

John DeMerritt  
Guild of Bookworkers Standards  
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johndemerritt@sbcglobal.net

### Modified Bradel binding

This modified Bradel Binding is a structure that I learned from my first bookbinding instructor and employer Klaus Ullrich S. Roetzscher. Klaus is from Leipzig, Germany and served his apprenticeship at the Schurer bindery there. Later, he completed the master course in bookbinding at the Academy of Applied Arts in Munich. Currently, he owns and operates Pettingell Bookbindery in Berkeley, CA.

This is a structure we employed frequently in his studio as an alternative to case binding. It provides a higher level of precision and allows for the use of very thin boards. Many Bradel bindings use paper as the "base" board connector, but in this binding we use jaconet. It makes a very strong and flexible joint.

#### Text block:

- Prepare and press sections
- Tip endsheets
- Unsupported sewing w/ herringbone stitch
- Forward w/ 2 layers mulberry (I use Sekishu)
- Trim
- Attach or work headbands

#### Preparing the Boards:

- 6-7 mm joint
- cut boards out of .059 board (I use Eska)
- spine .059 board.
- Determine proportions for quarter binding
- Cut two pieces of 3 ply Bristol board to the width of the proportion adjacent to spine and 1" higher than cover boards
- Attach Bristol to cover boards and press

Bristol board

Board

#### Making the case:

##### *Constructing the "base" structure:*

- Make the spine jig. Measure joint width x2 plus spine width. Cut piece of binder's board to width and 2" higher than cover board. Find center of jig with dividers. Find center of spine piece with dividers. Impose spine measurement onto center of jig at head and tail of jig. Draw two parallel lines entire length of jig. Cover jig with clear packing tape.
- Cut a piece of jaconet the width of spine/joint jig plus 2".
- Glue up the interior piece of one of the cover boards (opposite the side with the Bristol bd.) a little more than 1" on long edge.
- Make two 1" tick marks on glued up board with dividers.
- Place jaconet on board at marks. Bone down.

- Turn board over, Bristol side up and place spine jig snugly against cover board edge, next to Bristol.
- Glue up other board in the same manner as first.
- Place Bristol edge of board next to jig, taking care to align head and tail of boards. (squaring off jig at head and tail makes this step easier and more accurate)
- Turn over and bone down all jaconet on boards.
- Leave spine jig in between cover boards with Bristol side of board down.
- Using the square end of the spine jig, trim off excess jaconet from head and tail of boards.
- Make sure spine jig is protruding 1" from head and tail of cover.
- Glue up spine piece.
- Use parallel lines on jig to center spine piece on jaconet. (Note: spine piece is attached on opposite side of jaconet as boards.) Take care to align spine piece with head and tail of boards.
- Line back of boards with oversized piece of paper same thickness as jaconet. Trim and press and let dry.

#### *Finishing the case:*

- Measuring from the completed base structure cut spine-covering material to accommodate a .5" turn in head and tail and .25" past Bristol "step" in each direction.
- If material is leather or paper, pare or sand covering material all four sides. Sides should go to zero.
- Moisten show side of cover material with sponge.
- Glue out with PVA/methyl cellulose mixture.
- Carefully center covering material on boards.
- Starting from the spine, carefully burnish material into place, paying particular care to attachment to sides of boards and the edge of the Bristol board "step."
- Line front of cover boards with thinner oversize paper, tearing the paper where it meets cover material to create a more seamless meeting spot.
- Let dry.
- If there is any embossing or printing to be done on spine or quarter panel, now is a good time to do it.
- Cut panel-covering material to accommodate a .5" turn in on head, tail and fore-edge.
- Glue out cover material and attach to front and back boards, turning in as usual.
- Let dry.

#### **Casing in:**

- When the case in dry, double check fit with text block.
- Glue out text block, case in and slipsheet with paper inside of endsheet to absorb moisture.
- Press with casing-in boards. I find that making ones with laminated binders' board and acrylic dowels work much better in forming the joint of the book.
- Let dry and voila!

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## Resources

Miro moose cam clamps - Dubuque Clamp Works  
Japan woodworker  
1731 Clement Avenue,  
Alameda, California 94501  
(510) 521-1810 or (800) 537-7820  
www.japanwoodworker.com

Heating strips  
McMaster carr  
P.O. Box 54960  
Los Angeles, CA 90054-0960  
562 695-5911  
www.mcmaster.com

Robotemp stepless heat controller  
Ulanet  
413 Market St.  
Newark, NJ 07105  
973-4876  
www.ulanet.com

Brass dies  
DC graphics Inc  
59 Central Ave. Suite 15  
Farmingdale, NY 11735  
631 777-3100  
www.dcgraphicsinc.com

Foam paint rollers  
FOAMPRO MFG. CO.  
P.O. Box 18888, Irvine,  
CA 92623-8888 Telephone 949-252-0112  
www.foampromfg.com

Scalpels  
Havel's Incorporated 3726 Lonsdale  
Street Cincinnati, Ohio 45227  
1-800-638-4770  
www.havels.com

Laser thermometer  
These are widely available at many  
electrical supply stores and hardware  
stores. I use the Kintrex IRT042.

Magnesium dies  
Bauer engraving  
11290 Sunrise Gold Circle Suite G  
Rancho Cordova, CA 95742  
916 631-9800  
www.bauerengraving.com