

## JANA'S JOURNAL BINDING STEPS

Create a 7.5" tall by 5.5" wide case-bound journal with 64 pages (sides)

See end of document for more information about supplies and instructions for making your own book cloth and building a simple book press.

### ***Most Important Rule of Bookbinding:***

*Make sure that all papers and boards are used so that the grain of the paper runs the same direction as the spine of the book, from head to tail. If the grain goes the wrong way the paper will ripple and the folds will crack or be ragged.*

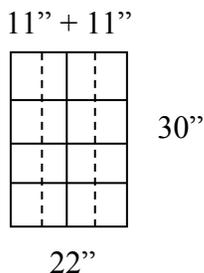
### **FOLDING AND TEARING PAPER**

Follow these directions to fold and tear two sheets of 22" x 30" watercolor down to be the pages in the journal. It is important to use paper with grain that runs the long way or pages won't fold properly. I use Legion Multimedia Paper (also sold as Utrecht Cold Press Watercolor Paper) because it has an identical fairly smooth surface on both sides which makes matching pages across the spreads easy, but has enough tooth and sizing to be enjoyable for both ink and watercolor.

### **Match paper on spreads**

- If the two sides of the paper you are using are different (most watercolor paper has two sides, each with a slightly different texture) consider making sure that facing pages across the spread both have the same texture. [Roz](#) provides a [detailed explanation](#) of how to do this. With the Arches 90 lb watercolor paper the difference was easily discernible I took an easier (for me) approach. I just folded half of the papers with the rougher side on the inside of the fold and the other half with the rougher side on the outside. Then I assembled each signature so that alternating spreads both had the smoother back side of the paper and then the slightly rougher side.
- The Legion Multimedia/Utrecht WC paper is virtually the same on both sides so it doesn't need to be matched.

The unbroken lines in the diagram below indicate how each sheet is torn into 8 folios. The dotted lines indicate where folios will be folded after they have been torn.



- Each sheet of 22x30 paper = 8 folios. When folded each folio has four sides for a total of 32 pages/sides per sheet. Two sheets = 64 pages.
- The first tear creates two 30x11" pieces which are each torn into four 7.5" x 11" pieces for a total of eight pieces 7.5" x 11" which are folded down to a final size of 7.5" x 5.5".

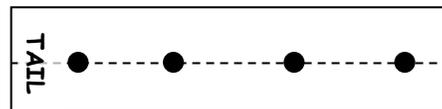
- 1. Fold: To prepare for the first tear, fold each sheet of watercolor paper in half lengthwise. Smooth the crease with a bone folder. Reverse the fold and smooth again. (Repeat a few times until the crease will be easy to tear.)

- 2. Tear: Place ruler along the crease and tear towards the ruler. You will now have four half sheets that are 30 x 11" each.
- 3. Tear each half-sheet into four pieces: Fold in half, smooth the crease with bone folder, reverse, smooth, and tear against ruler at crease. (These folds go against the grain so the paper will almost break at the fold). Keep in mind **that the 11" side is a final measurement and will not be torn again**. Continue until you have a stack of 16 folios 11"x 7.5".
- 4. Create Signatures: Fold each folio down the middle of the 11" side so it is 7.5" x 5.5. Insert one folio inside another to create one signature and set aside. Continue for all the remaining folios. You will now have a stack of 8 signatures made of 2 folios each.

## MEASURING HOLES

### Make a hole punching template:

- **Cut a 2" wide by 7.5" tall piece of** cardstock or paper and fold in half lengthwise to mark the center and so that it will sit inside the folded signatures when punching.
- **Write "Tail"** at the bottom.
- Eye ball and **mark an even number of holes** (4 or 6) as follows:
  - Mark one **5/8 inch in from the tail**
  - Mark one **5/8 inch in from the head**
  - Add 2 or 4 more holes fairly evenly spaced.

