

Binding your copy of The Abra Codex

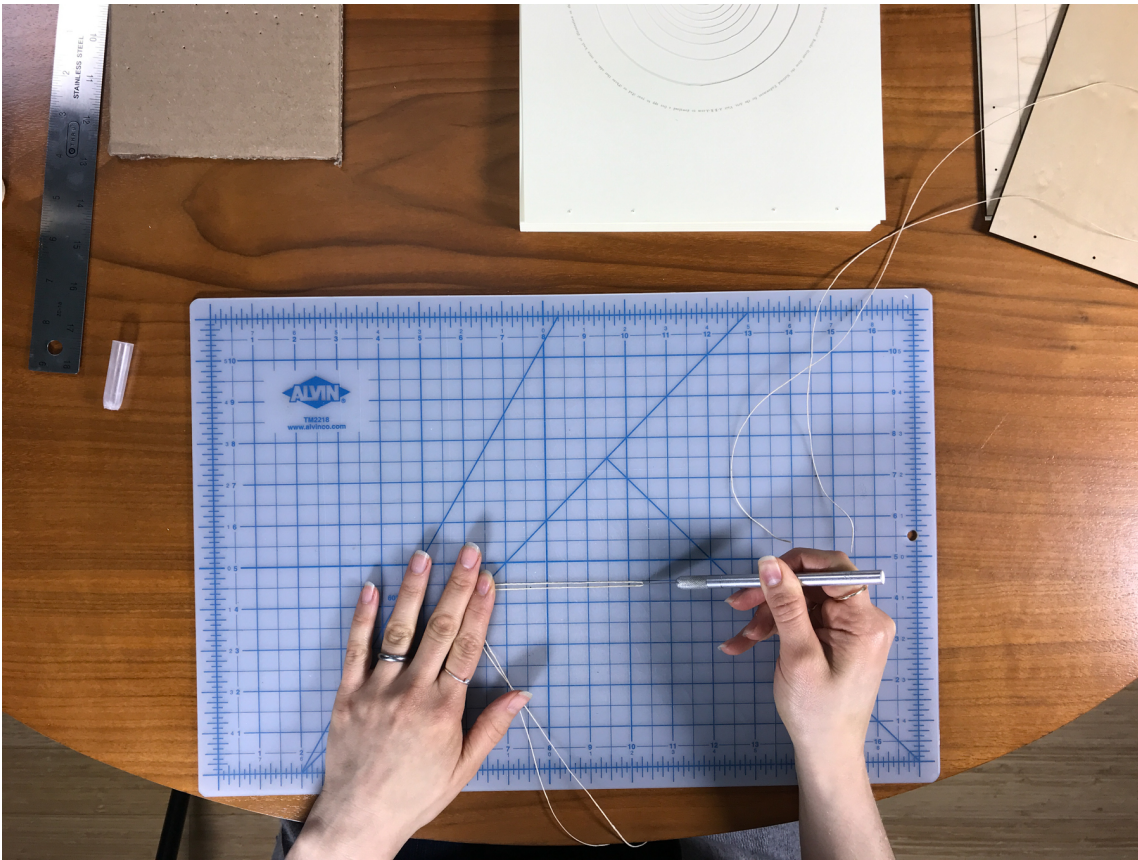
Amaranth Borsuk

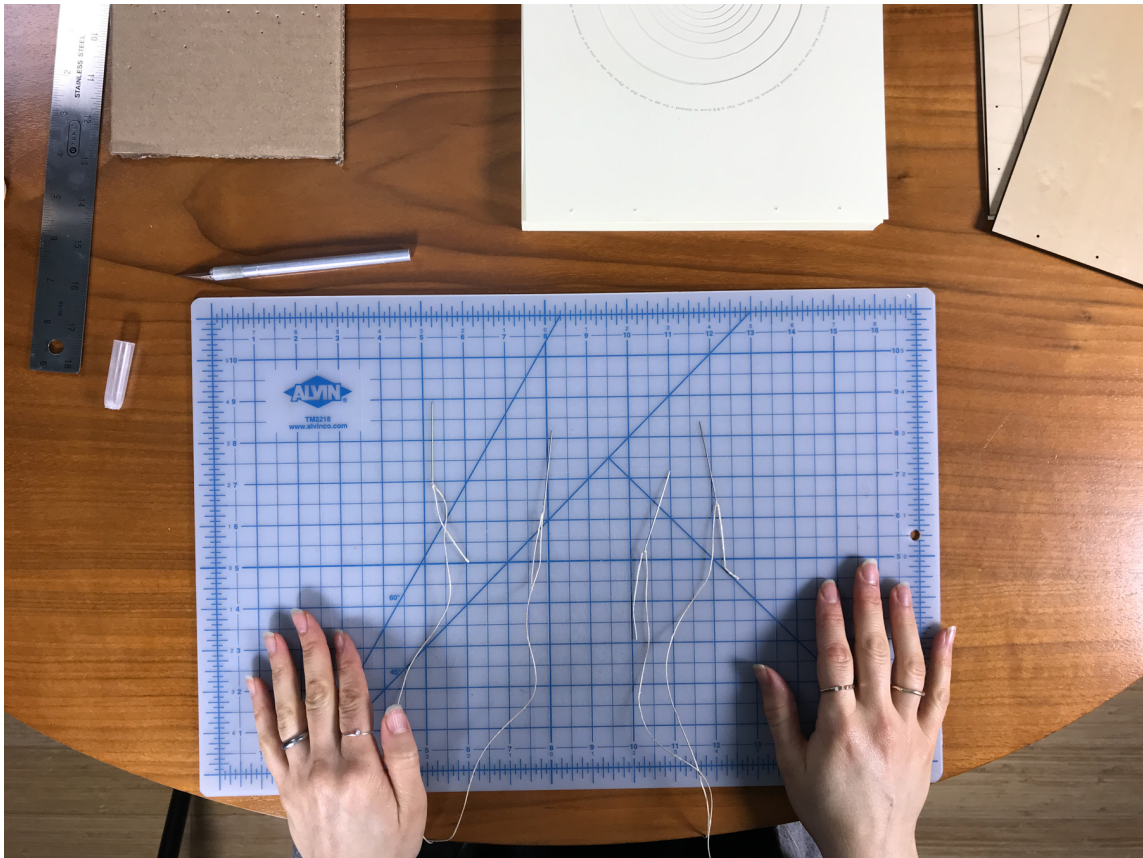
Make sure you have plenty of workspace and gather your tools:

- X-Acto knife or scissors
- 13 feet of binder's thread
- 4 binder's needles
- Cutting mat

Thread the needles:

1. Cut your thread into two equal lengths.
2. For each piece, thread needles at both ends, leaving a tail of 3-4 inches.
3. Do not tie a knot in the thread. The wax will keep your needle on.
4. Take care not to tangle the threads. You may wish to insert one end of each needle into your clothing to keep it off the floor.





Prepare your workspace:

1. Stack the book in order, with the back cover on the bottom and the front cover on top. Make sure the holes indicating the sewing stations are lined up on the spine side.



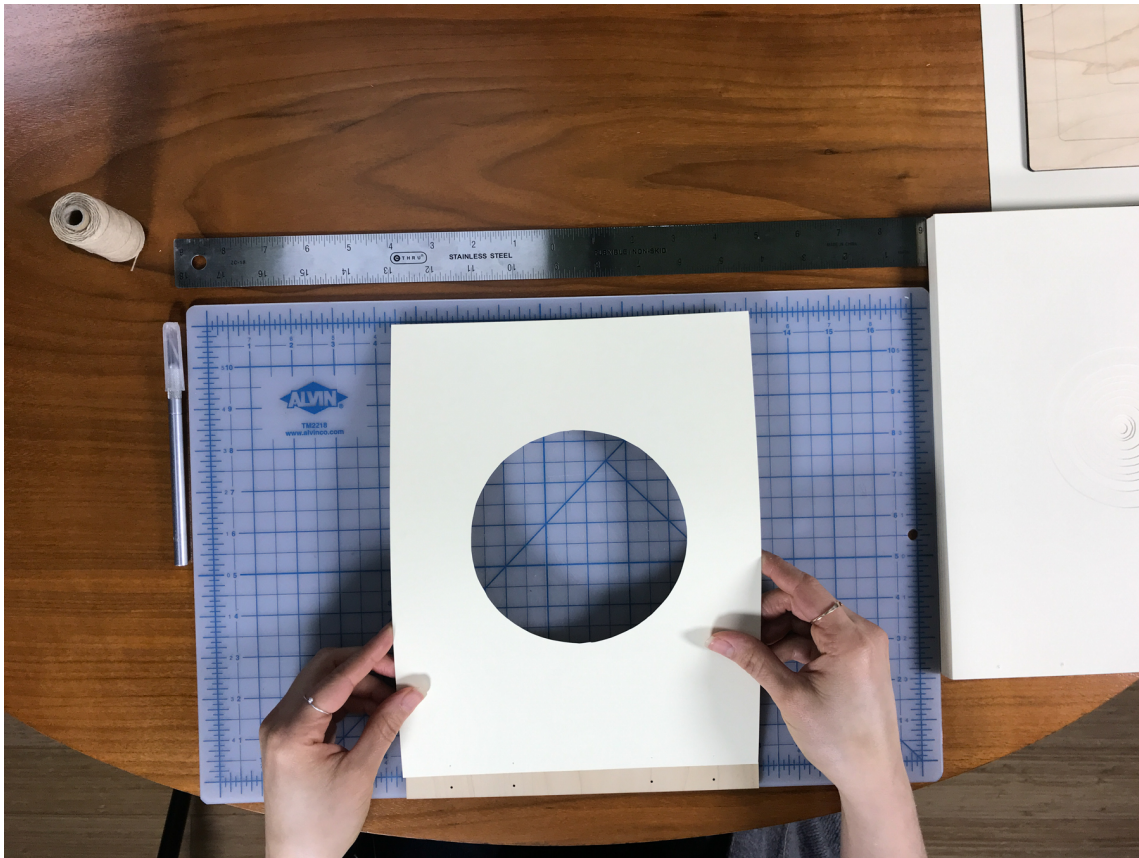
2. Flip the book so that the front cover is face down and the spine side is toward you.



3. Remove the back cover from the stack, and turn it face up on the work surface.



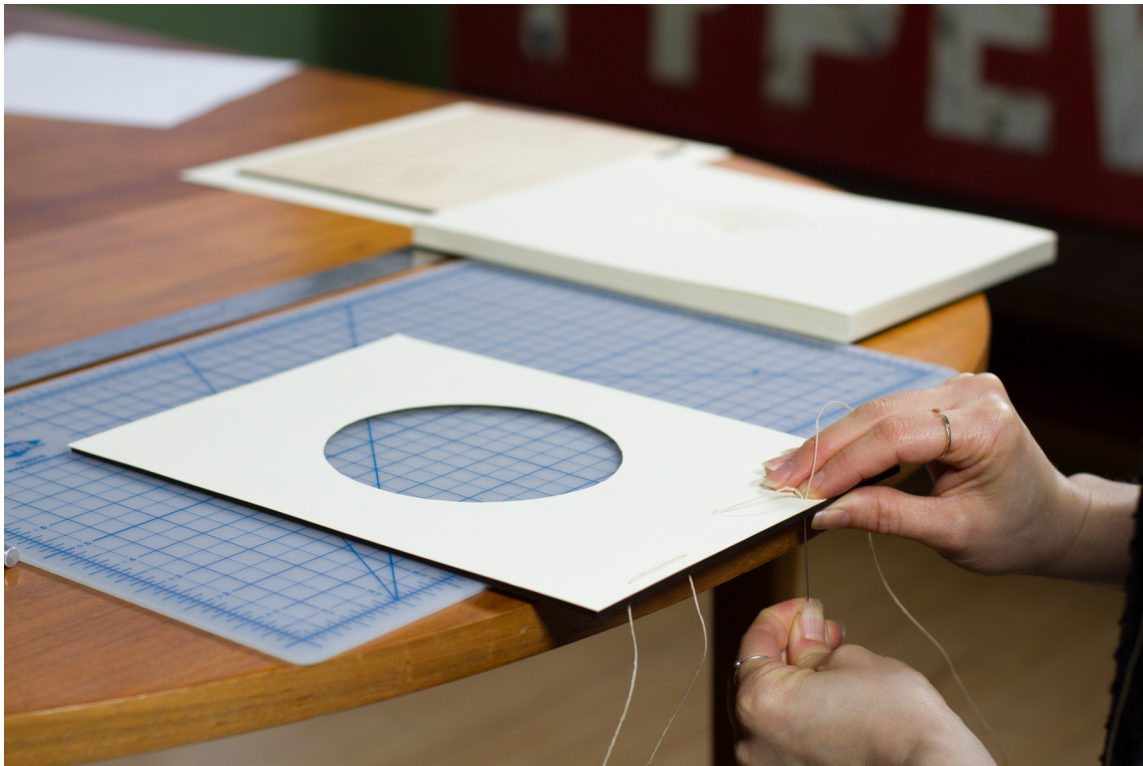
4. Take the last page of the book off the stack and flip it face down onto the back cover (the side facing you is blank so that the colophon is on the reverse, facing the back cover). This is the only page you will turn upside-down. The rest will be legible to you while you are sewing them.



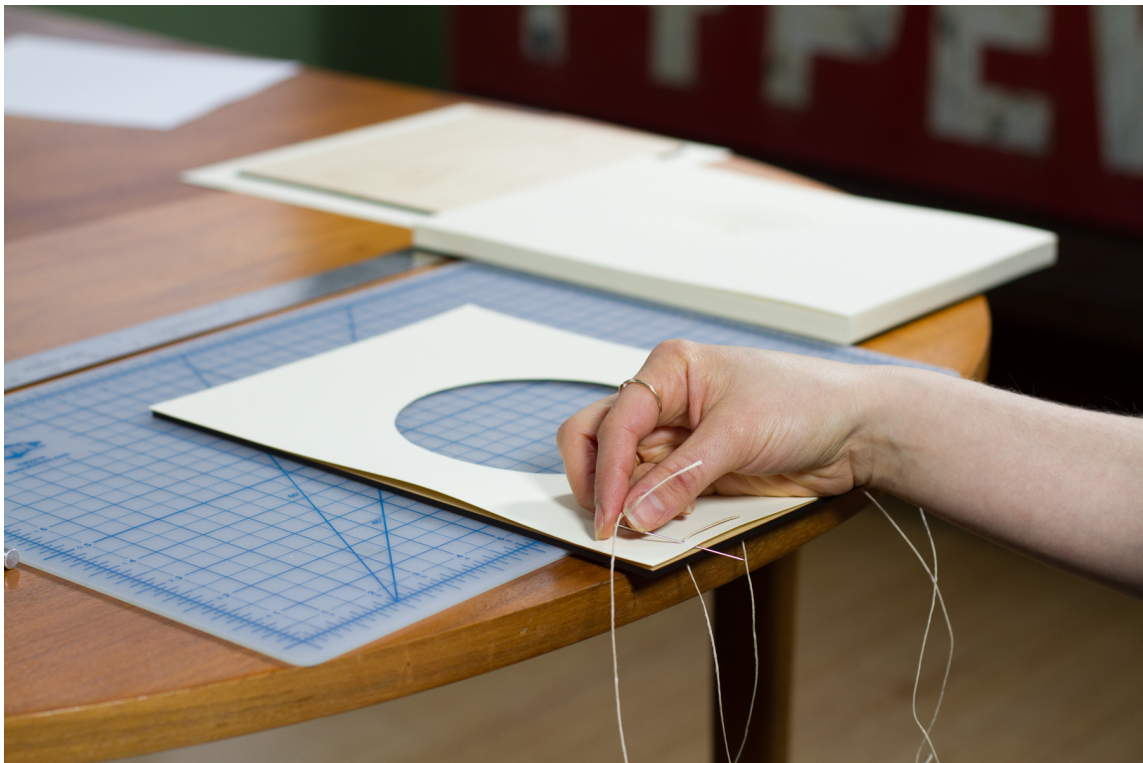
Attach the back cover to the last page:

Each of the 4 holes along the spine is known as a “sewing station.” The 4 holes are paired up, and you will use one loop of thread on each pair of stations. Complete the steps for one set of stations and then move on to the other. Try to keep the book flat on the table as you are working, with the side you are binding extended slightly off the edge so you can easily pull your thread through.

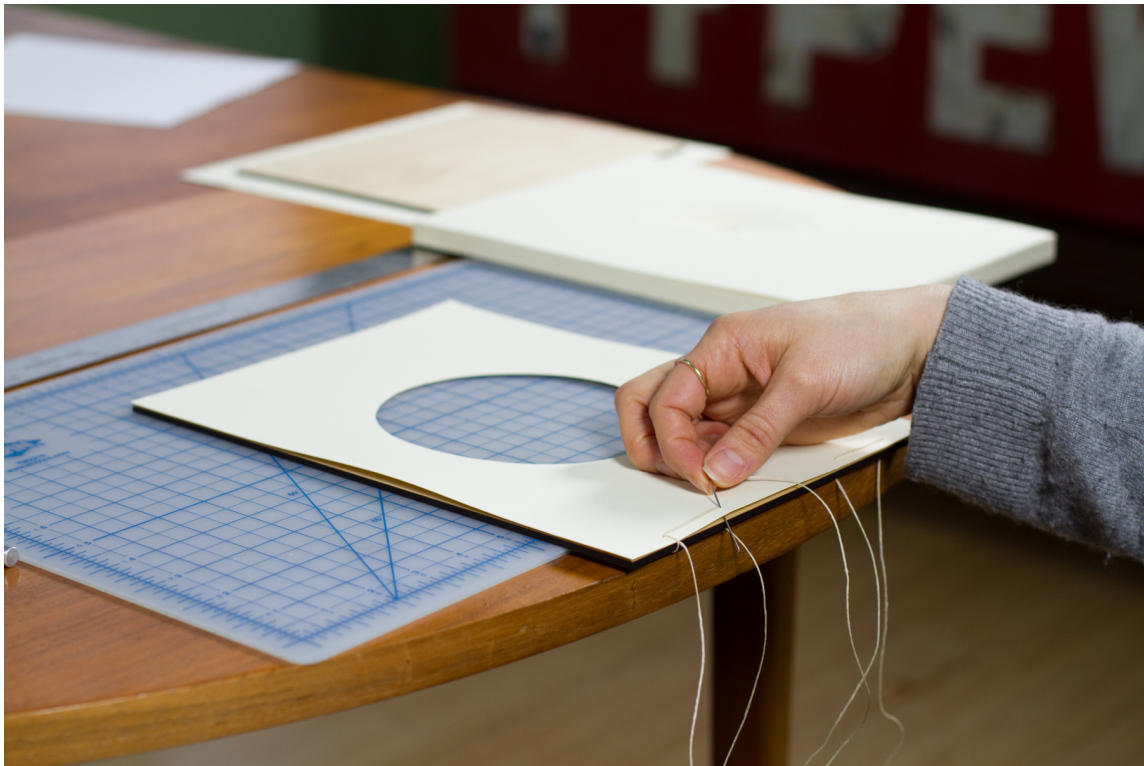
1. At the pair of sewing stations on your left, draw one needle through each hole so that the ends dangle out of the back of the book. Make sure the ends are the same length.
2. Do the same at the pair of stations on the right. Your loops are now extending out of the back cover.
 - a. To keep your threads straight, let the two inner threads dangle between your knees or stitch through your pants. Keep the two outer threads outside your knees (or poke them through your shirt). This will prevent tangles.



