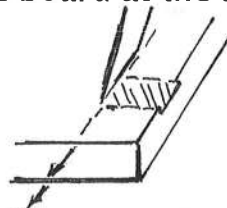
# Liege Valley - Miter Square

## Lace in boards:

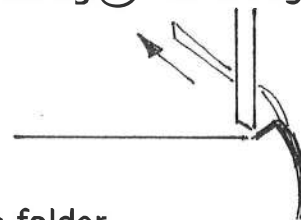
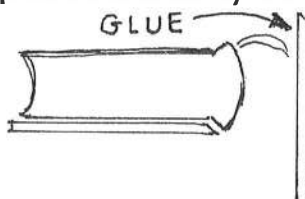
- Mark a  $3/8$ " line along the outside spine edge of the boards.
- Pull thongs tightly over the board and mark width with a scalpel blade up to the  $3/8$ " mark. *Slightly thinner than thong*
- Remove boards from text and use a square and scalpel to cut along the tic marks and the  $3/8$ " line.



- Number cut outs and remove. Save & use later for fill-ins, if needed.
- Return the boards to the text and check the depth of cutouts.
- Use a  $1/4$ " chisel to cut through the board at the  $3/8$ " mark. Use a point knife to open the chisel cut.



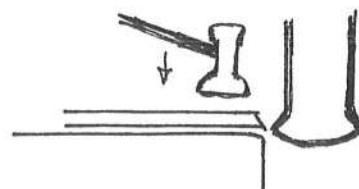
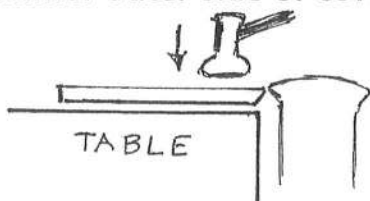
- Pull thongs through chisel cut.
- Mark beside thongs on inside of board and cut channels in same fashion as outside.
- ① Open board away from text and glue under thong. ② Pull thong taut.

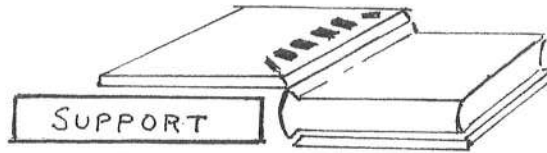


- ③ Close board and rub down thong with bone folder.



- ④ Hammer outer side of cover. ⑤ Hammer inside of cover.

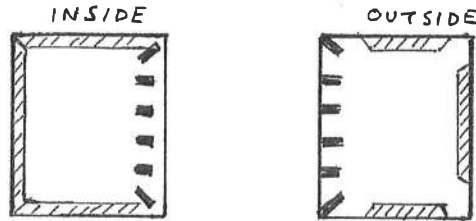




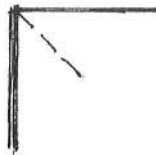
- Support text block and trim length of thong to fit inside channel.

Hammer inside again.

- Lace in end band strips, using the same technique as above, but at an angle.

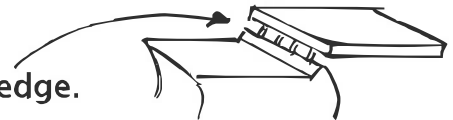
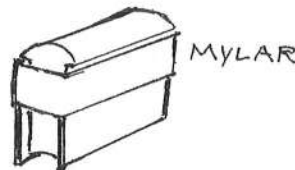


- Mark 90° angle inside board corners.



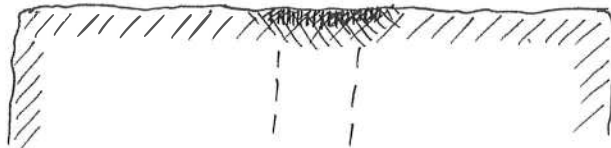
Finish preparing textblock:

- Wrap edge of boards next to spine with mylar.
- Line spine with a piece of suede or alum tawed leather that is longer and wider than spine. Use palms to mold leather over bands. Allow width of leather to stick to the mylar wrapper.
- Dry, then sand to eliminate unevenness in spine. Sand carefully along spine edges and over endbands.
- Open & check gap between boards & shoulder edge.
- Cover textblock with "cap" or chemise of paper with polyester sheet under paper for moisture barrier or use plastic wrap.



Prepare alum tawed skin:

