Bow-Stitch Book

- Cover **one sheet card stock** or an old file folder or something similar. The size should be approximately 5 ½" to 5 ¾" tall by 11" wide. Don't worry about grain as this is a prototype and is meant to use commonly available materials.
- About **20 total sheets copy paper** or similar 8 ½" x 11" The heavier the paper the fewer sheets needed
- Small piece of scrap cardstock to use as a template for punching holes.
- Thread (waxed linen) 2 lengths that are 4 times height of spine. One is for practice and one is for the book. The heavier the thread the better pattern it will make on the spine.
- Needle that works well with thread chosen.
- Tyvek optional for spine strength. Size is almost ½ wide by 5 ½" tall (about same as spine)
- PVA if Tyvek is used.
- Punching cradle, phone book, etc.
- The usual: ruler, pencil, scissors, scoring tool, bone folder, cutting mat, awl and cutting knife (X-acto), clips to hold signatures together.
- Ribbon (optional) for tie as is a button

This is a small two-signature book 5 $\frac{3}{4}$ " tall, 4 $\frac{3}{4}$ " wide and about $\frac{3}{2}$ " deep. It is designed for making with 8 $\frac{3}{4}$ " x 11" paper and cardstock or light cardboard. If possible grain should parallel the spine but for this prototype use what is handy. I learned this binding from Ali Manning of Vintage Page Designs and adapted it to be able to make it from things we probably have on hand.



Cover – One sheet cardstock, heavy paper, file folder (my sample) cut to 5 %" high x 11" wide. I'm allowing 1/8" at top and bottom. Sample will have folded sides so not concerned about width just yet.

Minimum width would be 9" (4.25 + 4.25 + .50 which allows for sheet of paper folded in half and $\frac{1}{2}$ " spine allowance.) Find center of cardstock and lightly mark. Mark and then score $\frac{1}{4}$ " from either side of center to create $\frac{1}{2}$ " spine. Fold sides of spine in making sure top and bottom are lined up. If using Tyvek to strengthen, cut piece a little less than $\frac{1}{2}$ " (width of spine) and glue into the spine almost to top and bottom and allow time to dry. Place a little mark indicating top of cover.



This is the goal – 20 holes evenly spaced on the spine.

Hole Punching Template – Using a sturdy piece of paper or cardstock create a punching template that almost fits into the spine – it is 5 ½" (signature height) tall and almost ½" wide. On template make two long lines 1/8" in from each side. Next mark 10 holes on each of these lines starting ½ from top and then in ½" increments the rest of the way. There should be 20 total holes. Position the template in the spine equidistant from side to side and from top to bottom. Hold this template in place with a weight, tape, etc. and prick holes through the template AND the cover. Mark the top of the template. Remove template but keep it and flip cover over. You should be able to see the tiny holes on the outside cover and can make any tiny adjustments needed as holes are punched with awl or screw punch (1 mm). Go ahead and punch holes from the outside – this makes them neater and more easily lined up.

Signatures – Starting with 20 sheets of 8 $\frac{1}{2}$ " X 11" paper cut them in half so they are 5 $\frac{1}{2}$ " tall and 8 $\frac{1}{2}$ " wide. Separate into two stacks. Take the first stack and fold all sheets at once. Repeat for the second stack. If they are too stiff to fold this way then fold them in groups of five or 10 and fold. What we're avoiding is the sharp crease made by folding each piece individually. Put them together and measure their depth which should be about 1/2". Add or remove pages as needed. Place under weights overnight to help press them into flatness.

Optional tip – when a signature this thick is folded the inside papers will creep out adding to the width of the signature. After the signatures have been pressed overnight, this creep can be trimmed off by using a metal ruler held firmly in place and a knife with a new blade. Accurate measuring needs to be done so both signatures are the same width. Slice off the paper creep a little at a time – not all at once. **OR** wait until book is finished and then trim the signatures together (harder to do) **OR** don't worry about it (what I usually do) and don't do anything.

Using the template, score it lightly on one set of the holes and then fold it on that line with the holes. Check to see how it matches up with the holes in the cover. Make sure top aligns with top of each signature and mark tops of both signatures. Place signature into cradle and punch holes making sure awl is moving straight down into the cradle. Do this for both signatures. If you don't have a punching cradle, use a thick book, a sheet of foam, the corner of a box, etc.

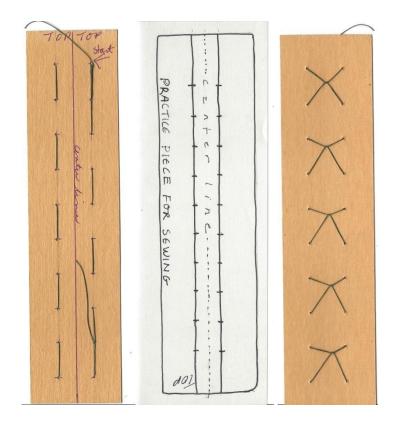
Copy or trace the practice piece onto cardstock, cereal box, etc. so the sewing pattern can be learned. Thread should be about four times the height of the template. Mark an inside and an outside.

- Start inside right signature and place right signature in the book. Leave 2-3" tail inside.
- Exit hole 1 of right signature moving from inside to outside. Tape or clip tail in place. If using tape remove some of the tack by adhering to cloth once or twice before sticking it onto the paper.
- Create a straight stitch across the spine and enter hole 1 of left signature from outside.
- Exit hole 2 of left signature from inside to outside and take thread under previous (horizontal) stitch and back down to enter hole 2 of right signature from outside. Tie off with square knot.
- Enter hole 3 of right signature from inside, create straight stitch across spine and enter hole 3 of left signature.
- Exit hole 4 of left signature, bring needle under previous stitch across the spine
- Enter hole 4 of right signature.
- Repeat this pattern until you enter hole 10 of right signature.
- Tie off inside with two half hitches.

Note that since this is a two signature book the sewing can be started inside either of the signatures. And the thread that goes over the previous stitch can either go over or under the thread – just be consistent for the sake of the pattern.

Now using the pattern just learned sew signatures into the book. The first stitch is the hardest as you're holding onto the cover, two signatures and the needle. Take it slow, use clips and it will fall into place. Adjust thread tension and make sure pages are lining up properly after each stitch.

This learning template is about 8" high by 2" wide. The holes are spaced about $\frac{1}{2}$ "apart and spaced out about $\frac{3}{4}$ " going down. Important thing is to end up with 20 holes to practice the binding.



Once the signatures are sewn in close the book and smooth it out so it settles itself. Keeping everything square check to see how much needs to be folded in on the front and back covers. Then fold in the little extra to give the edge of the cover a little more protection. Before gluing the flap down, insert ribbons, or a ribbon and a button or other closure ideas. Glue flap down and let dry.

Use your book for recipes, notes, poems, quotes, as a notebook for special projects or as an artist journal. Even copy paper may be used for sketching and journaling.











Note the various notebook, graph and other papers





The two signtures in each book showing prominently. Note the ribbon closure.

Folded cover flap of manila folder adds a nice inishing touch.