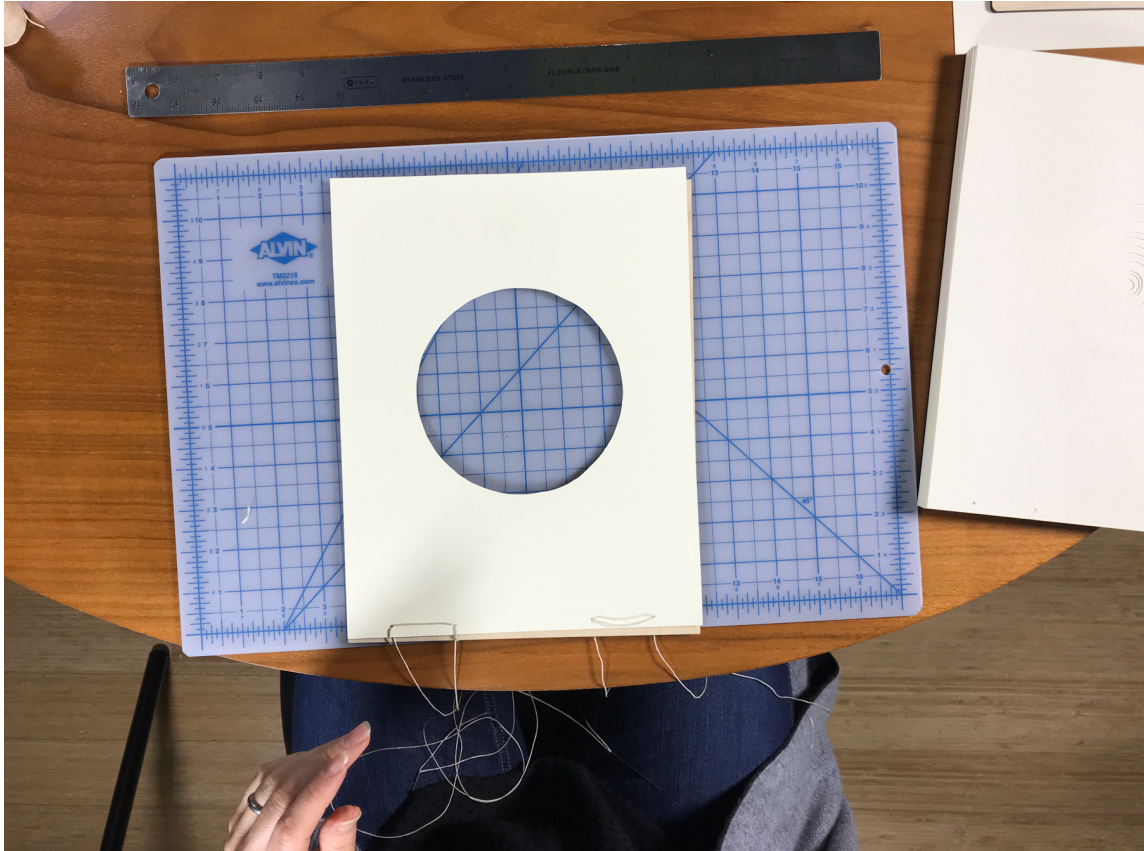
3. Gently pull the threads taut. Ease the page away from the spine about 1/8 inch, so that the wood is showing. This will give you enough slack in the thread to lift it later.
4. **Left** pair of stations: take the **left** needle, bring it down through the corresponding sewing station above, and angle the needle so it goes to the right of the stitch you just made. Go through the paper only, not the cover. Pull the thread through, being careful not to tear the paper.



5. Repeat for the **right** needle of this pair, this time keeping the needle to the left of the stitch.

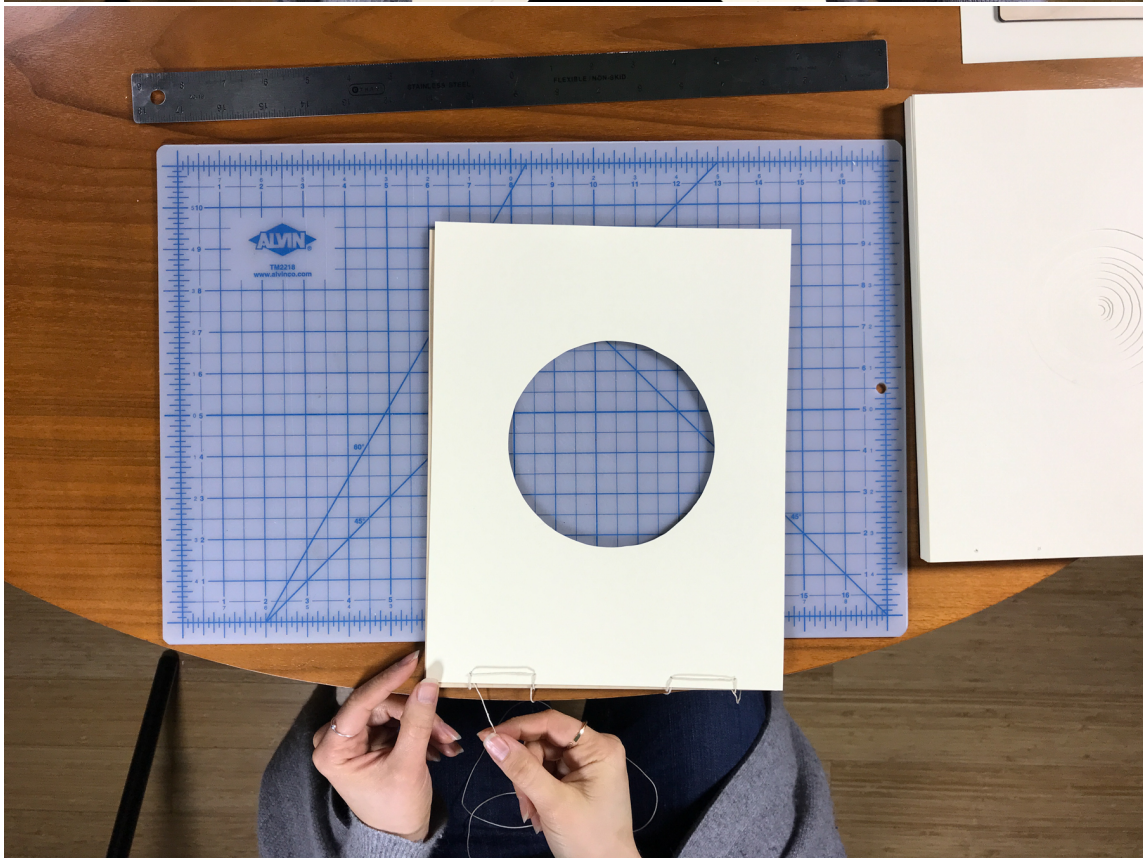
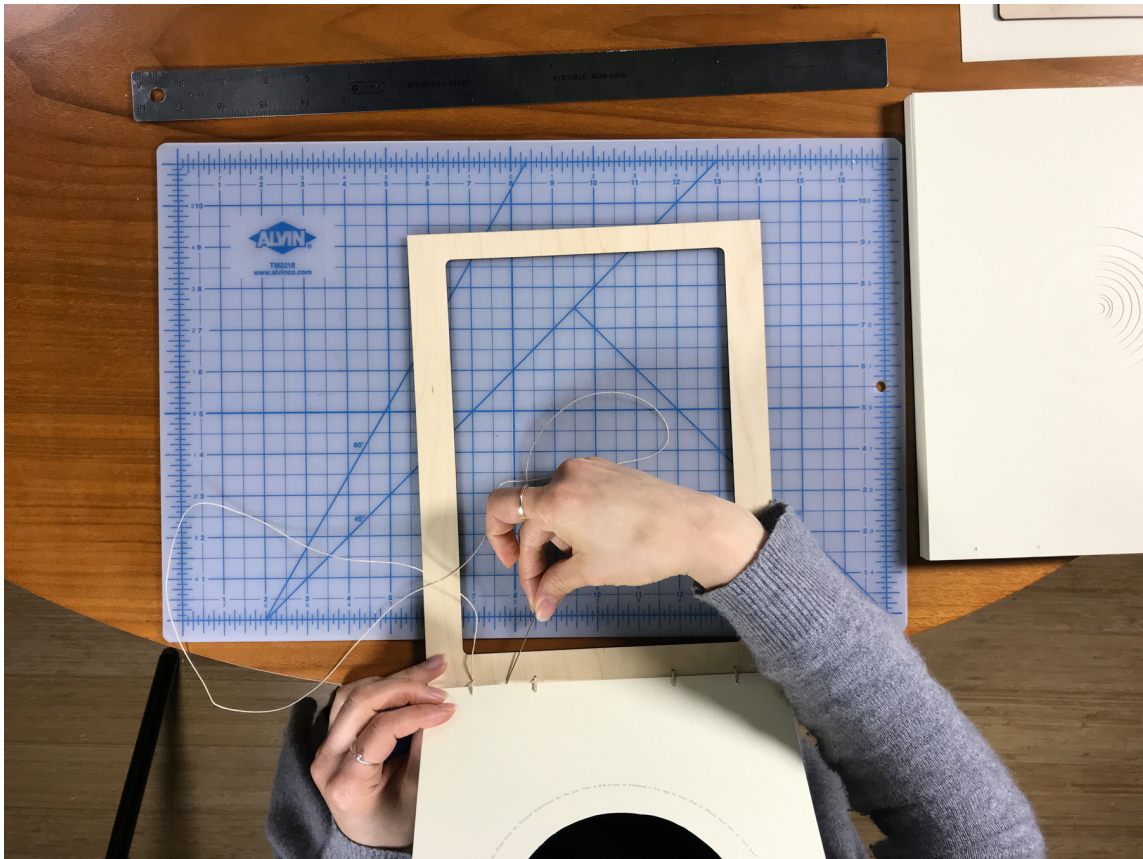


- a. This is an important pattern to remember: For every set of stations, when your needle goes in, keep it to the inside of the pair.
- b. Pull gently, but not too tight, being careful not to rip the paper. Make sure your threads are perpendicular to the spine.

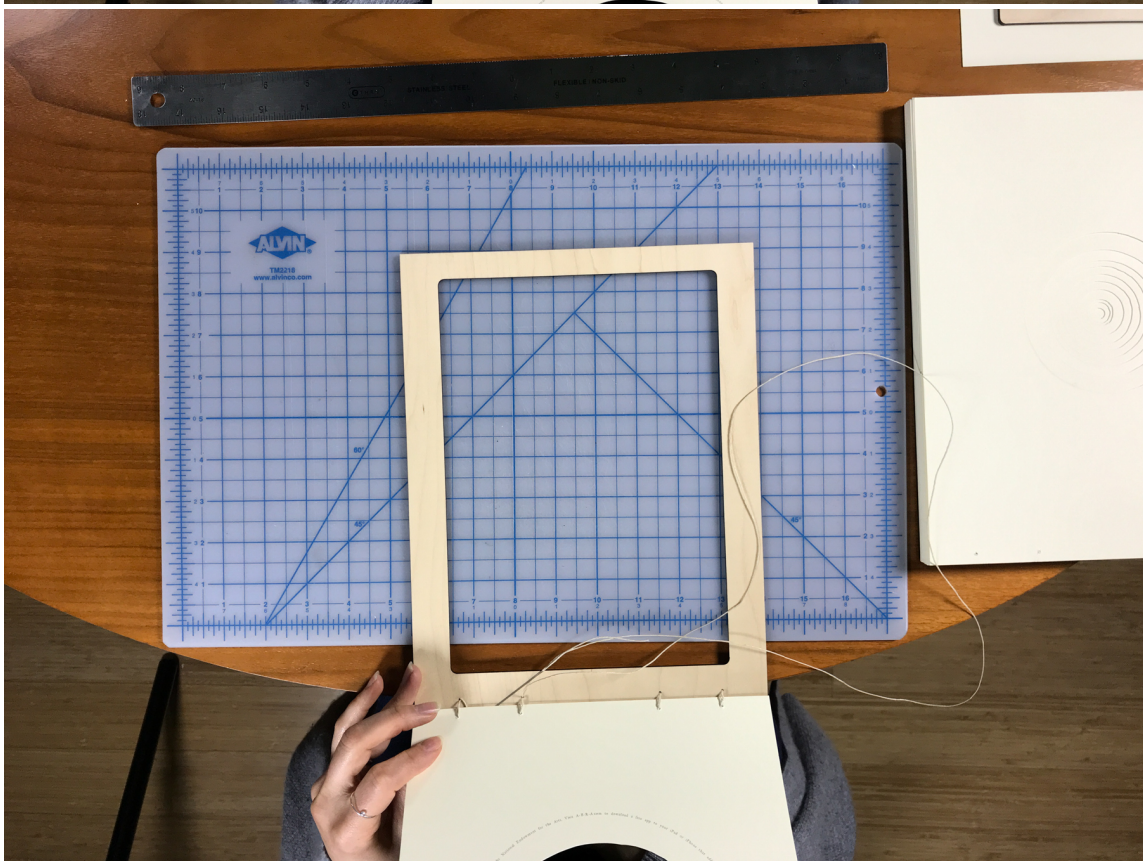
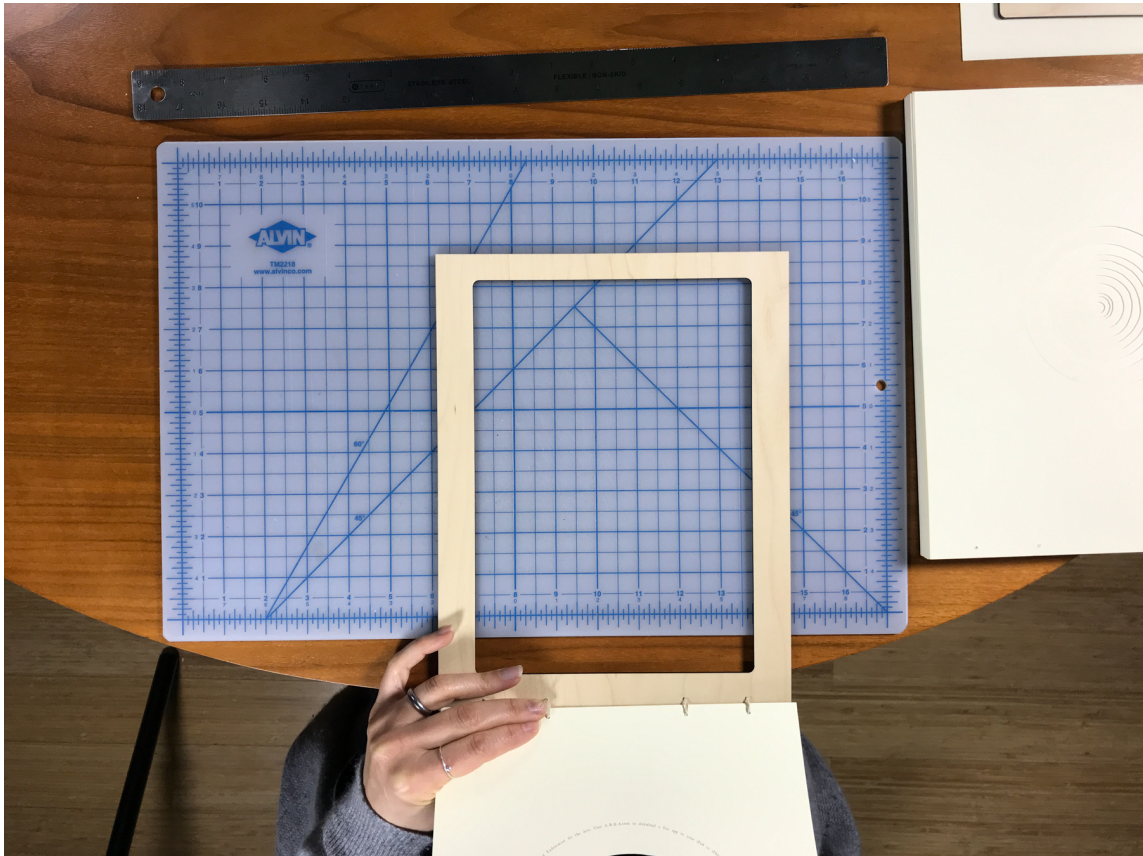


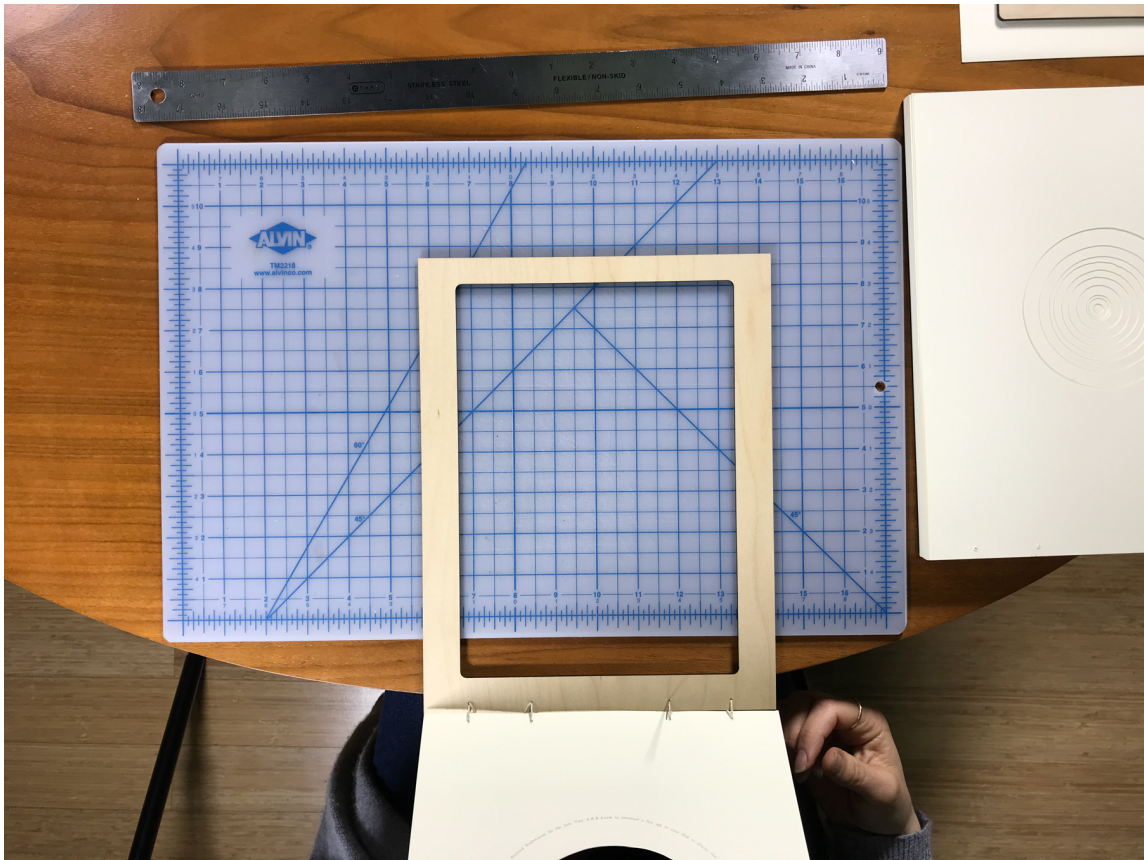
6. **Right** pair of stations: repeat steps 4 and 5.

7. **Left pair:** Take your **left** needle up through the hole in the back cover, but not through the page, then bring it out the spine toward you, keeping it between the two stations. It can help to lift the page while you do this.