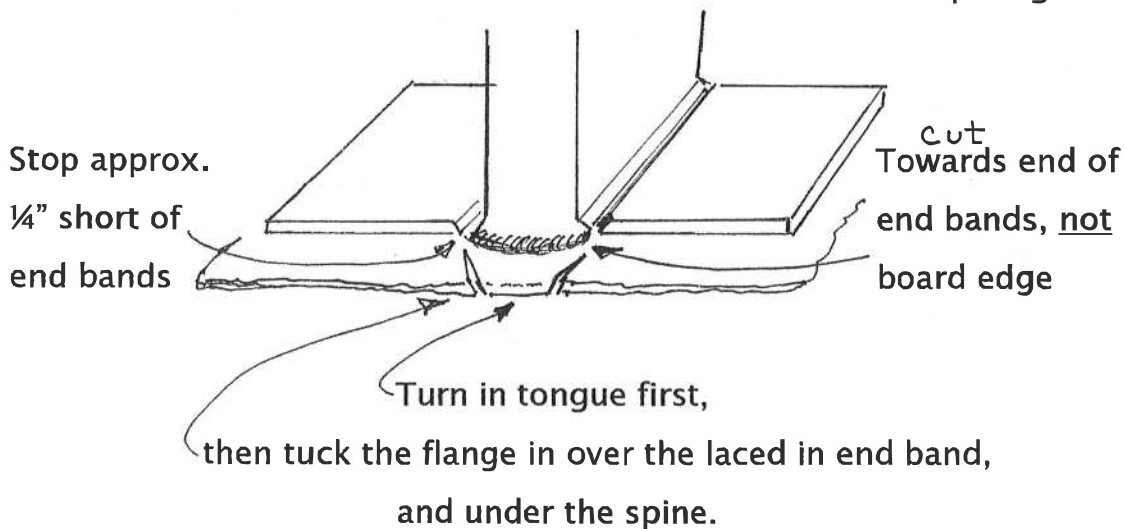
- Spokeshave where needed to thin turn-ins and endcaps.



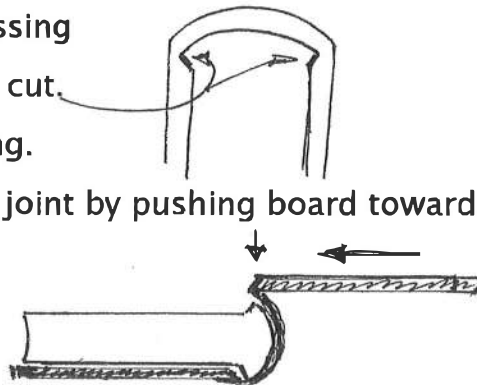
Covering:

- Board skin
- Wet lightly the outer surface

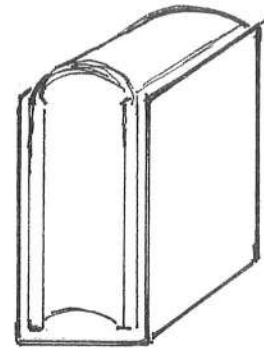
- Paste inside, fold over skin (paste to paste) to “marinate”
- Open and paste again
- Paste spine and front board
- Place book on leather, front board down.
- Paste back board and lift leather onto the back board.
- Set book on fore edge and mold (do not stretch) the leather over the bands. Do not use band nippers.
- Place book on side and lift leather away from board. Back board leather onto board with palms to reduce wrinkles.
- Cut corners with English paring knife. Scoop cut at board corners.
- Turn in fore edges.
- Make bevel cuts in turn-ins at laced-in end bands with a paring knife.



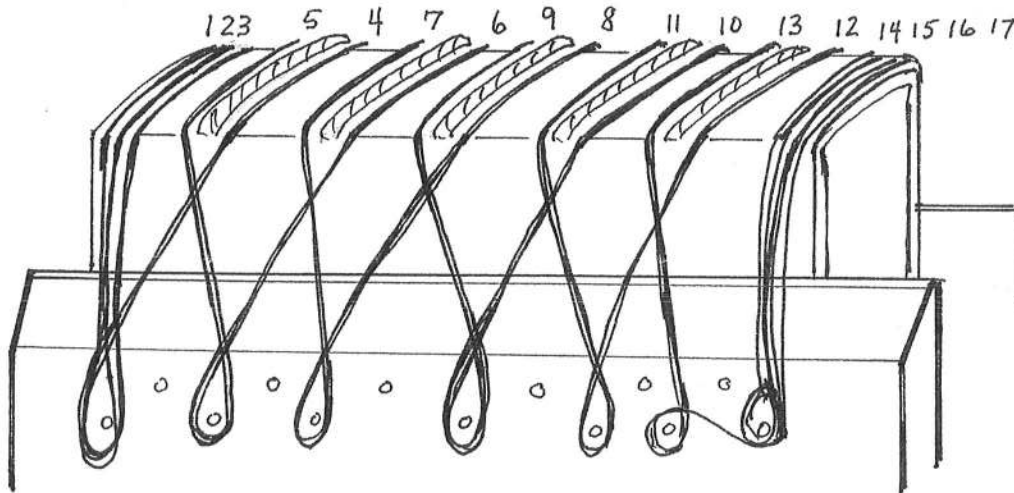
- Finish turn-ins, making sure to emphasize the bevel cuts.
- Shape headcap, pressing against inside bevel cut.
- Finish corner pleating.
- Open board and set joint by pushing board towards text.



- Put in blotter paper, close board
- Put in tying up press, or use heavy card creased and folded to protect the sides and fore edge.



- Wrap twine over spine to create rope markings on spine at head and tail, and around and over the endbands.



Wrap head  
2-3 times

Wrap tail at least 1 more  
wrap than head

wrap opposite side of  
band first, then the other side