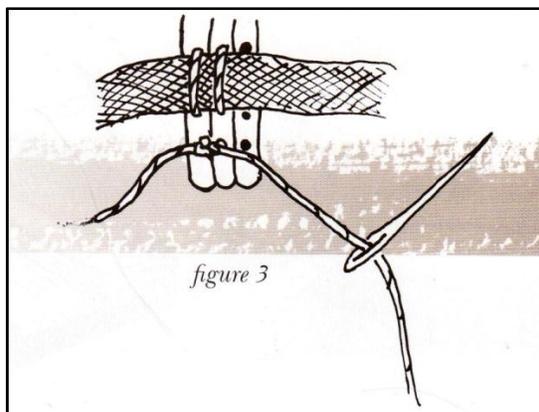


### PUNCHING HOLES:

- Open a big phone book or other large book and use it as a cradle for punching the holes. To protect your journal paper from the ink in the phone book, you can place a folded sheet of paper down first.
- Pick up a signature (of 2 folios) and knock it gently on its TAIL edge to align the pages. (I put a small piece of low-tack tape on the outside of the signature at the tail to prevent confusion later when assembling and sewing all the signatures.) Line up template with tail, hold both together at tail and press into center of phonebook.
- Using a Kemper Clay Pin Tool (or bookbinding awl), punch the holes as marked for each signature, pushing pin in as straight as possible so holes line up. As you complete signatures, stack them, keeping all tails at one end and all heads at the other so that the holes will line up properly when sewing.

## SEWING THE SIGNATURES

1. **Measure Thread:** Measure about 2 yards (72") of linen thread (or a length equal to the **number of signatures multiplied by the height of one spine** (plus a tad extra). For example, my book has 8 signatures with a spine that measures 7 1/2". Eight sigs times 7.5 = 60" so a length of 65-72" should be enough to sew all the signatures. (If you run out of thread before you finish sewing, see \*Connecting Thread, page 4.)
2. Run the thread through a **beeswax** block to wax it and keep it from tangling.
3. Pick up the first signature and insert thread through hole at tail from the outside. Leave a 5" unknotted tail hanging out. Sew in and out of the holes on the first signature and finish at top on the outside.
4. Pick up the second signature and insert needle into top hole from outside, sew down to bottom of second signature.
5. Make sure stitches are tight and **first two signatures are lined up together and then tie the tail to the thread on the needle** (Figure 3) using a **square knot (ehow): left over right and under; right over left and under**. (*Images below from Gwen Diehn's "Real Life Journals."*)
6. As you sew and knot one signature to the next, make sure to keep the **signatures pressed together and the thread fairly taught** (you can use a binder clip at the tail end to keep the sigs aligned as you work). **To tighten the thread**, pull from the side, parallel to paper surface rather than straight up, to avoid tearing the holes.

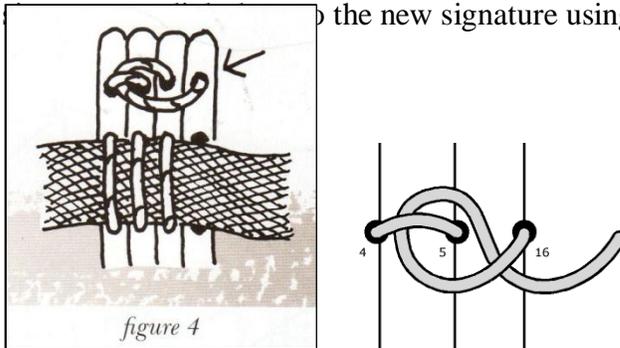


*Note: Ignore the "tapes" in pictures on left; not using them in this method*



7. Sew into the bottom hole of the third signature and sew up to the top.

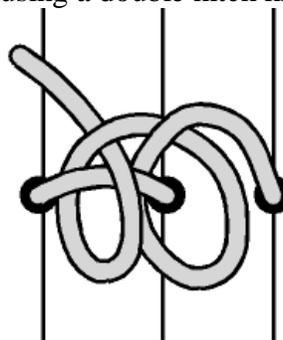
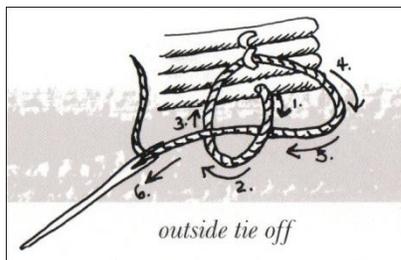
8. Before sewing into the fourth signature, scoop the little stitch between the second and third the new signature using kettle stiches (figure 4).



9. Repeat this scoop stitch before attaching each new signature to the book. It links the sigs together at both top and bottom.