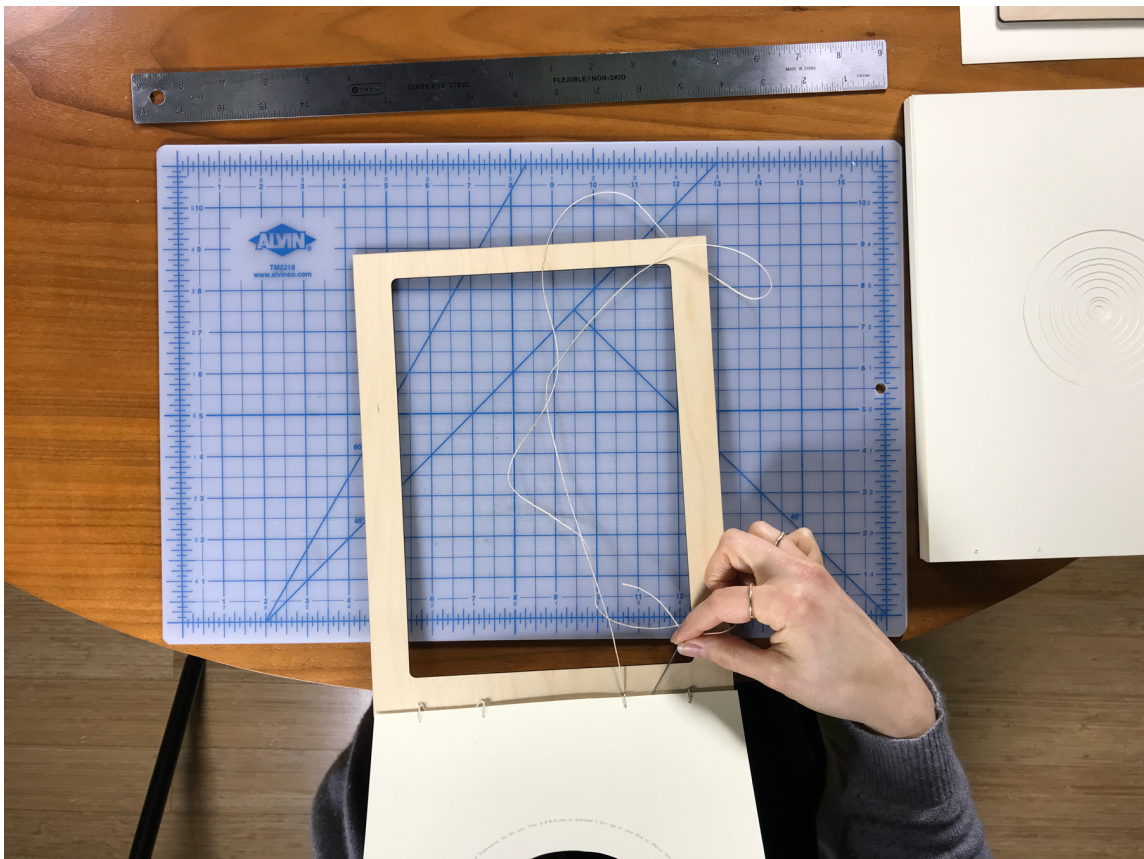


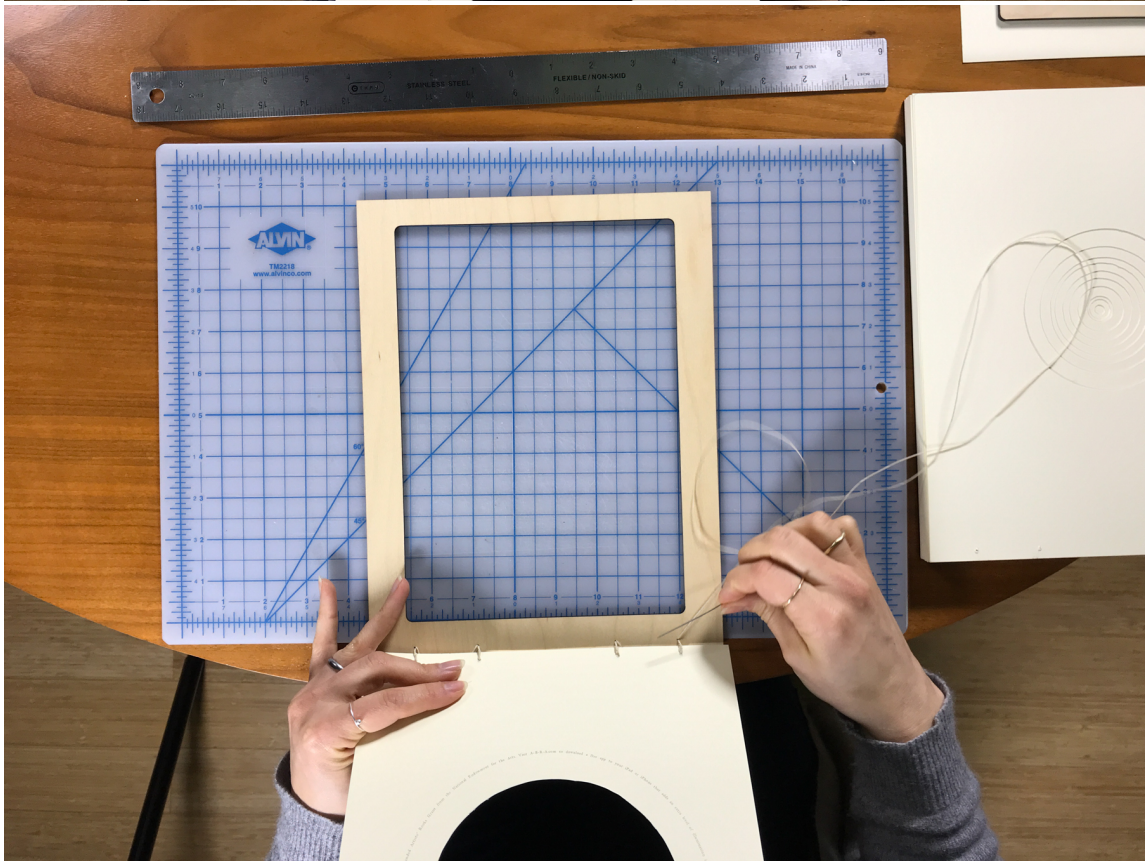
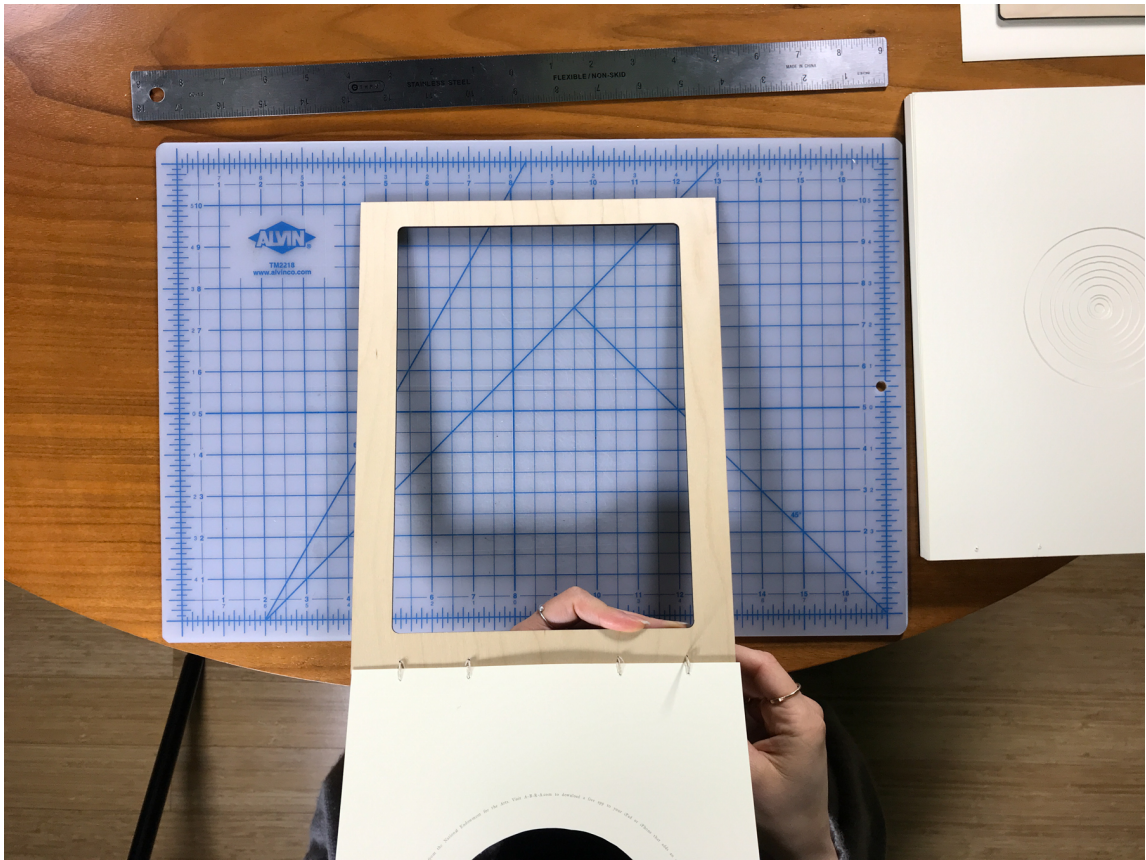
8. Repeat for **Left** pair: **Right** needle.

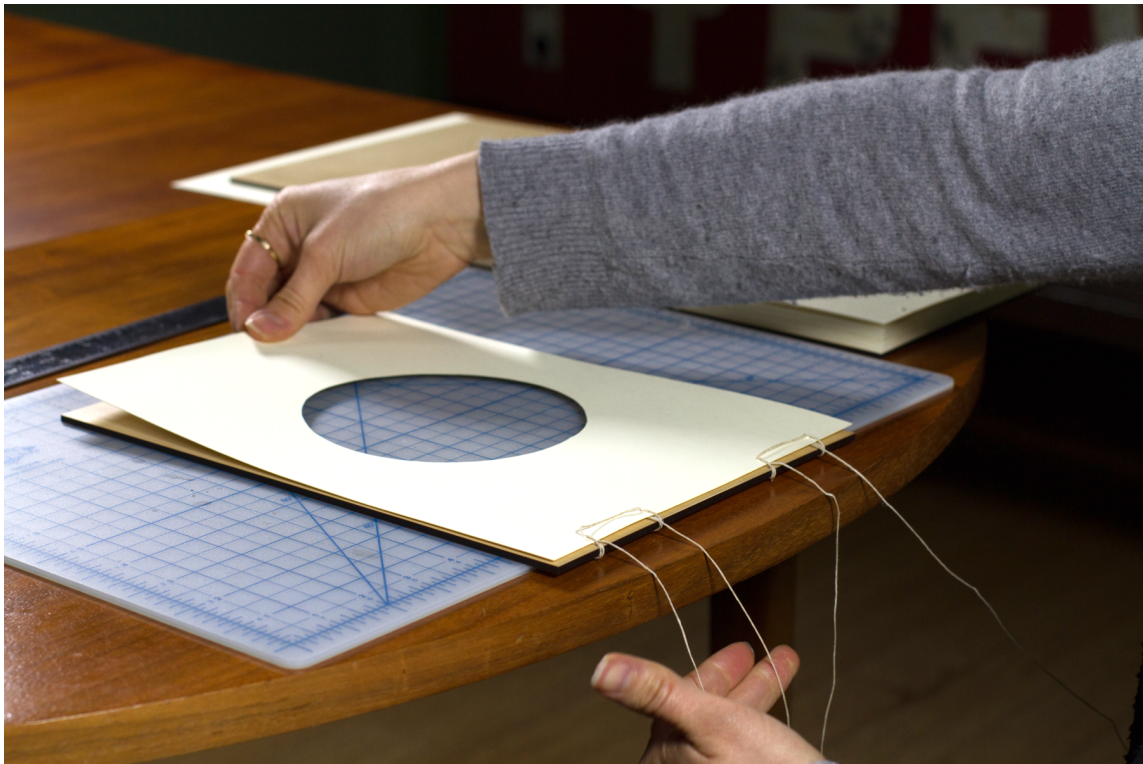




9. Repeat for **Right** pair.

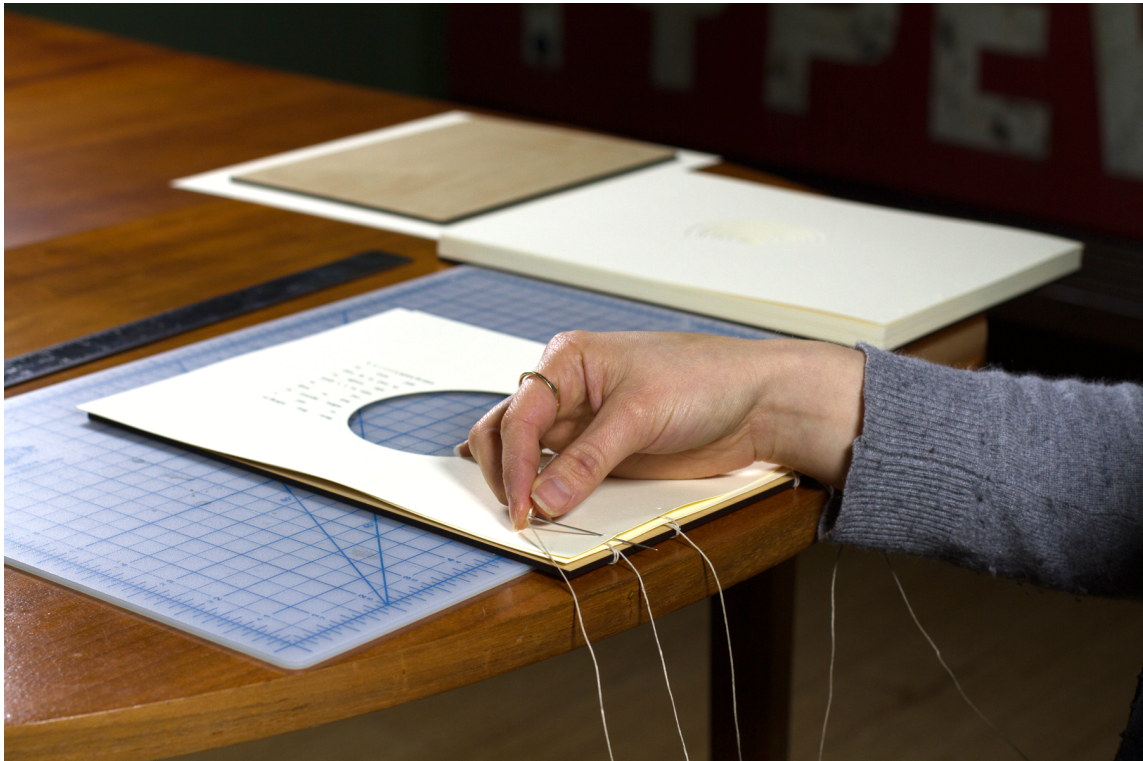




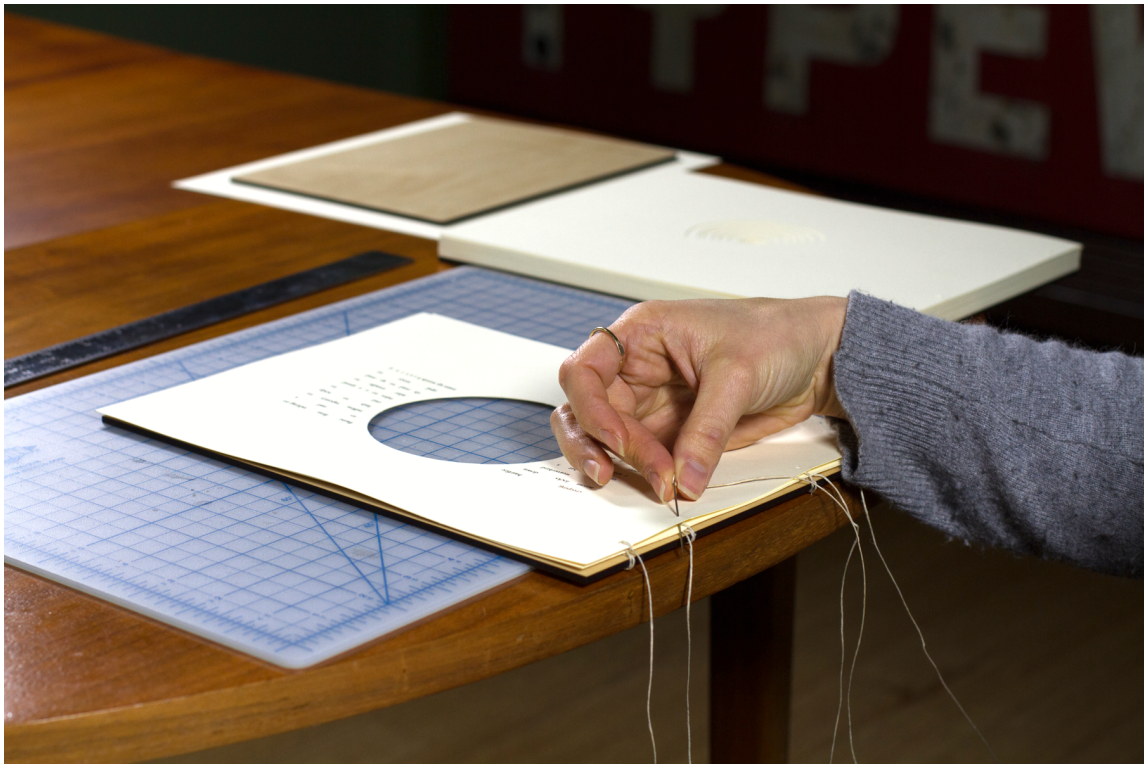


Attach the next sheet:

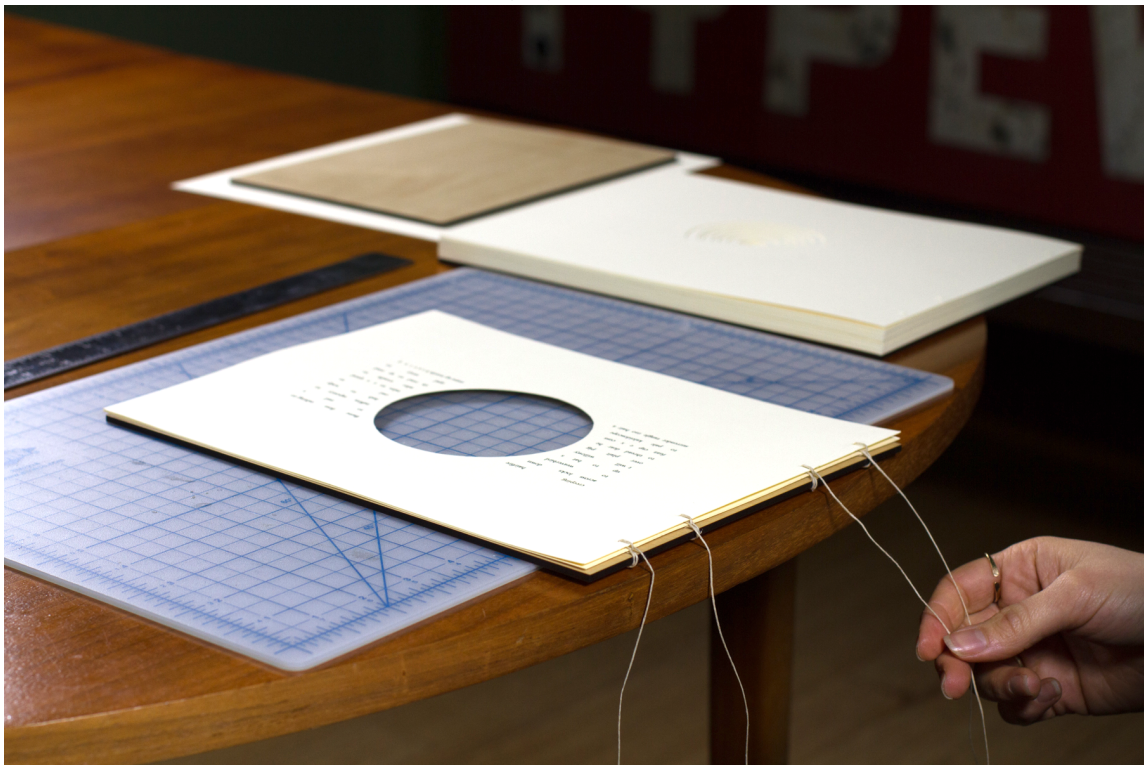
1. Take the next sheet off the stack and place it face up on your binding.
2. **Left pair:** **Left** needle goes down through the corresponding hole of the page and out the spine, staying between the pair of sewing holes. Gently pull taut.



3. **Left pair:** **Right** needle goes down and between as well. Gently pull taut.

