

Hardcover Multi-needle Coptic Stitch Journal

Source: Papercraft Panda

Please visit the website below for full step-by-step instructions, or YouTube for a full video tutorial of the complete book-making process from start to finish.

Please note that our book has different dimensions and some steps have been omitted/changed.

<https://blog.papercraftpanda.com/how-to-make-a-4-needle-coptic-journal-for-autumn/>

https://youtu.be/vd_fxb2Qij0?is=qZp7JWYUi_UEcLF5

Supplies and Materials:

Ruler

Pencil

Craft knife

Cutting mat

Awl

PVA Glue and brush or permanent glue stick

Bone folder

4 needles (preferably curved)

Waxed Thread

2 book boards: 5.75" x 4.75"

12 papers (4 sets of 3 pages) 8.5" x 5.5" (you can add as many signatures as you like) This project used 80lb mixed media paper. You can use any paper you like. The thicker the paper the fewer the pages per signature. If you have thinner paper, like computer paper, you can use more sheets per signature.

2 end papers for the book boards - scrapbook weight paper 5.5" x 4.25"

2 cover papers - scrapbook weight paper (or book cloth, etc.) 7" x 6"

Template on cardstock - 5.75" x 4.75" heavy cardstock

Assemble & fold signatures

Measure and cut paper to 8.5" x 5.5" size. Fold each set of 3 pages in half to a final size of 5.5" x 4.25". Place signatures under heavy books to flatten for 10 minutes.

Create a punch template

5.75" x 4.75" heavy cardstock - Mark signature size $\frac{1}{8}$ " from top and $\frac{1}{8}$ " from bottom of cardstock. To support an exposed spine, the sewing stations should be about $\frac{3}{8}$ " inset from the spine edge of each board. Draw a line $\frac{3}{8}$ " over from the left side of the paper to mark book board holes. Mark and pierce book board holes at $\frac{1}{2}$ " from top and bottom, 2" and 3.5" for a total of 4 holes between the two $\frac{1}{8}$ " signature marks at the top and bottom of the cardstock. Draw a line to the left edge of the paper from the holes.

Boards

1. Measure and cut the book boards with a craft knife - use a cutting mat, it may take 5 - 8 cuts to cut all the way through the book board.
2. Determine which board will be the front of the book and which one will be the back.
 - i. **Tip:** Mark the front board with an "F" and the back board with a "B" to keep the order correct.
3. Use the template you just made to mark and pierce the boards and signatures.
4. Lay the top board down on a cutting surface and position the template on top.
5. Pierce each sewing station with an awl.
 - i. **Tip:** Use a heavy-duty awl if you're working with a thick board.
6. For the bottom board, reverse the template like a photo negative and repeat the process.
7. Sand the holes with fine grit sandpaper to make them less noticeable on the finished product.

Technique Tip: when piercing sewing stations in a board, create the opening using a tapered awl. Move the tapered awl about 2mm into the board. Set the tapered awl aside and use a straight needle awl to finish the opening. This will ensure the opening is the same width throughout, creating an evenly sewn binding. When passing a needle through the board, it should feel slightly snug but not too tight.

Signatures

- Open each signature and line up the template with the inner crease.
- Using a tapered awl, pierce the sewing stations at the marked locations. Repeat with all signatures.

Cover the boards

1. Position one board onto the back of each cut piece of cover paper, roughly centered so there is roughly 1/2" of excess material around each edge.
2. Using a pencil, trace the position of each board.
3. Apply a thin layer of glue to the back of each board.
4. Position the board glue-side down onto the cover paper inside the trace marks.
5. Press each board with your fingertips.
6. Turn the board over and smooth the cover paper softly with a bone folder to remove excess air.
 - i. **Tip:** The paper will be wet from the glue, so you can try placing a sheet of wax or waste paper between the cover paper and bone folder to prevent damage.
7. Once smoothing is finished, return the cover paper to a face down position (exposed board up).
8. Using your ruler, measure outward from each corner about 3 - 5mm or 1/8".
9. Cut diagonally across the mark for each corner.
10. Apply adhesive to the top and bottom edges (head and tail).
11. Fold the head and tail edges over the board and press with your fingertips to remove excess air and glue and smooth with the bone folder.
12. Press in the corners of the cover paper at head and tail on each corner so the paper folds well on the fore edges.
13. Apply adhesive to the left and right fore edges.
14. Fold the edges over the board and press with your fingertips to remove excess air and glue and smooth with a bone folder.
15. Use an awl to re-pierce each sewing station hole. This will create a pin prick mark on the cover paper side.

16. Turn the board over. Use an awl to define each sewing station hole. Be careful, because the paper is still wet with glue and may tear.

Glue down the endpapers

1. Turn each board over so the cover paper is face down. The exposed board should be facing up at you.
2. Apply a thin layer glue to the back of each endpaper and position it on the board so it is roughly centered with the material around each edge.
3. Press the sheet into place with a bone folder, removing excess air bubbles.
4. Repeat this process with the second board.
5. The endpapers will cover up the holes you've pierced, and that's okay! Use your awl and the defined holes on the cover paper to "re-pierce" each hole. This creates a smaller, less visible hole on the endpapers.
6. Sandwich the boards between a sheet of wax paper. Place a heavy book or weight on top and set aside for 5 - 10 minutes.