(See [Michael Shannon](#)'s DIY Moleskine for more good sewing tips)

10. When you get to the last signature attach using a double hitch knot (see next page)



*Images from Gwen Diehn's excellent book "Real Life Journals."*

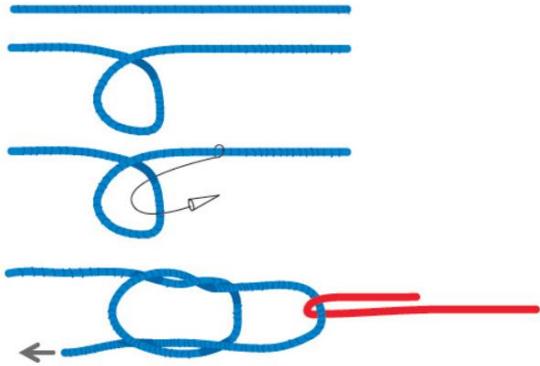
You have now created your "Book Block."

\*Connecting Thread: In case you don't have enough thread to finish sewing and need to connect a new piece of thread if you run out see this link [here](#) and diagram below.

**Connecting Thread**

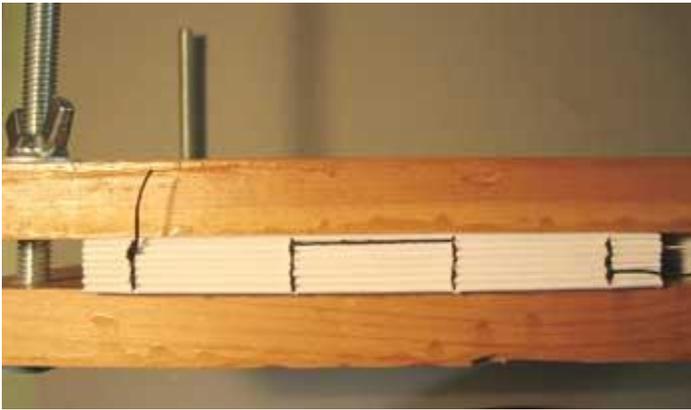
You will inevitably run out of thread and need to connect two separate pieces of thread to one another. ALWAYS JOIN THREAD INSIDE A SECTION not the outside.

Sorry for the shodiness, rope diagrams are hard.

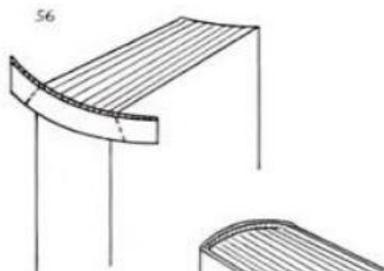
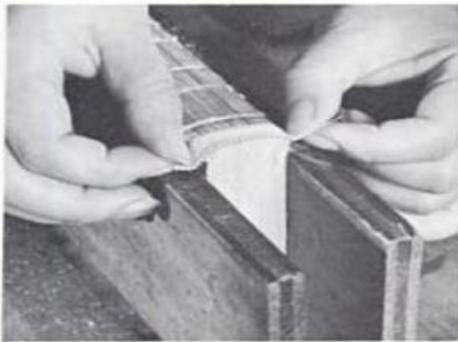


## GLUING THE SIGNATURES (Book Block) TOGETHER AT SPINE

- **ENDPAPERS: Tip on endpapers** (or you can skip this step and just use end pages of signatures). Fold decorative paper with pretty side in or use solid colored or **Mi Tientes** paper. Apply thin line of glue at folded edge **no more than 1/4" down (less is better!)** and stick on ends of book block. [See this link for tipping on end papers:](#)
- Tape wax paper over press (see instructions for making a press at end of this document), standing it on edge. Make sure that **tail of book block and spine are both even** and nicely lined up. Insert book block in press with 1/8" to 1/4" of spine exposed at top. (see below)



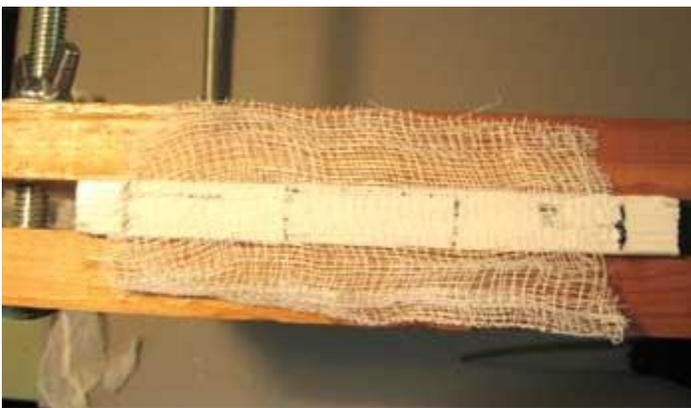
- Cut **header ribbons** so raised edge is exact width of spine and then tapering a bit wider towards center of spine (see below).