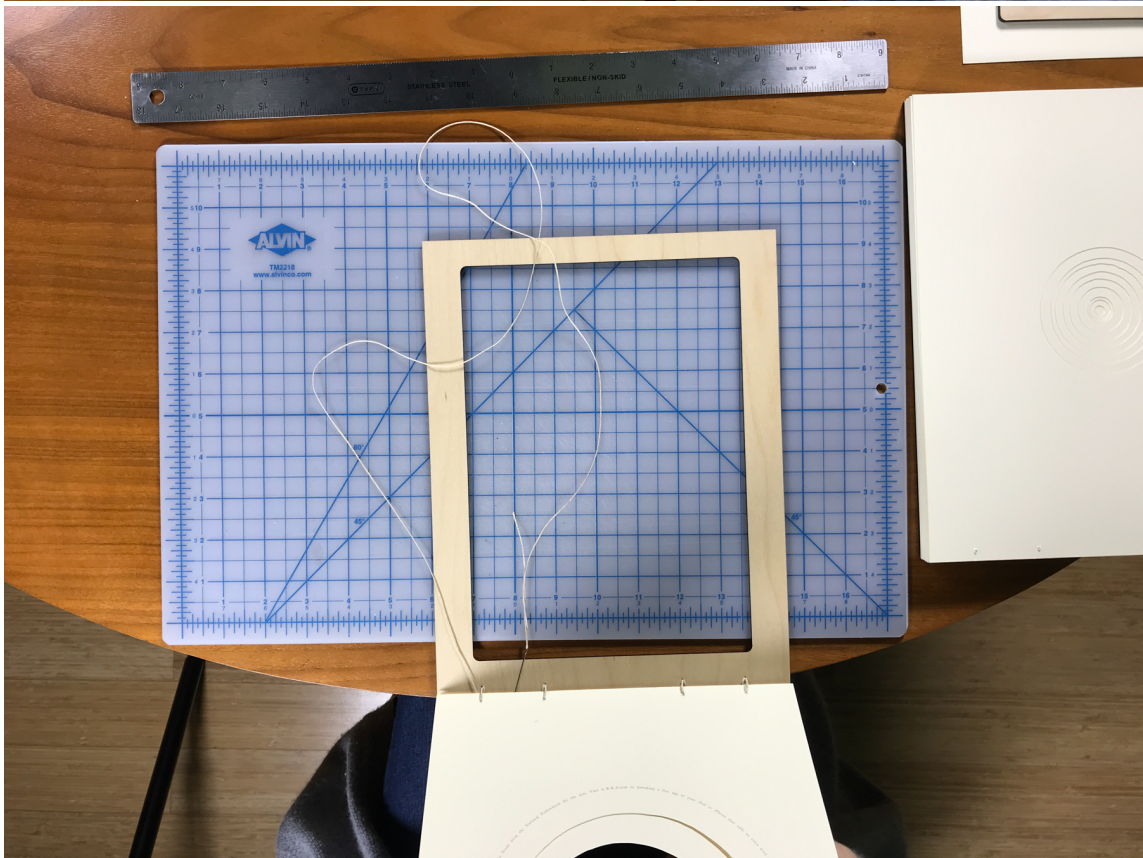


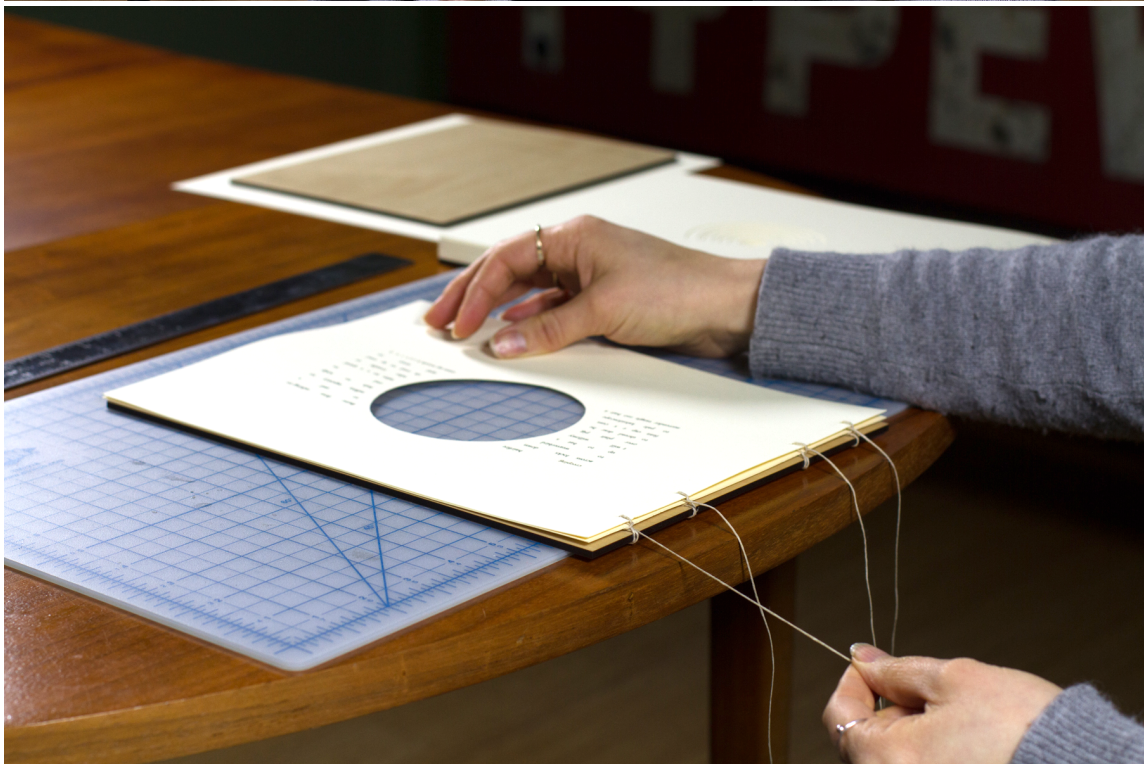
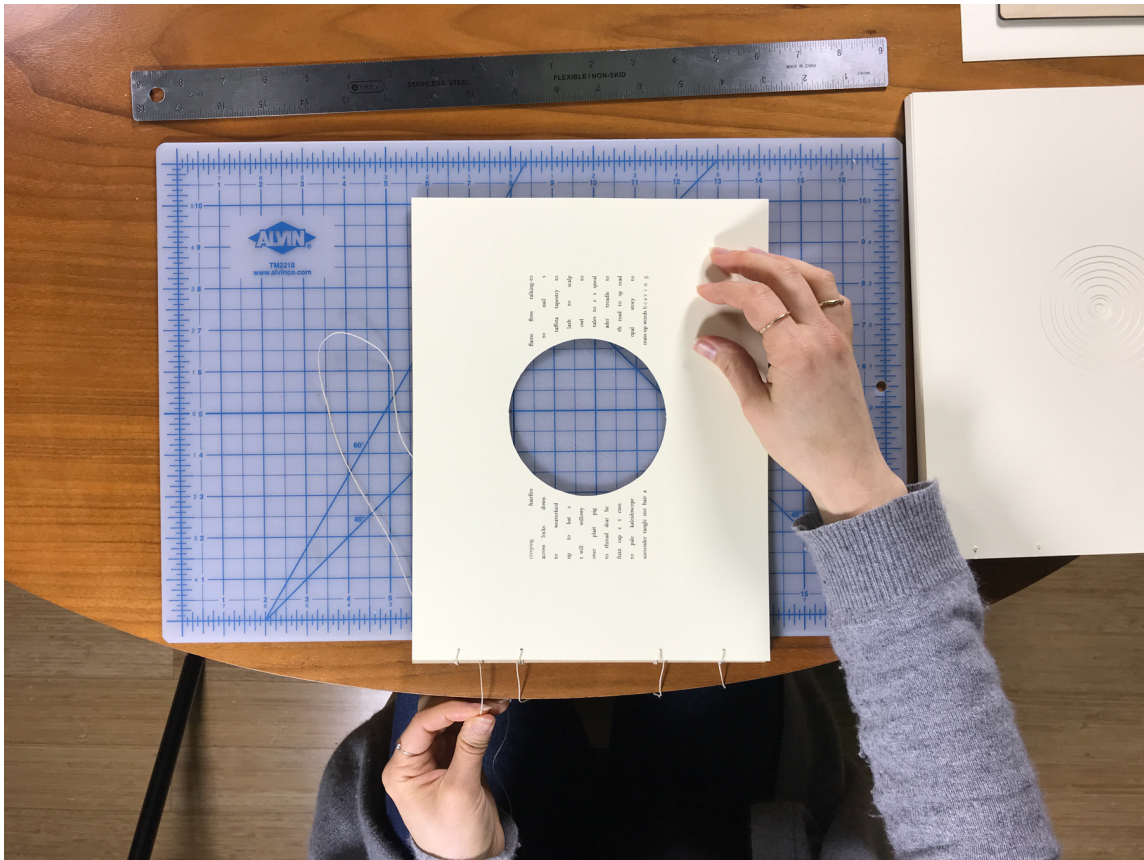
4. Right pair: Repeat steps 2 and 3.
5. Again make sure the links are perpendicular to the spine. You can pull more tightly this time than before, but be careful not to damage your paper.



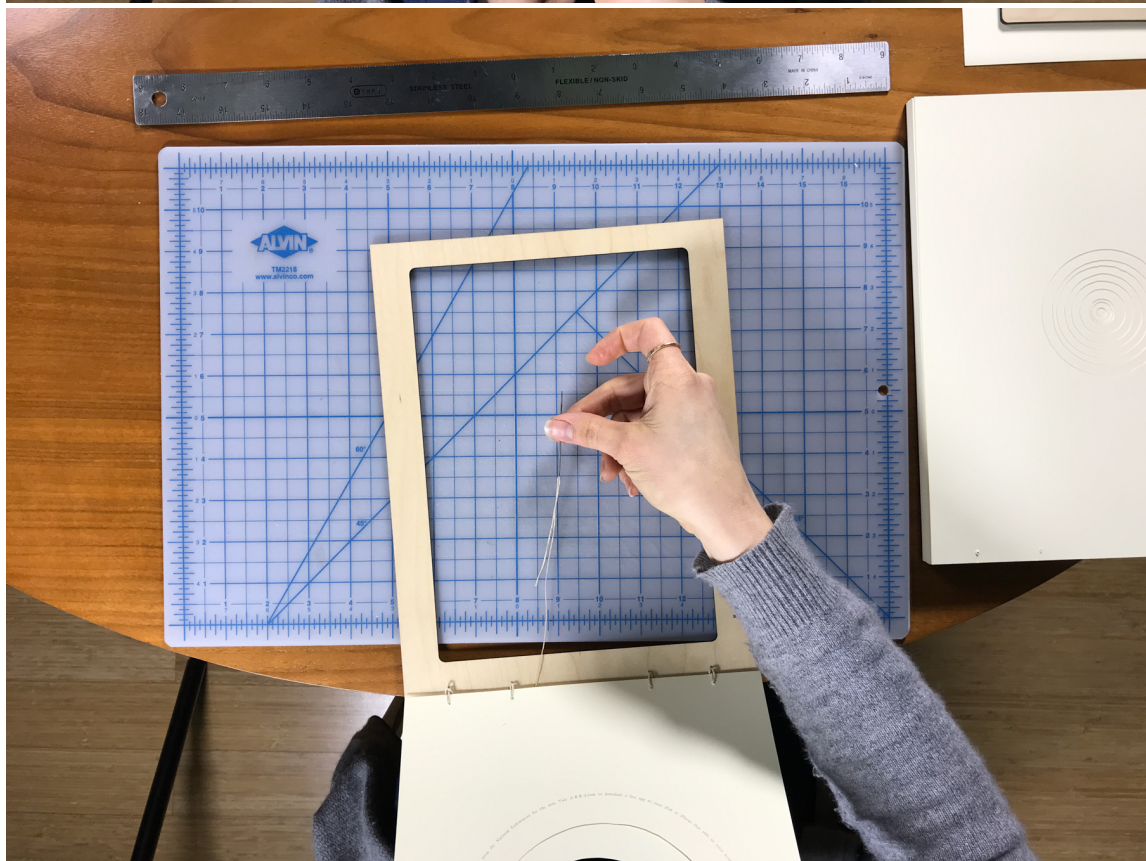
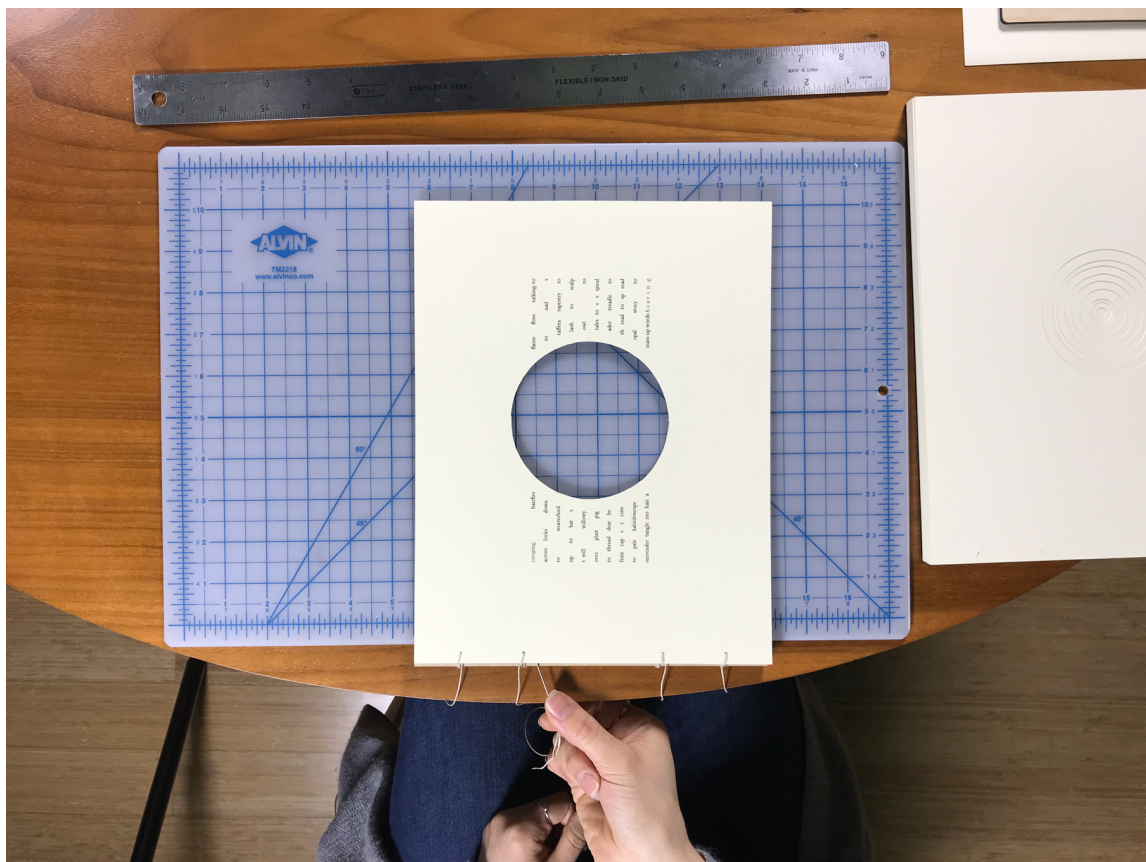
6. Now we will make the first link in the chain of the binding.
7. **Left** pair: Lift both pages from the back cover, and take your **left** needle around the left set of threads clockwise, so that the needle passes around the threads and comes out between the sewing stations and between the cover and last page. This is why we needed the extra slack between the first page and the back cover. Pull taut so that the pages stack up with

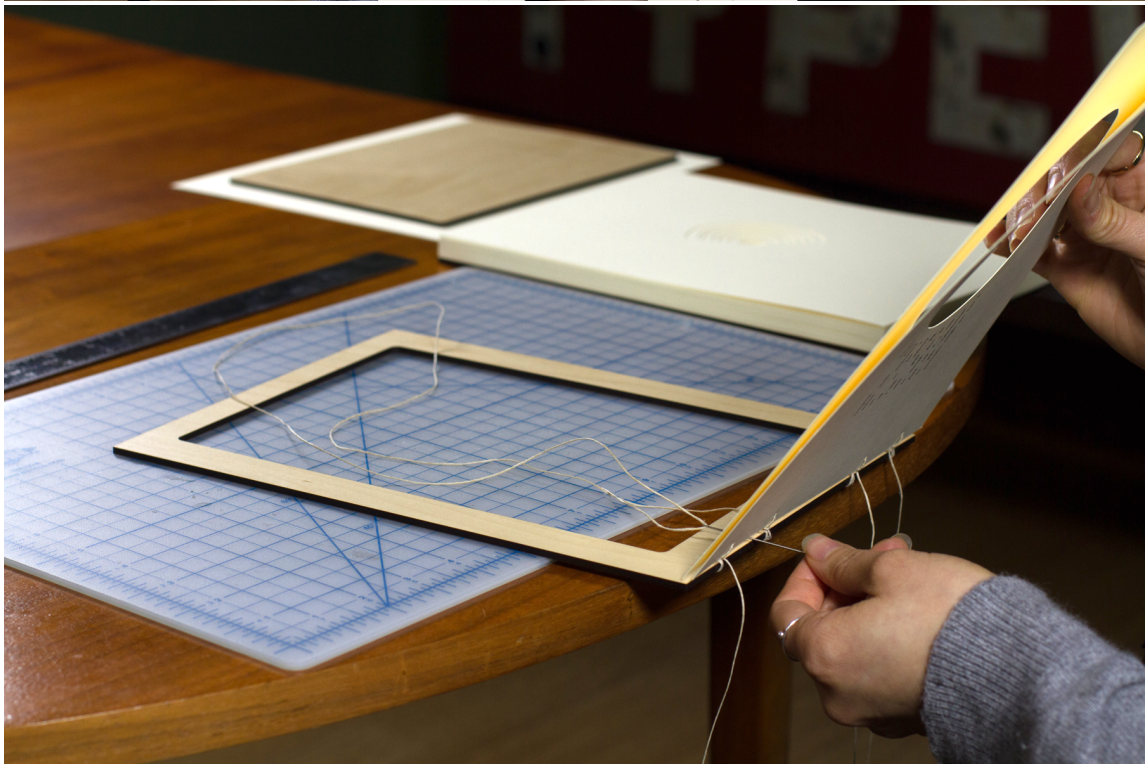
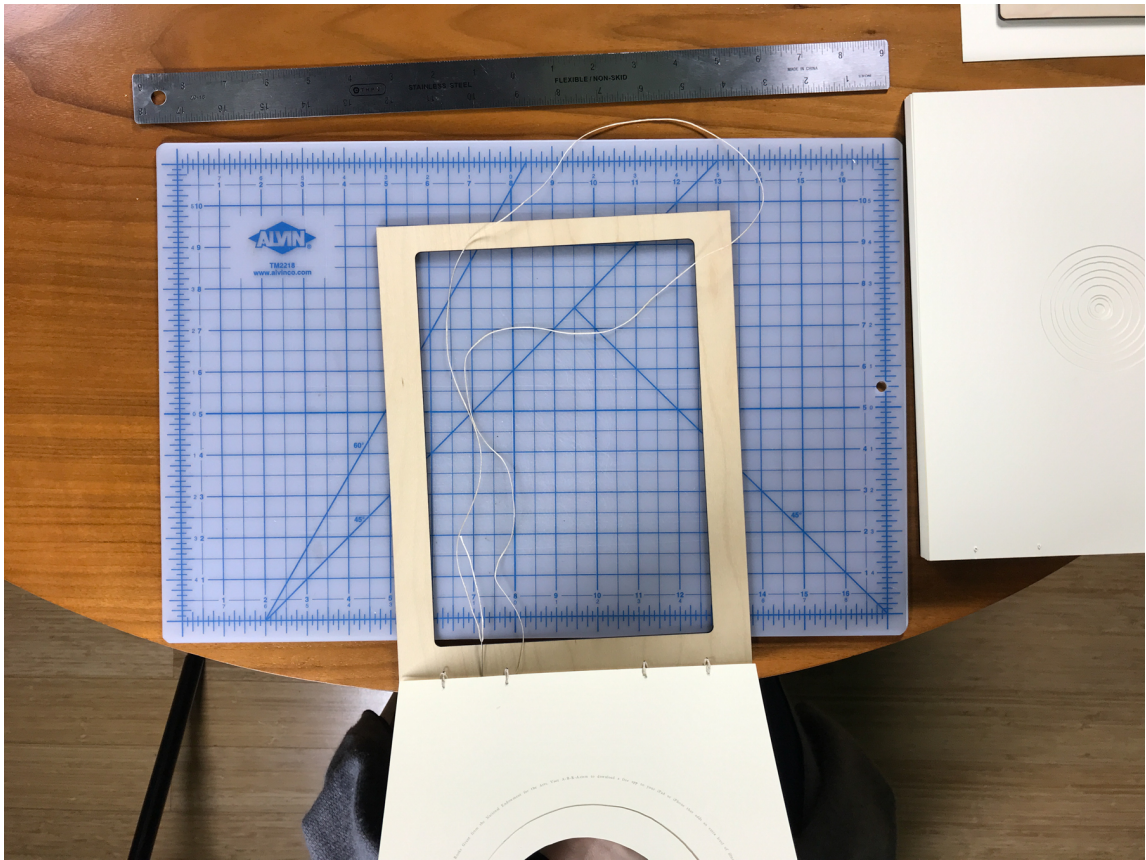
one another. The gap between the final page and the back cover should close, but don't force it, or you will tear the paper! Better to have it stay slightly inset than to tear it.