Sew the four needle Coptic binding

Sewing the front board + first signature

1. If using two colors of thread, pick up one of each color and tie the ends together using a square knot (right over left, left over right) Repeat with the other two strings.
2. Attach one needle to the ends of the threads (4 ends = 4 needles).
3. Start at the first station (hole) inside the first signature at the bottom of the book. Pull one needle until it's just through the hole.
4. Move to the adjacent station (hole). Pull the second needle until it's just through the hole.
5. Holding both needles carefully in one hand, pull the threads until the knot you've tied sits evenly between the two stations (holes).
6. Repeat steps 1-4 with the second set of threads, needles, and holes.
7. Place the crease of the signature, with thread through it, on top of the inside of the front cover aligned with the spine. The needles with thread should be hanging down off the table. Pick up the first needle and thread the needle through the corresponding first station of the front cover, going from the outside of the cover to the inside of the cover.

Run the needle along the left side of the thread that has made a loop around the edge of the cover board as you pull it through. The thread that is now hanging down will be on the left side of the loop around the spine of the cover.

8. Repeat this process with the remaining three stations (holes).
9. Once all the needles have looped through the cover, be sure the signature and the cover are aligned and flush. Pull the threads along each sewing station until they're tight.
10. Pick up the first needle and feed it **behind** the thread that connects the first signature and board. Pull it through, but leave a tiny loop. Feed the needle through the tiny loop and pull up to the right of the spine until tight. This will create the braided look. (It is natural to have a bit of play or wiggle when the book is completed, which is what allows it to open flat, but it should not be overly loose.)
11. Repeat this process with the three remaining needles.

When finished, all needles should be outside and ready to go back into a new signature.

Sewing the second signature

1. Add the second signature on top of the first signature and feed each needle into the second signature's corresponding station (hole).
2. Open the second signature (make sure it stays aligned with the one below it).
3. Start at the bottom of the book. Grasp the threads for station 1 & 2 and cross their positions. Return the right needle into the left needle's hole. Return the left needle into the right needle's hole. Pull both threads until they're laying tightly inside the fold.
4. Repeat the crossing position process for station 3 & 4.
5. All the needles should now be outside the signature. Start with the bottom sewing station. Feed the needle behind the thread holding the board and first signature together. Pull until there is a small loop of thread remaining. Return the needle through this small loop and pull away from the spine. This will create the first braid.
6. Repeat this process with the remaining needles.

Sewing the remaining signatures

1. Add the third signature on top of the second.
2. Repeat the above steps until all the signatures are attached.
3. The needles of the third signature should loop behind the thread attaching the second and first signatures together.
4. The needles of the fourth signature should loop behind the thread attaching the third and second signatures together, and so on.

Attaching the back board

1. Start at the bottom of the book. Feed the first needle into the corresponding first station of the cover from the outside of the cover to the inside of the cover. Pull the needle toward you so it creates a loop around the board. Don't tighten it yet.
2. Repeat this process with the three remaining needles.
3. Align the board with the signatures and pull each thread until it's tight, much like you did with the first cover board.
4. Feed the first needle behind the thread of the last two signatures. Pull the needle until there is a small loop of thread. Feed the needle through this small loop and pull away from the spine. This will finish the braid.
5. Open up the last signature. Place one hand inside the fold while holding the book firmly between your thumb and fingers.
6. Feed each needle into the corresponding station (hole) of the final signature. This will be a little tough because the hole can be hard to see with the thread in the way, so take your time. Move the thread aside a little with the tip of the needle to see the hole if necessary.
7. Once inside the signature, pull the needle through.
8. Repeat this process with the remaining three needles.
9. Tie off each needle by feeding it underneath the thread along the crease of the signature and then feeding it through the loop it created. This will form a knot at each station (hole). You can do this twice if you want a more secure knot, but it isn't required.
10. Using a scissors, trim away any excess thread leaving a 3 to 5 mm tail on each thread. You can also trim the thread inside the first signature to the same length.

Resources:

Papercraft Panda

<https://blog.papercraftpanda.com/>

https://youtube.com/@papercraftpanda?si=Ao0Su_4CcBp9Tc-2

Sea Lemon

https://youtube.com/@sealemondiy?si=3ED_LBYg7mwIPnAh

DAS Bookbinding

<https://youtube.com/@dasbookbinding?si=RCR6snfPLuo32ufM>

Hand Bookbinding by Aldren A. Watson

Supplies:

Hollander's – Probably the best-known U.S. supplier for traditional bookbinding materials.

Talas – Professional-quality supplies and conservation materials.

Colophon Book Arts Supply – Excellent papers, tools, and kits.

Amazon – Convenient for basic tools, though quality can vary.