- **Cut Mullcloth/Super/Cheesecloth:** Cut a piece a little shorter than the length of your spine so that it is long enough to cover all the stitching, and three to four times as wide as your spine is wide (approximately 6 3/4" x 4") and set aside.



- **Glue the spine:** Coat the spine evenly with just enough glue to fill the spaces between the signatures, spreading it outwards from center. You don't want the glue to seep between the signatures or too much covering the spine. Push the thread ends into the glue and coat them a little to keep them in place. Be very careful to not get any glue on the top or bottom edges as that would glue your pages together.
- **Glue on Header Ribbons:** Lay on headbands with ridge projecting 1/16 inch beyond spine with pretty side facing reader and press into the glue, adding more if necessary



- **Glue on the Mull/Cheesecloth:** (above) Center the cheesecloth over the spine and push it into the glue then carefully apply more glue (if needed) to top of mull to create a good bond. (Photos from Michael Shannon's DIY moleskine instructions)
- Dry at least 90 minutes or overnight

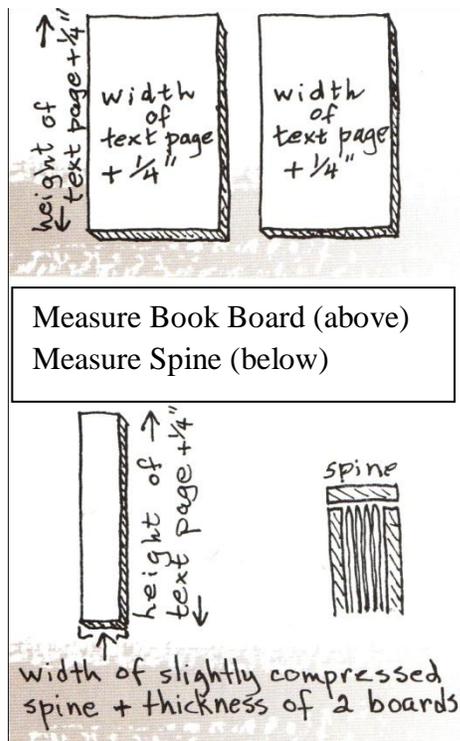
## CASING IN

### MEASURING BOOKBOARD

MEASURE TWICE, CUT ONCE! (or in my case measure 3 times just to be sure). Cut the book board so that the grain runs the direction of the spine.

#### Cut bookboards to FINAL SIZE Of: $7 \frac{3}{4}$ X $5 \frac{3}{4}$ "

- height of text page plus  $\frac{1}{4}$ " ( $7.5'' + \frac{1}{4}''$ ).
- width of text page plus  $\frac{1}{4}$ " ( $5.5'' + \frac{1}{4}''$ ).



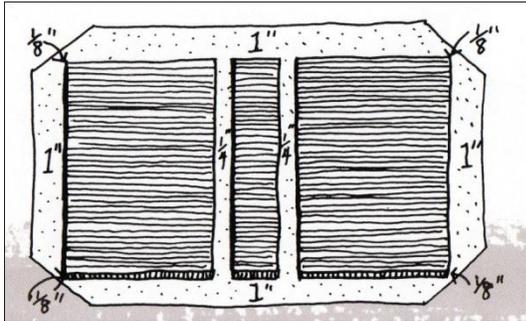
*Images from Gwen Diehn's excellent book "Real Life Journals."*

#### Cut spine to FINAL SIZE OF $\frac{7}{8}$ " X $7 \frac{3}{4}$ "

- **To measure:** Put book block between the two bookboard covers and lay flat on the table, compressing slightly. Measure the thickness which will be the width. (If book block =  $\frac{1}{2}$ " and 2 boards =  $\frac{3}{8}$ ", the width is  $\frac{1}{2}'' + \frac{3}{8}'' = \frac{7}{8}''$ .)
- Cut the spine height the same height as the height of book boards ( $7 \frac{3}{4}$ " )