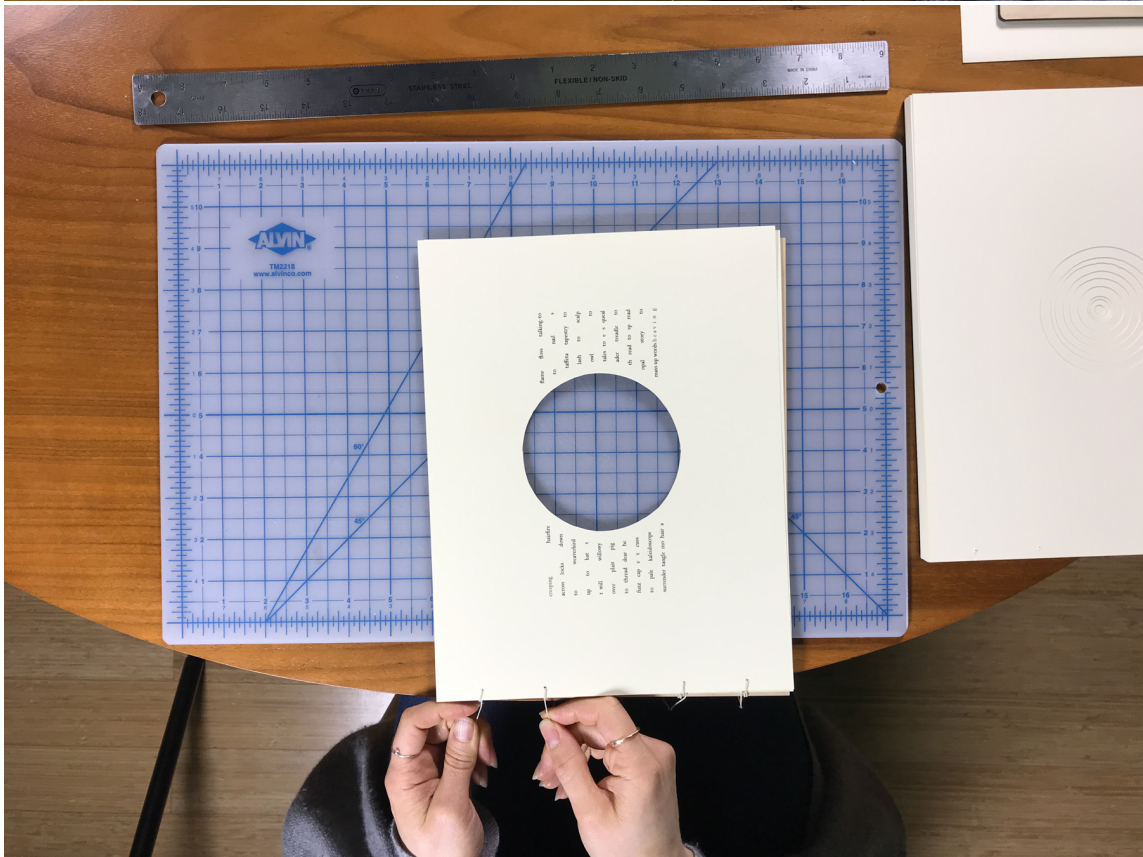
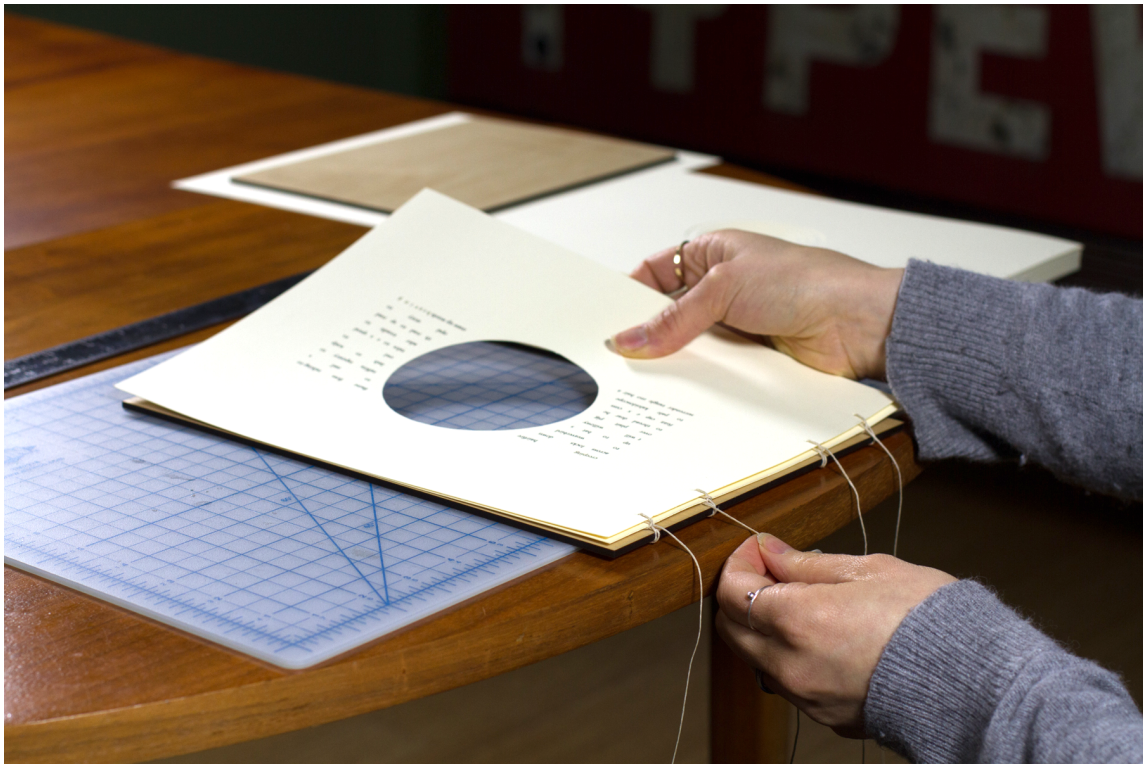




8. **Left pair:** Do the same for the right thread, going counter-clockwise.

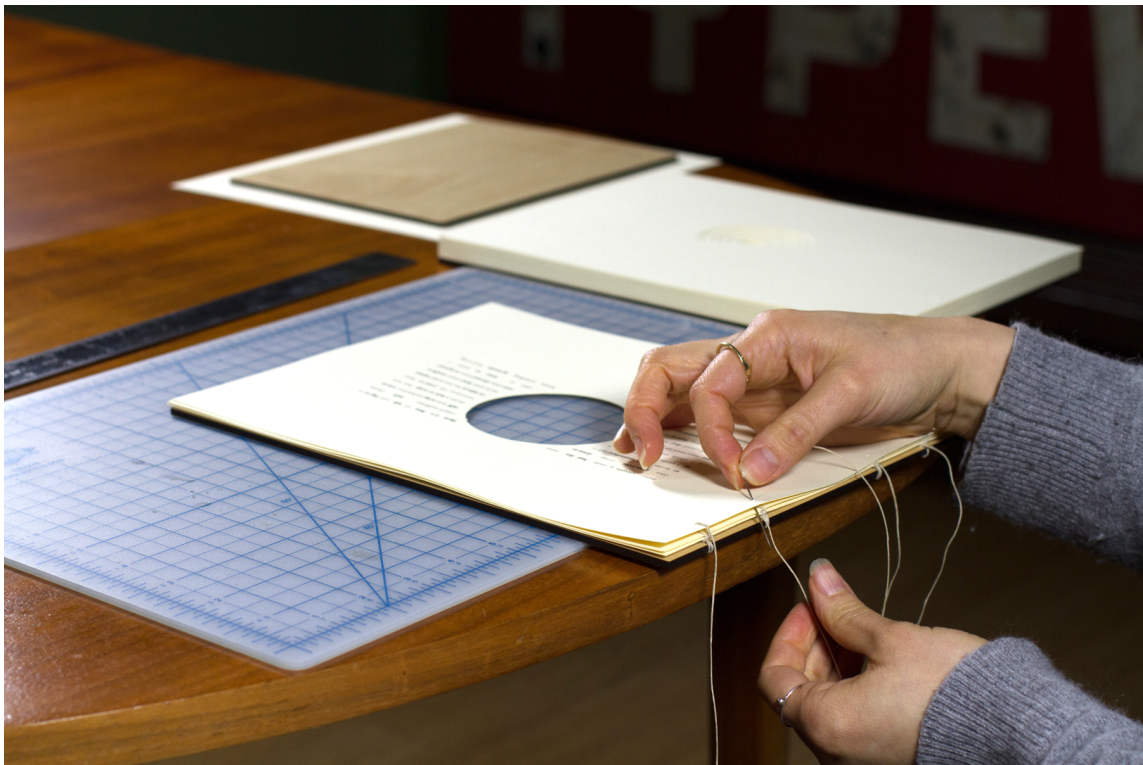
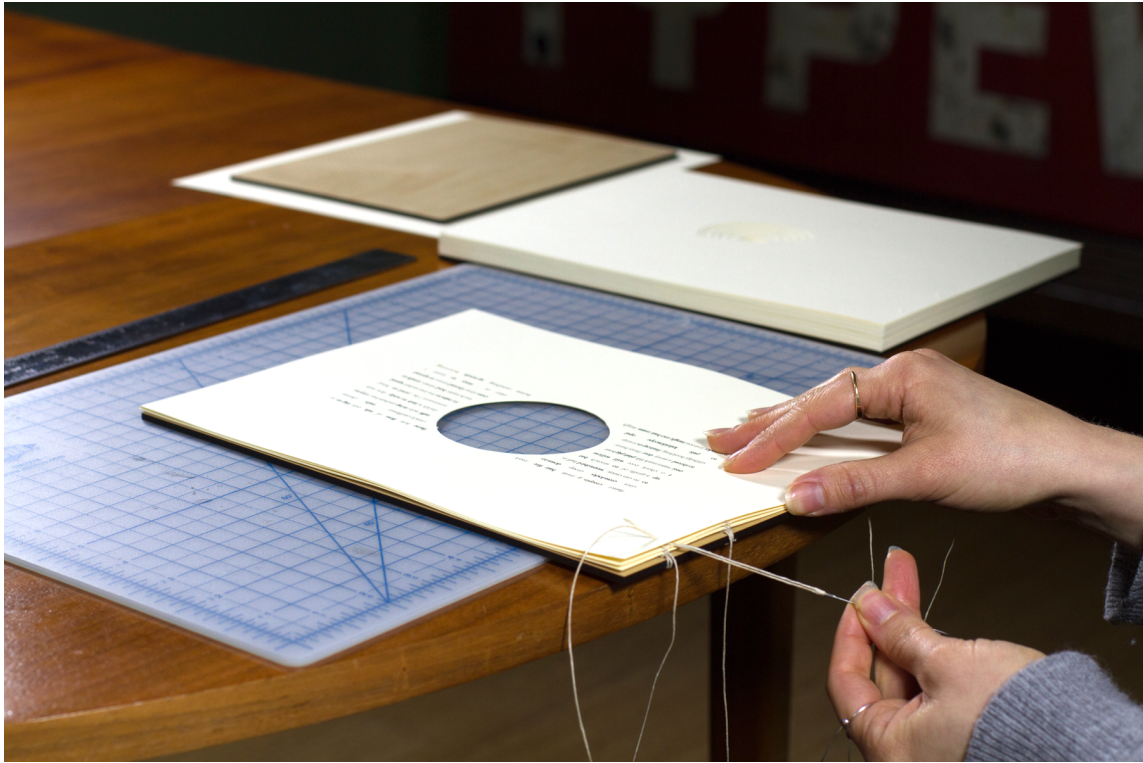




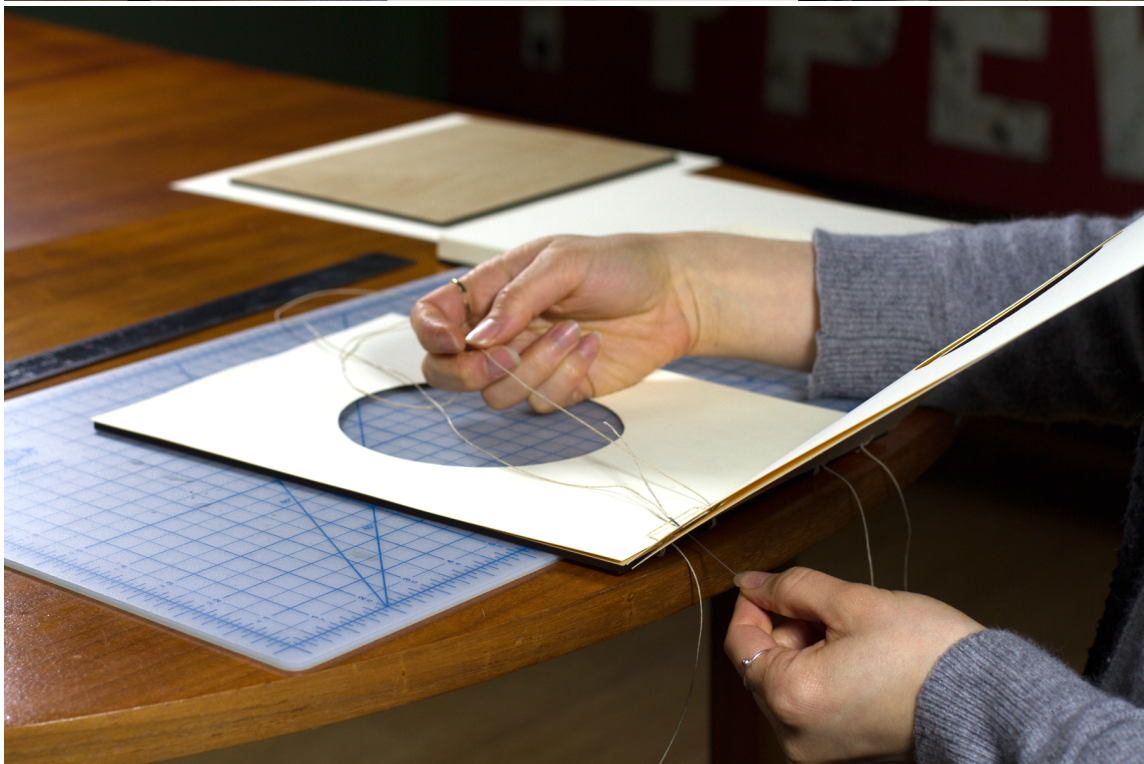
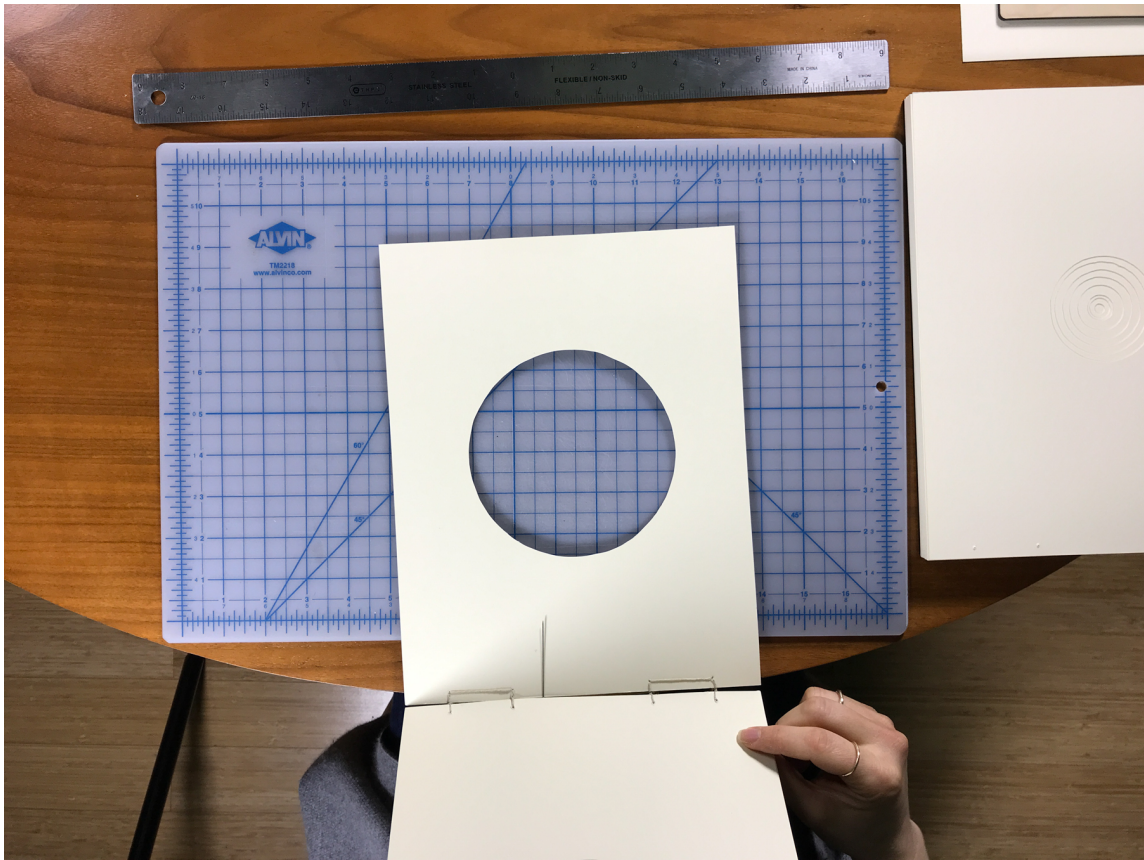


- a. This is essentially how the chain gets made. First you add a page by sewing down and inward. Then you lift the page below the one you added (so there are two pages lifted) and sew around the exposed thread so your needle comes out the middle toward the spine.
9. **Right** pair: Repeat steps 7 and 8, ensuring threads always dangle out the spine in between the two sewing stations.

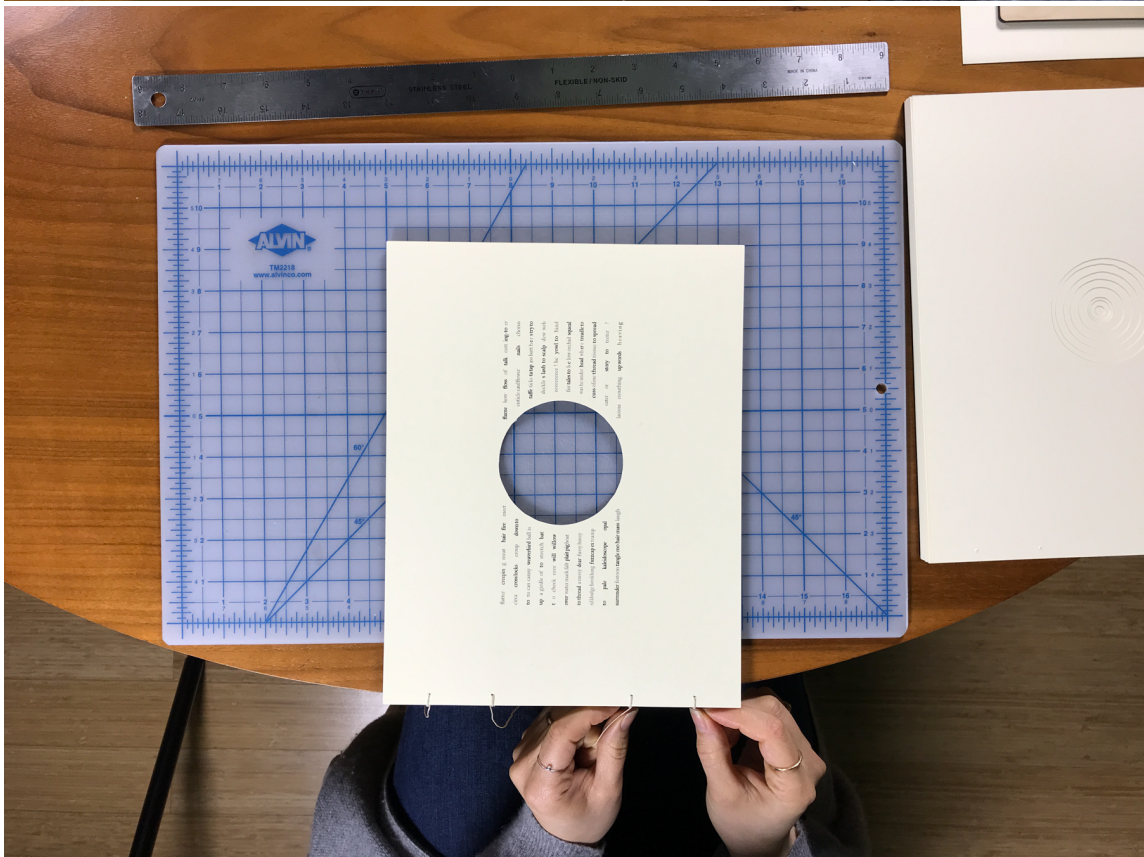
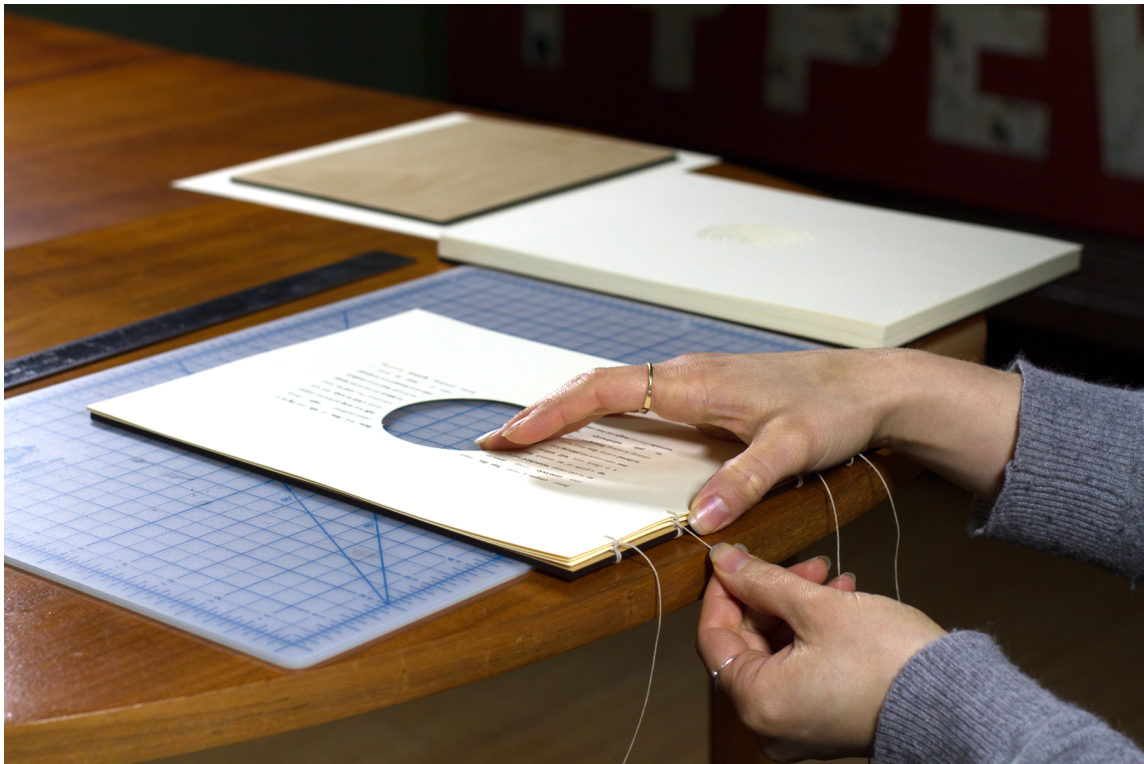
10. Continue this process, attaching sheets by sewing down and inward, then creating links on the spine by sewing around the thread two pages below. Here is an abbreviated reminder:
- a. Step one, sew down and in at each pair of sewing stations.



- b. Step 2: Lift two pages and sew around each thread and out toward the spine, always working from the outside in, so the threads exit the spine between the sewing stations.



c. Pull taut to ensure the knot you just made lines up with the knots below:



Repeat for all subsequent pages, adding one at a time to your *book block* (the stack of bound pages). Be sure to pull taut and check that your threads are perpendicular to the spine every time. This will ensure the chain is straight.

- Be gentle.
- Be patient.
- Think about the relationship between your body and the book.
- Keep your threads straight.
- Be mindful of each step in this process. After doing it 32 times, it should become more fluid and familiar—almost like choreography.
- During this stage, perhaps put on some music, a podcast, an audiobook, or turn on a Beckett play on YouTube.

11. Stop attaching sheets when only the title page and cover remain.



Adding the title page and the cover:

1. Place the title page face up on your stack of bound pages.



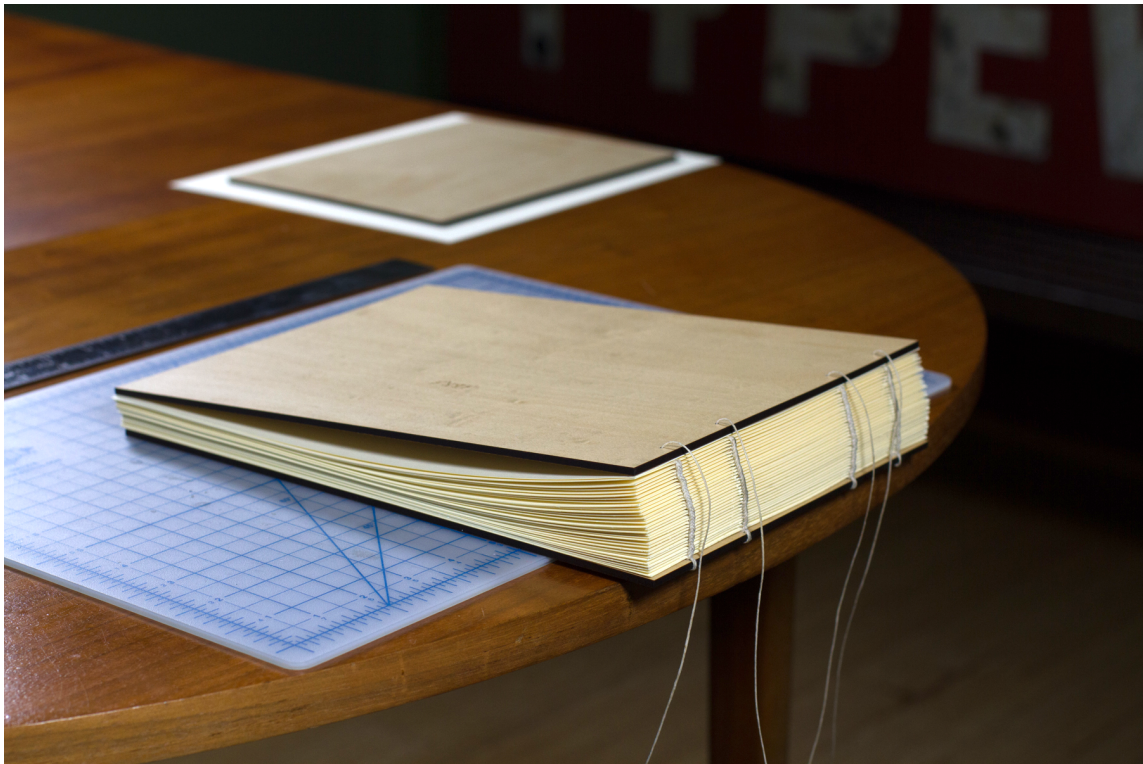
2. Rather than passing your needle from the top of the page to the bottom, this time sew upward, from the back of the page to the front. Do this with all four needles.



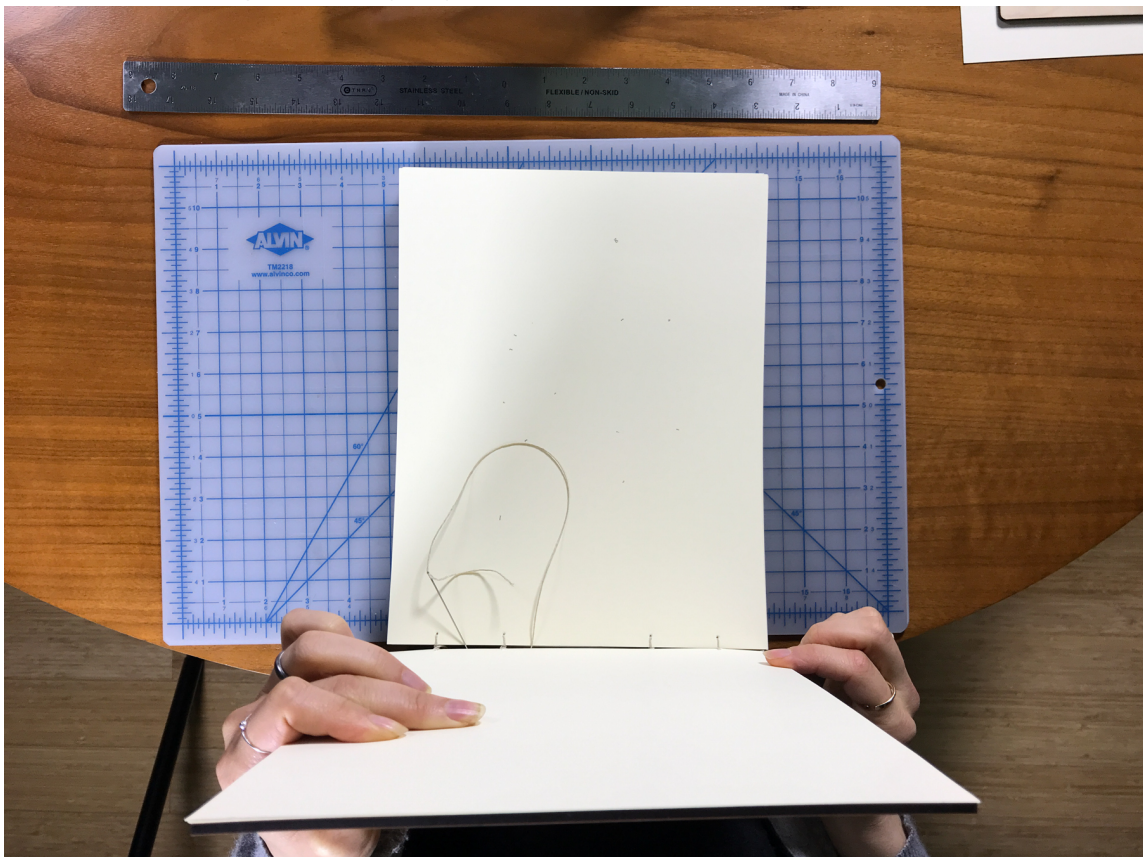


3. Place the cover on top of the stack.
4. Pass each needle upward through the corresponding holes again so that they exit through the front of the cover. Pull the loose ends back to dangle across the spine.



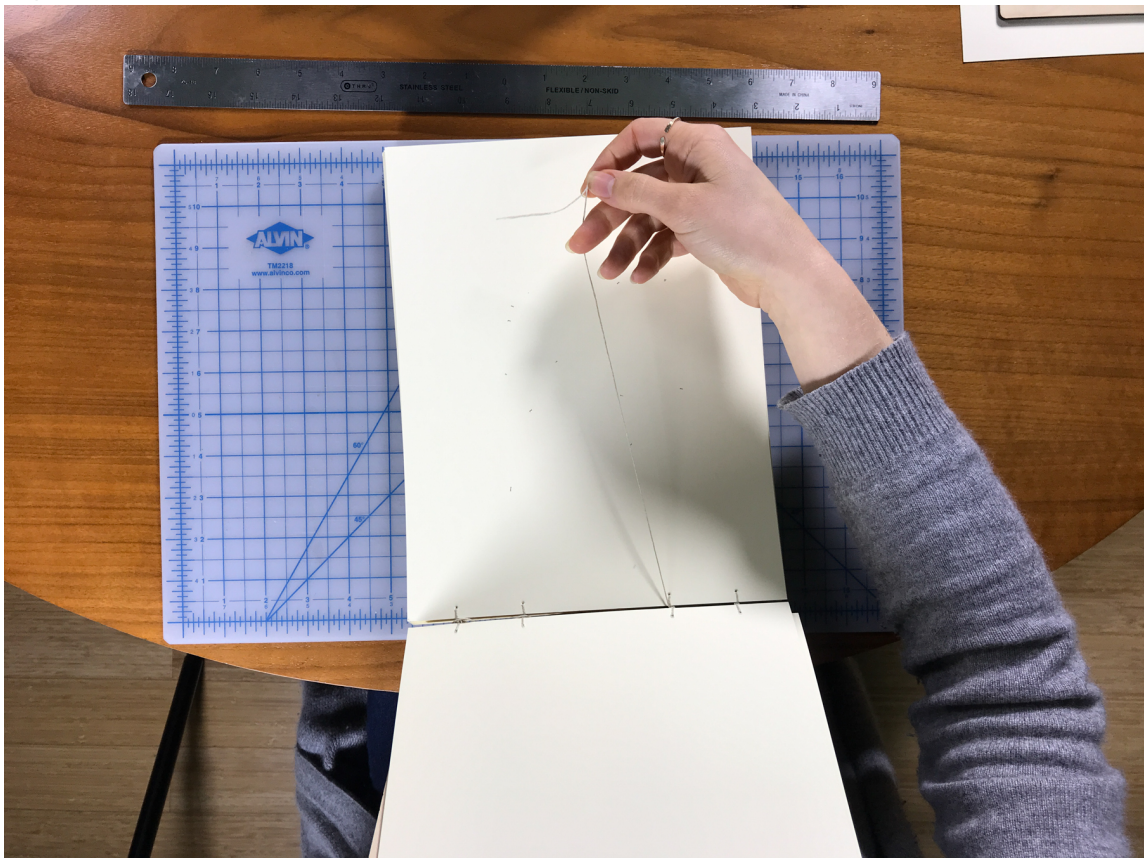


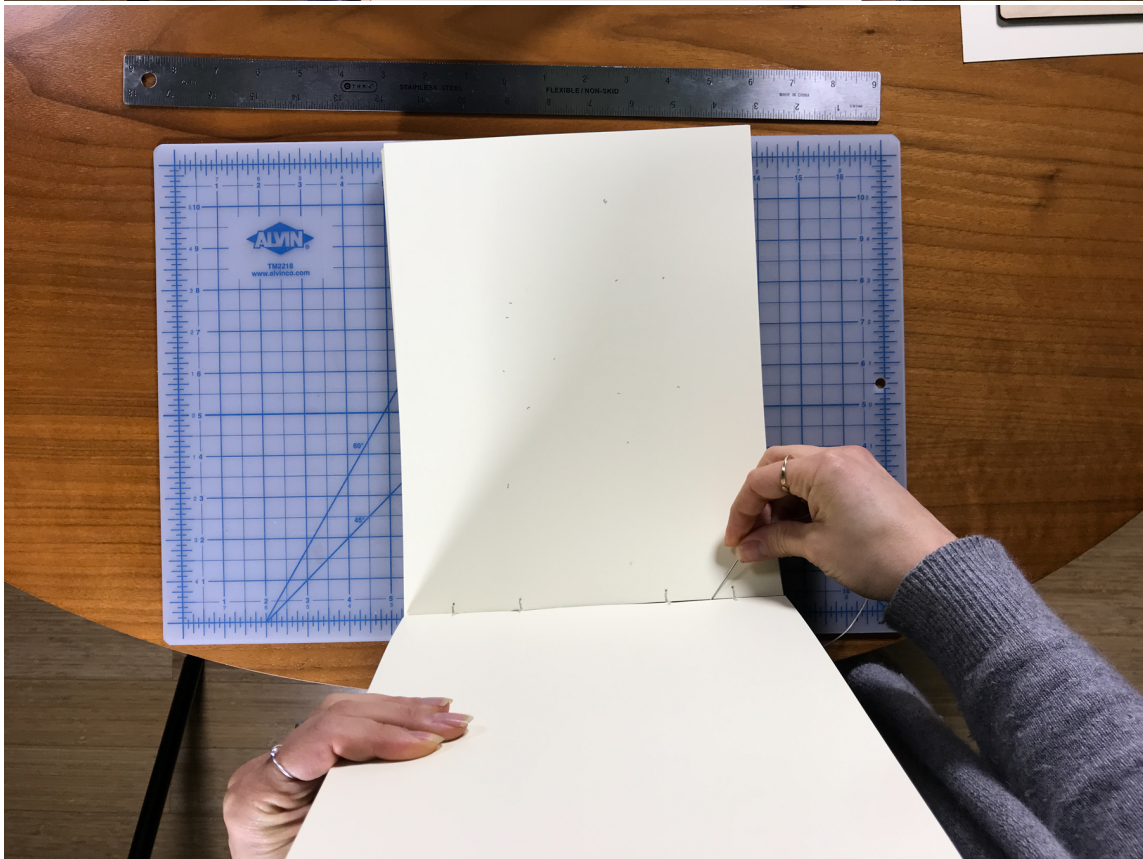
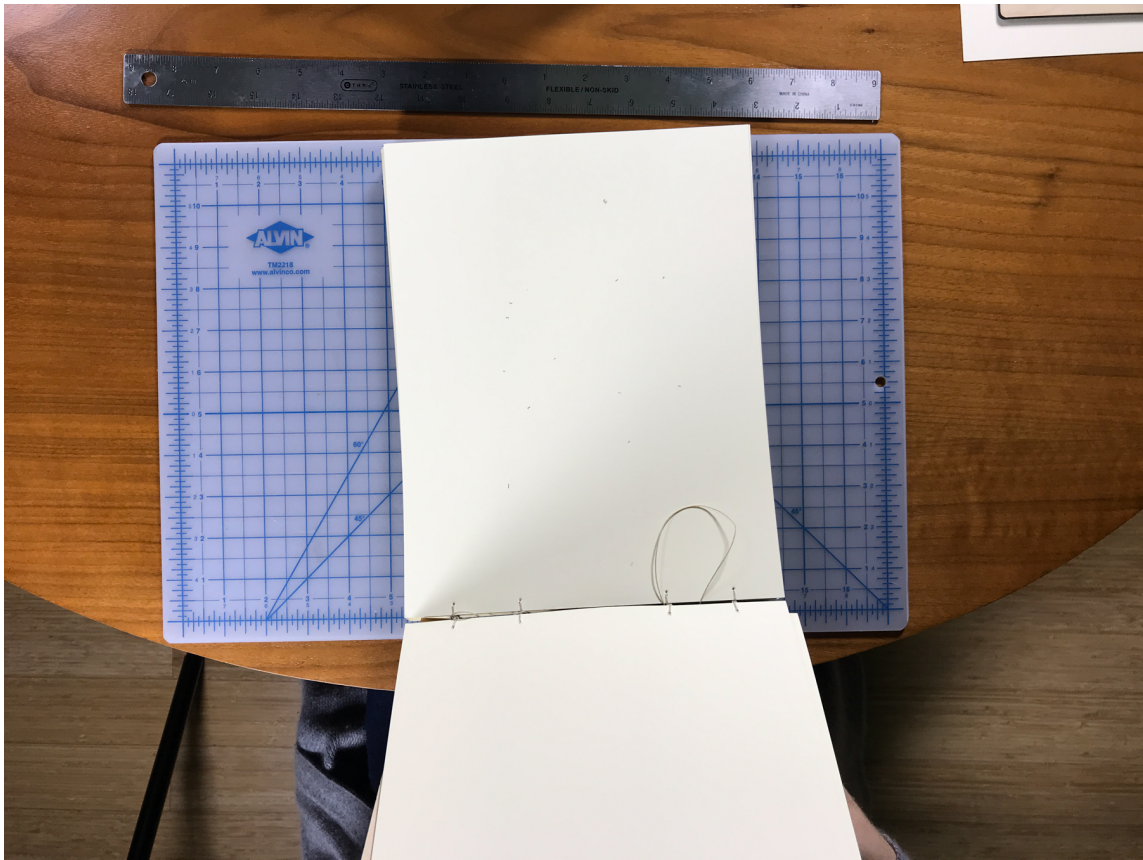
5. Lift the top two pages and cover and rest them against your chest.
6. **Left pair of stations:** **Left** needle wraps clockwise around the exposed thread at its sewing station and comes out the spine between the two stations.
 - a. Repeat with **Right** thread going counter-clockwise.





7. **Right pair of stations:** Repeat step 6.

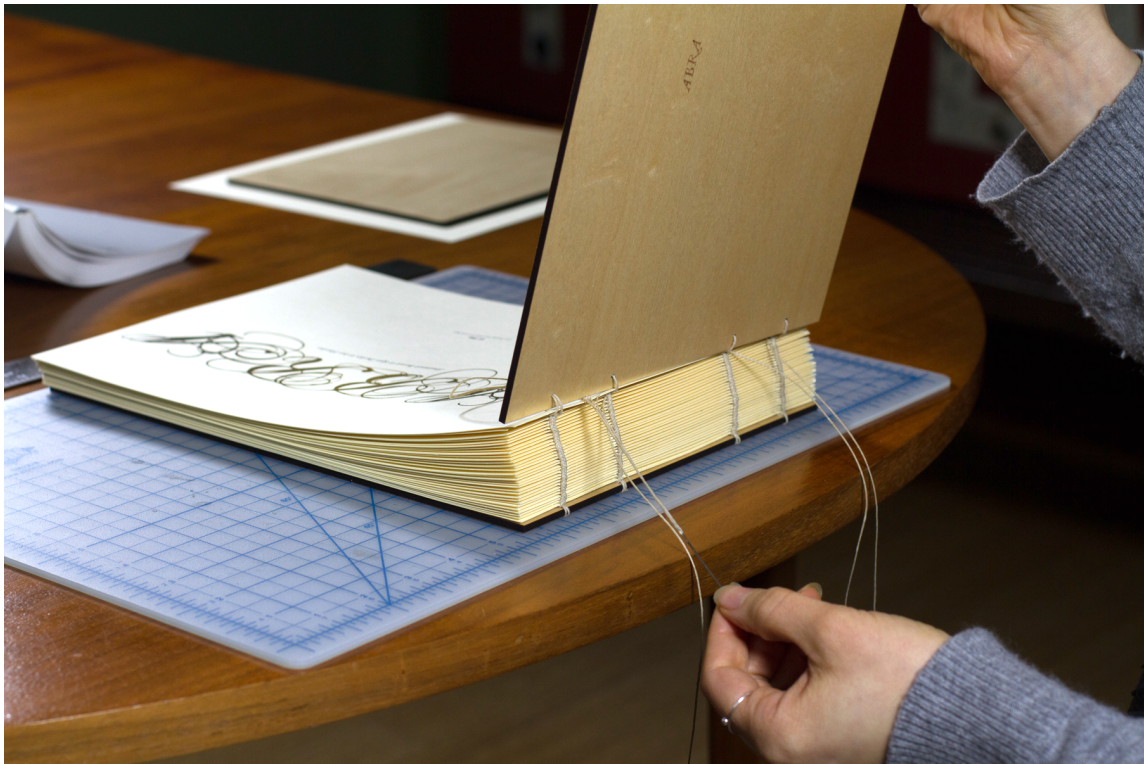




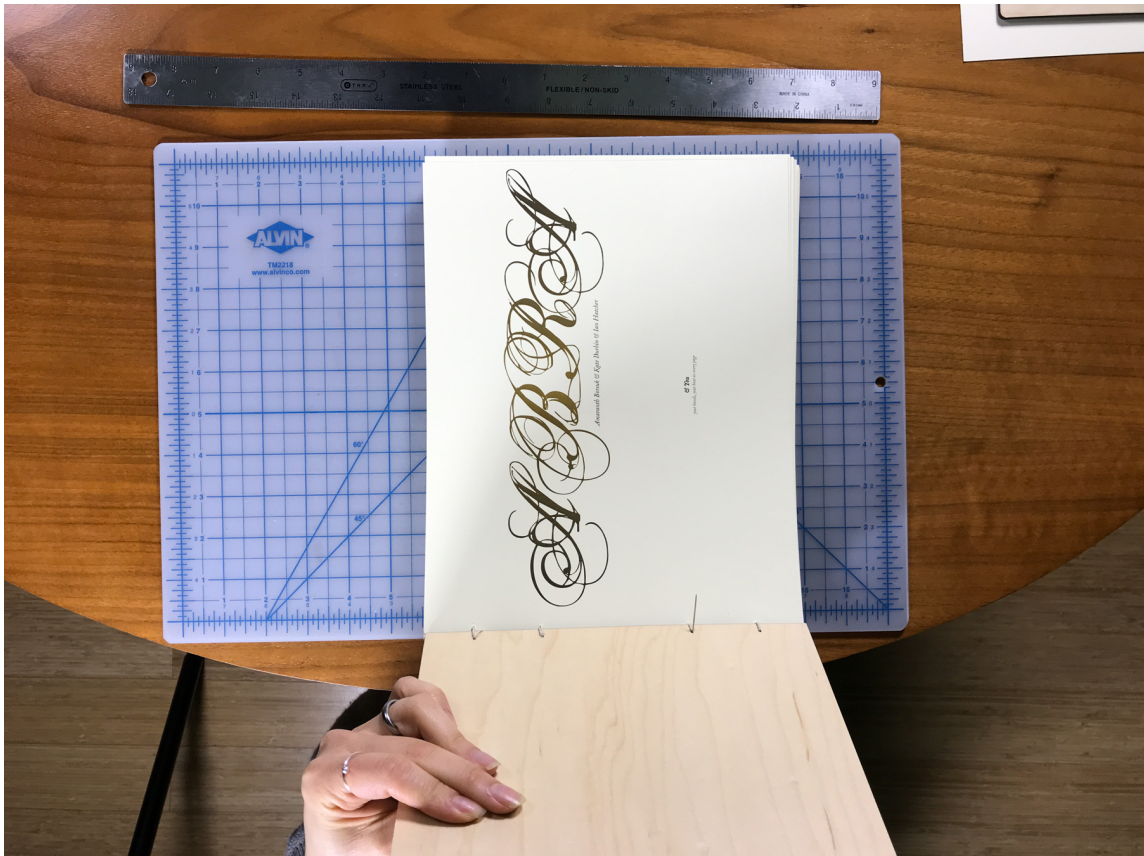
8. **Left pair:** Raise the cover off the stack. **Left** needle enters the corresponding station on the cover from the top down. Pull through, then exit toward the spine between the sewing