**Sand book boards lightly to round all edges a bit.**

## MEASURE/CUT BOOKCLOTH



*Image from Gwen Diehn's "Real Life Journals."*

### Cut book cloth to FINAL SIZE OF 9 3/4" X 15"

- Measure as above, laying out boards on the paper side of cloth, adding one inch on all four sides, 1/4 inch between spine and covers (1" margin + 5 3/4" board + 1 1/2" spine area + 5 3/4" board + 1" margin = 15)
- Trace around boards with a pen or pencil to mark their position
- Snip off corners diagonally, leaving 1/4" fabric beyond the boards
- If using 2 colors (back spine plus 2 fore-edge cloths or paper, add a couple inches to spine width plus another couple inches then measure enough of the second color or paper to allow it to overlap at least 1/4" on top of the back section.

### GLUE BOOK CLOTH to BOOK BOARD COVERS:

**Method One:** Glue book boards directly to book cloth:

- Use a damp brush, with a pile of waste paper underneath. Work quickly, gluing from middle toward outside edge, holding everything in place to avoid cover slipping and getting glue on it (it stains).
- Apply the glue to **each board, one at a time, and drop it into its place.**
- From the **back (cloth side) rub each board and place a weight on it.**
- **Apply glue to one long edge of the book cloth** and turn it in; then the other long edge and turn it in, and then each of the two sides sequentially. Use **bone folder or paper clip to drag in each corner before next side.** (see [this how to glue video](#))



Pull in from outer edge towards center to fold little corner into the side you're about to fold up.

**Method Two:** Use a paper bridge to glue all three pieces of book board together first  
Then glue to bookcloth as in Method One or by placing cloth on top of board  
(see [TJ BookArts video](#) or [Cerpegia's video](#))

**Allow to dry 90 minutes then use bone folder to emboss hinge crease**

## **CASING IN**

(See [TJ BookArts Casing In video](#) and/or [Cerpegia's video](#))

- Fit block evenly in case and close boards
- Lay book same height along left side, open journal, resting board on the other book.
- Put scrap paper under endpaper, apply glue on end paper and under mull and then over mull.
- **Replace scrap paper with wax paper**
- **Close book** and press down
- Turn over do same.
- **PRESS** over night

(DONE!)

### SUPPLIES

- **Paper:** 22×30" watercolor paper that has grain that runs the long way. I use Legion Multimedia also sold as Utrecht 140 lb. Cold Press Watercolor Paper because it has an identical fairly smooth surface on both sides, with enough tooth and sizing to be enjoyable for ink and watercolor.
- **Glue:** PVA adhesive dries quickly which means you can complete a book in one day without having to wait numerous times to "dry overnight"
- **Endpapers:**
  - Self endpapers: Just glue the book block directly to the book covers (don't add extra paper, just use first and last pages of top and bottom signatures).
  - Use pretty colored drawing paper such as Mi Tientes or scrapbooking paper or make your endpaper. Packaged marbelized endpapers too expensive and packages only have 1 sheet.
  - [a link for tipping on end papers:](#)
- **Binder's Board** by Lineco: it is .082 in thick (.208 cm). It comes in a pack of 4 sheets, 15 in by 20.5 in and says it is "warp-resisistant single layer, acid free with buffered alkaline reserve, strong dense board...prevents crushed corners and dents; grain runs in the long direction."
- Bookbinding linen thread, bees wax, bookbinding needles, "mull cloth" (also known as Super) or cheesecloth, bone folder, header ribbon, wax paper,

### MAKING YOUR OWN BOOK CLOTH:

- Use **Quilters type cotton - PFD** - prepared for dying and dye it yourself using resist techniques or stamping to decorate.
- Use **Wonder Under fusible** to attach the fabric to **Thai mulberry paper - 45 gms** as backing and then use it exactly like book cloth.

### Building a Simple Book Press

When drilling holes, stack both boards together so holes go through straight. I just used a 12x24" shelf from the hardware store that I sawed in half. Handle on top not really necessary.

1 — (2) 12" x 14" x 3/4"

-  Handle (1)
-  Wing Nut (4)
-  Washer (4)
-  Spring (4)
-  Bolt (4) 4 3/4" (length)
-  Wood Screws (4) 1/2" (length)