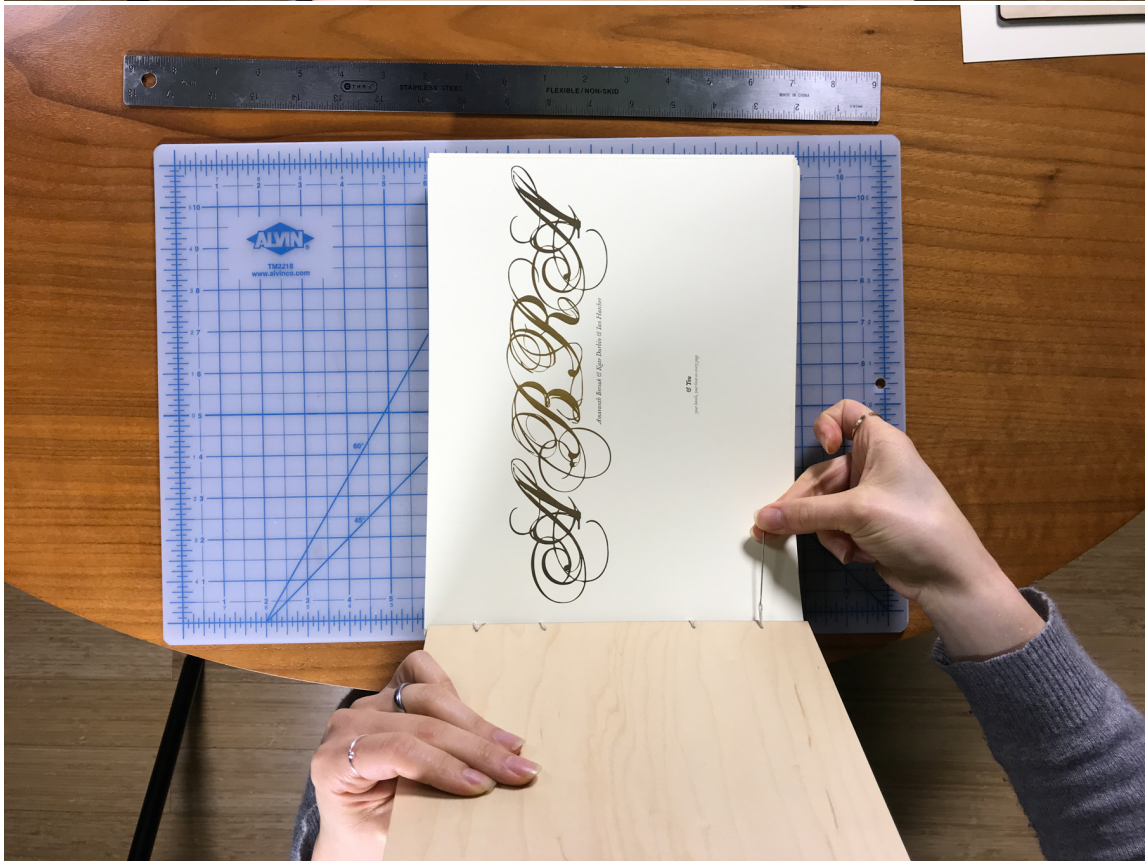
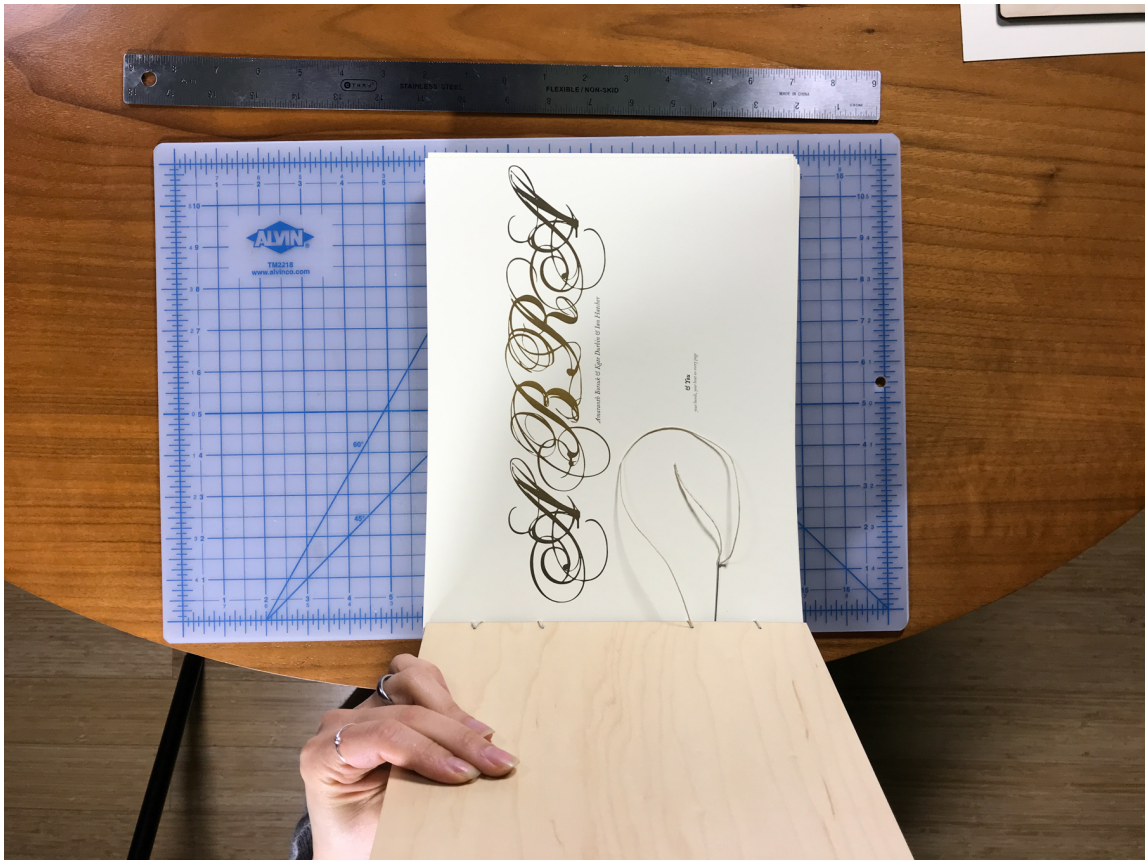
stations. The needle and thread should come out in the middle of the pair of stations and in between the cover and title page.

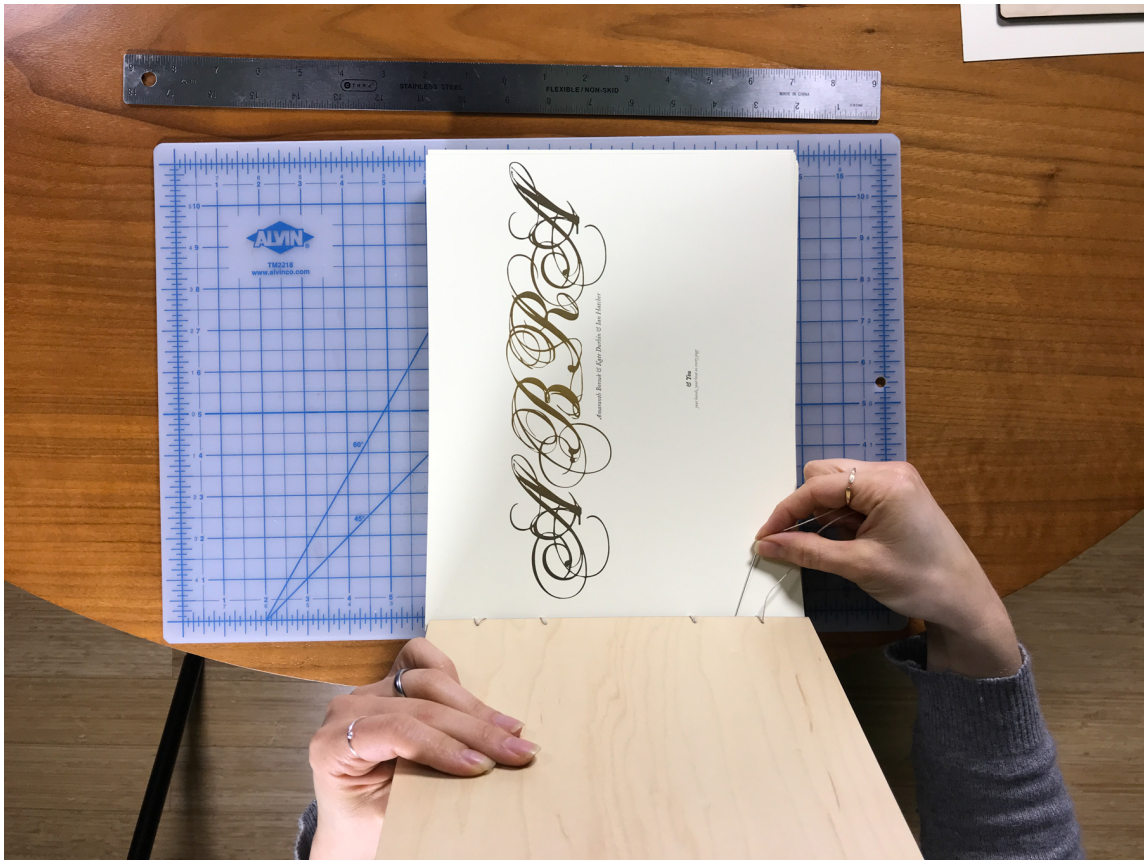




- a. Repeat with **Right** needle in the other direction.
9. **Right pair:** Repeat step 8.







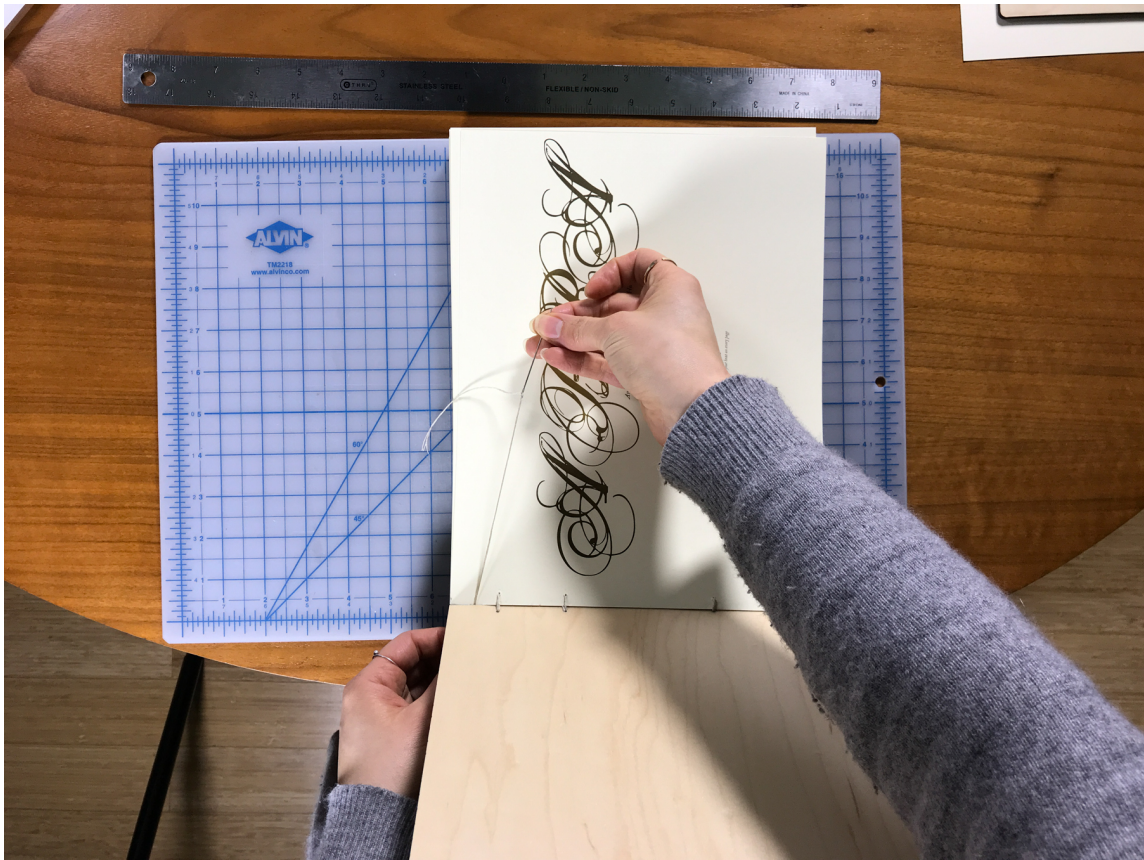
10. Pull the threads dangling out of the spine taut to straighten your links.





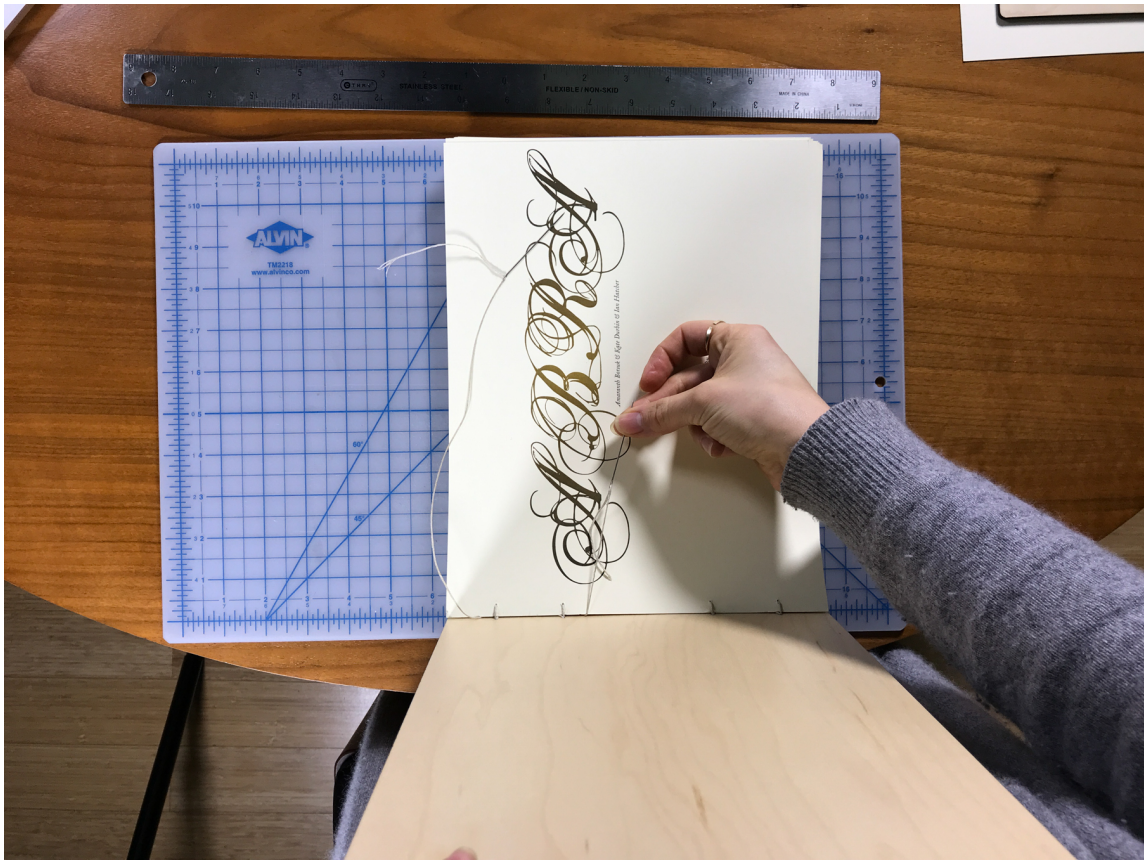
11. **Left Pair:** Raise the cover. **Left** thread enters between the cover and title page and on the outside of its sewing station. The remaining length of thread is now sandwiched between the cover and title page.





a. Repeat for **Right** thread going counter-clockwise.





12. Right Pair: Repeat step 11.



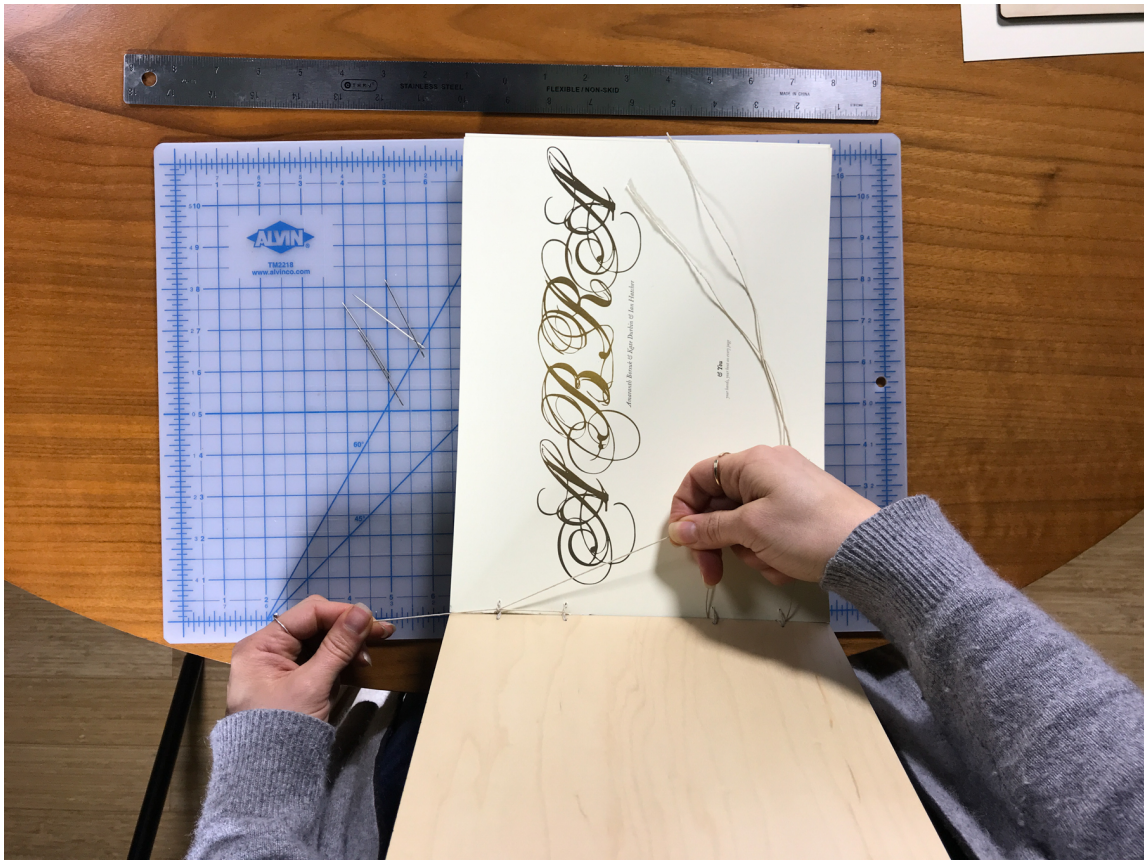
a. Remove the needles from the threads and leave the threads extended across the page.



13. Take the left pair of threads and tie a square / reef knot (two knots tied in opposite directions—meaning first one thread is on top, then the other is on top. If in doubt: <https://youtu.be/lexg5jTGnvE>), sliding it close to the left sewing station of the pair.

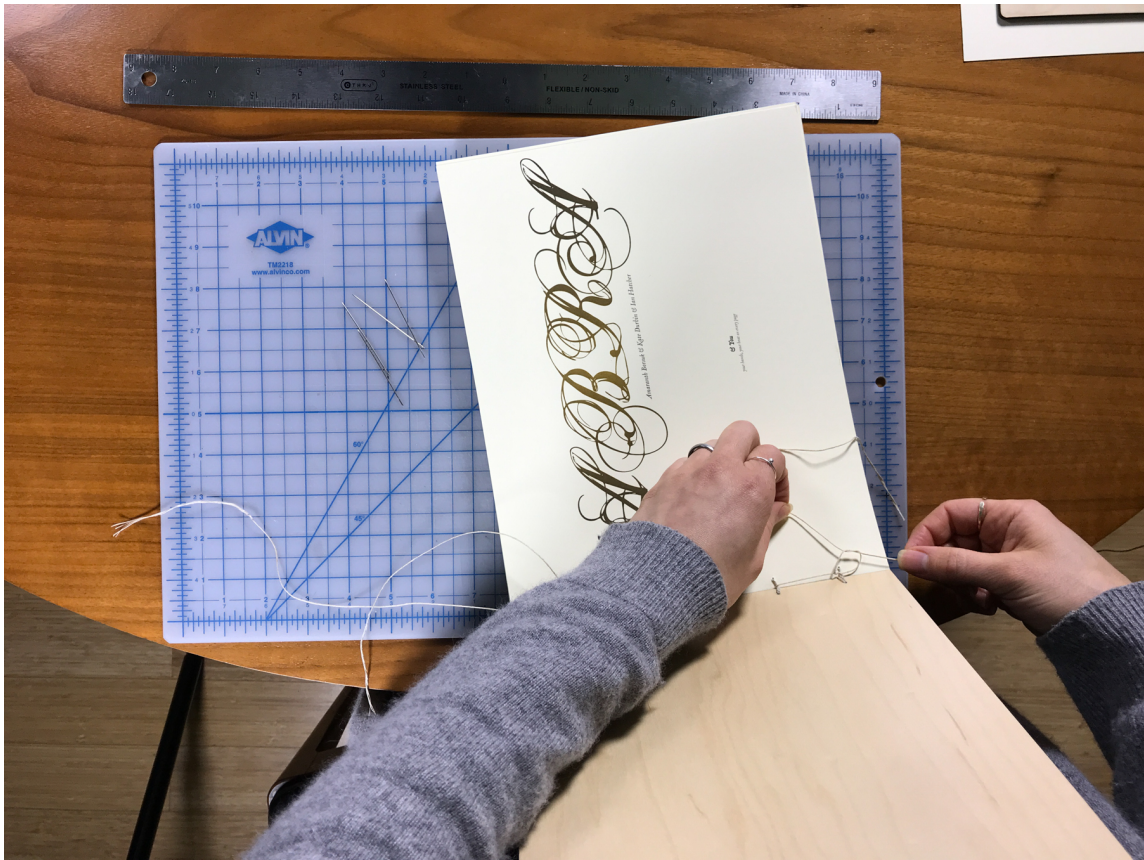




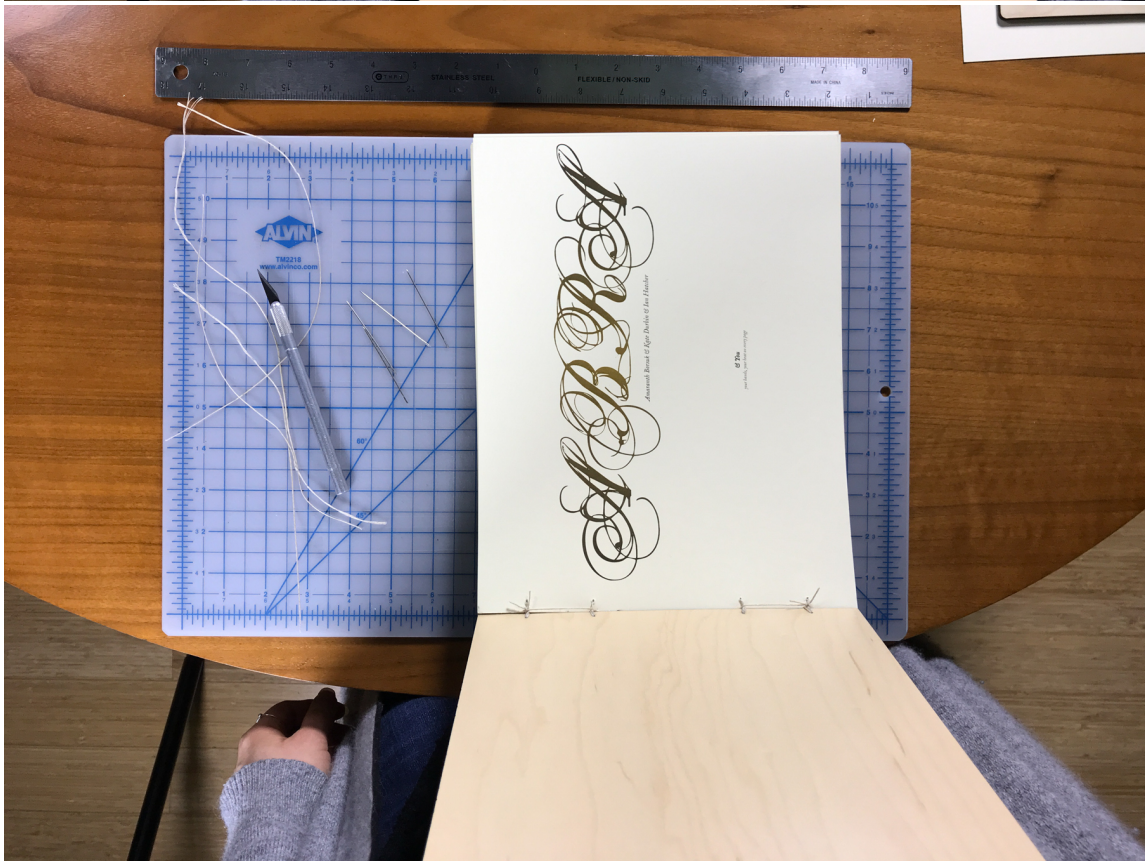


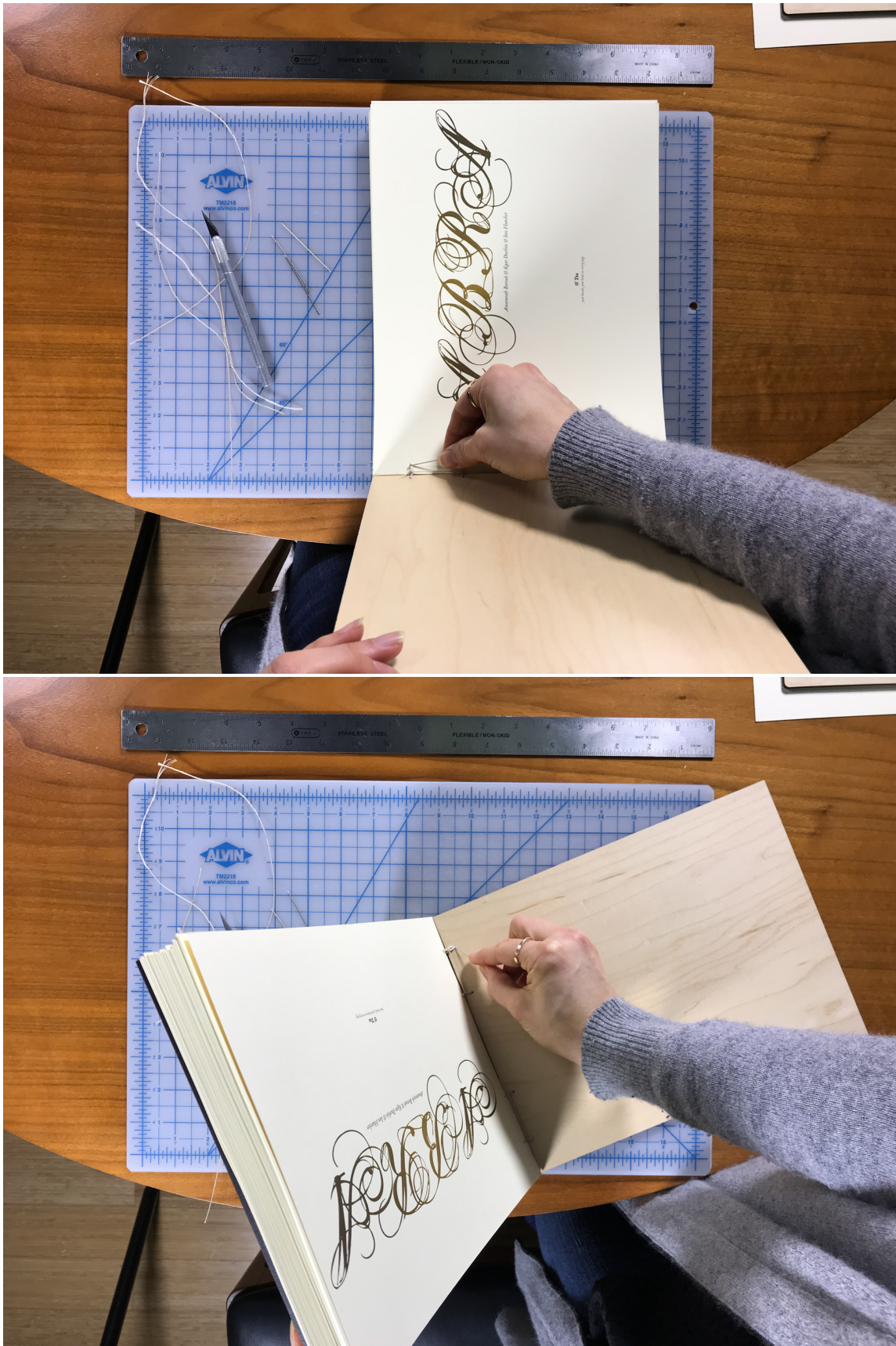
14. Take the right pair of threads and tie a square knot close to the right sewing station of the pair.



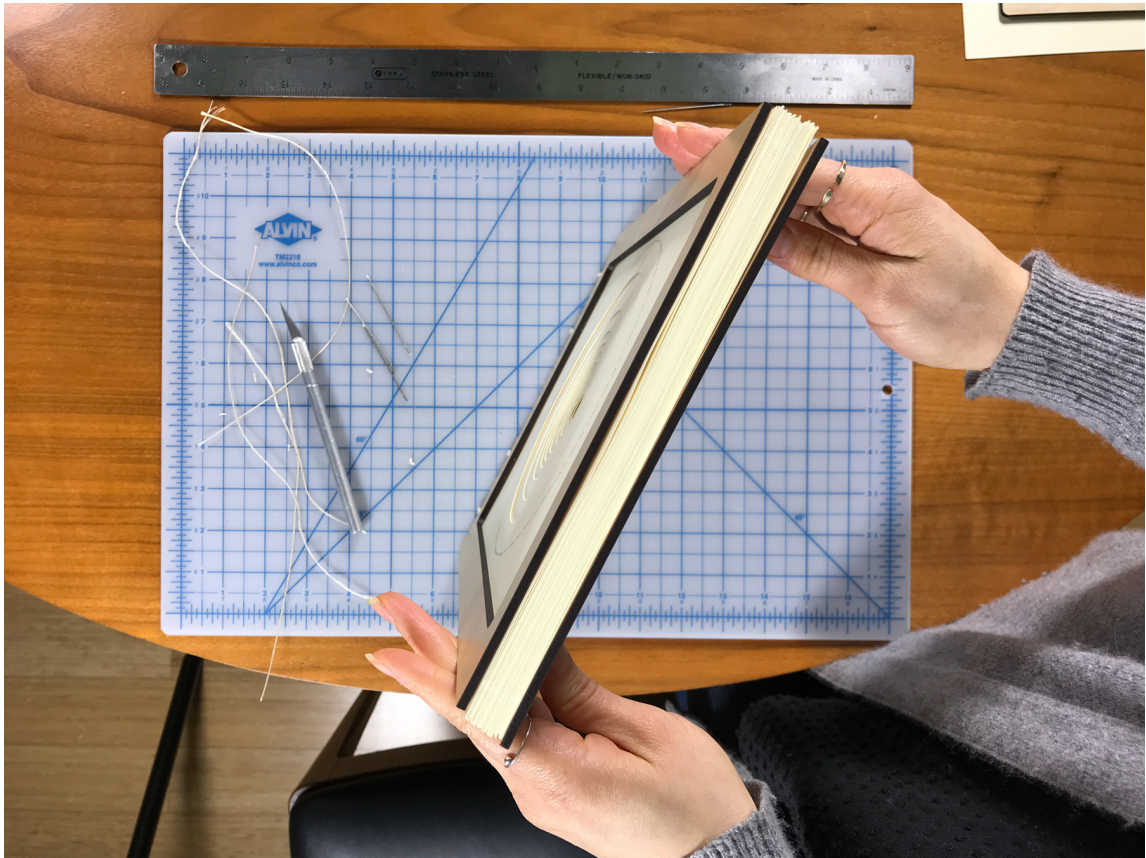


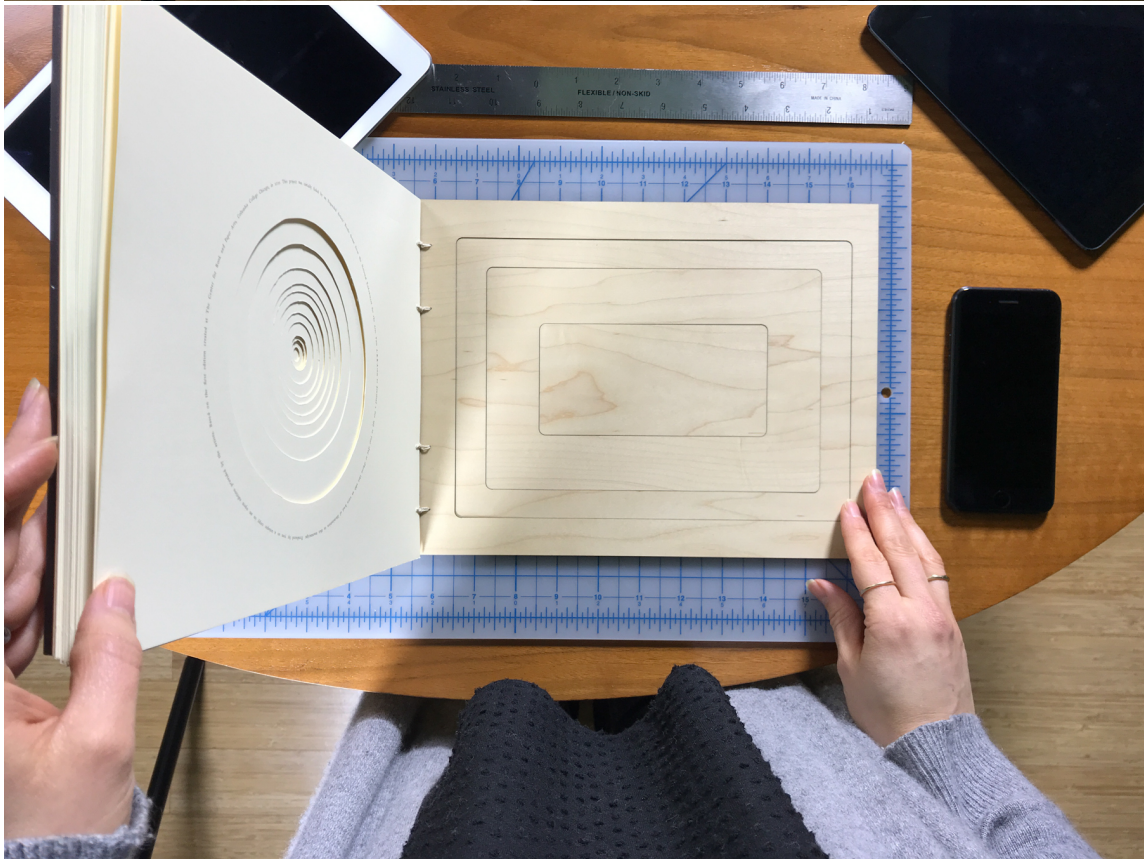
15. Trim the remaining threads to about a quarter inch and either fray the edges or use a needle to push them into the closest sewing stations, sticking them against the other threads.



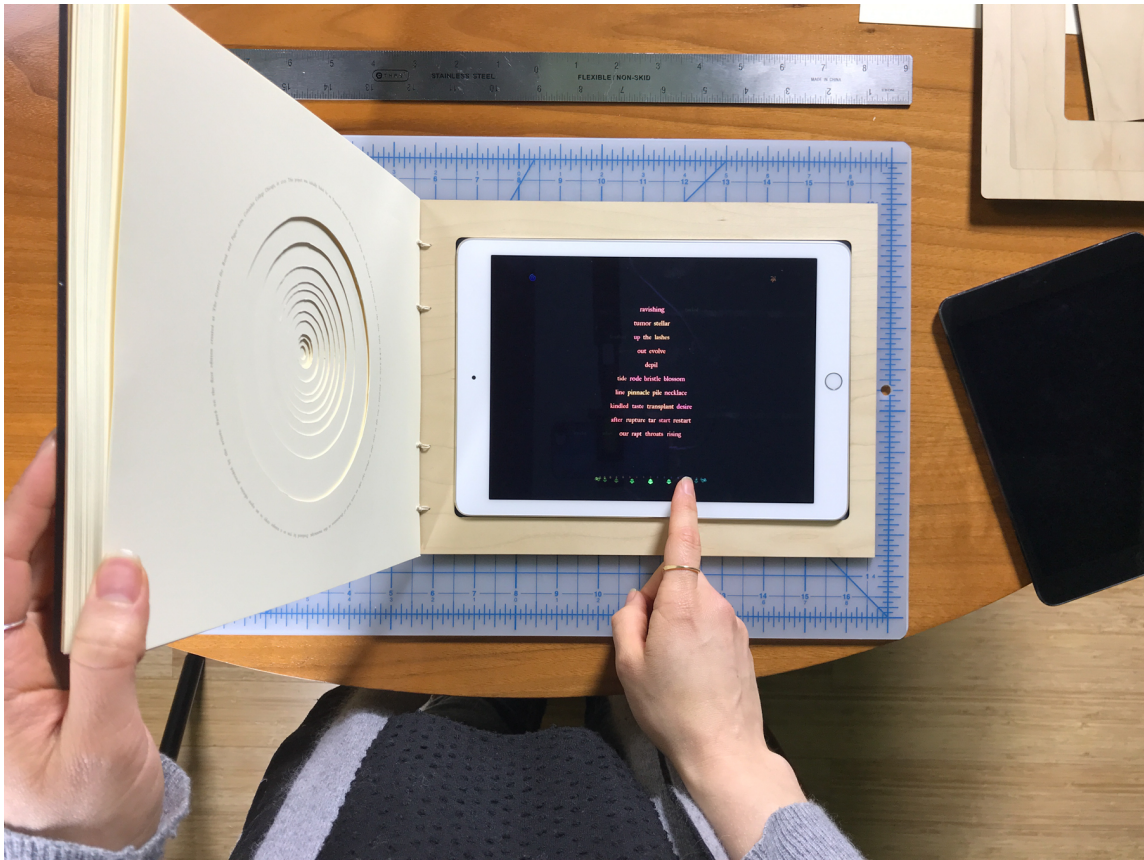


Your codex is complete! You can even out the stitches by gently flexing the spine. It should be supple. The pages should turn cleanly and lay flat for reading, a nice feature of the Coptic binding.

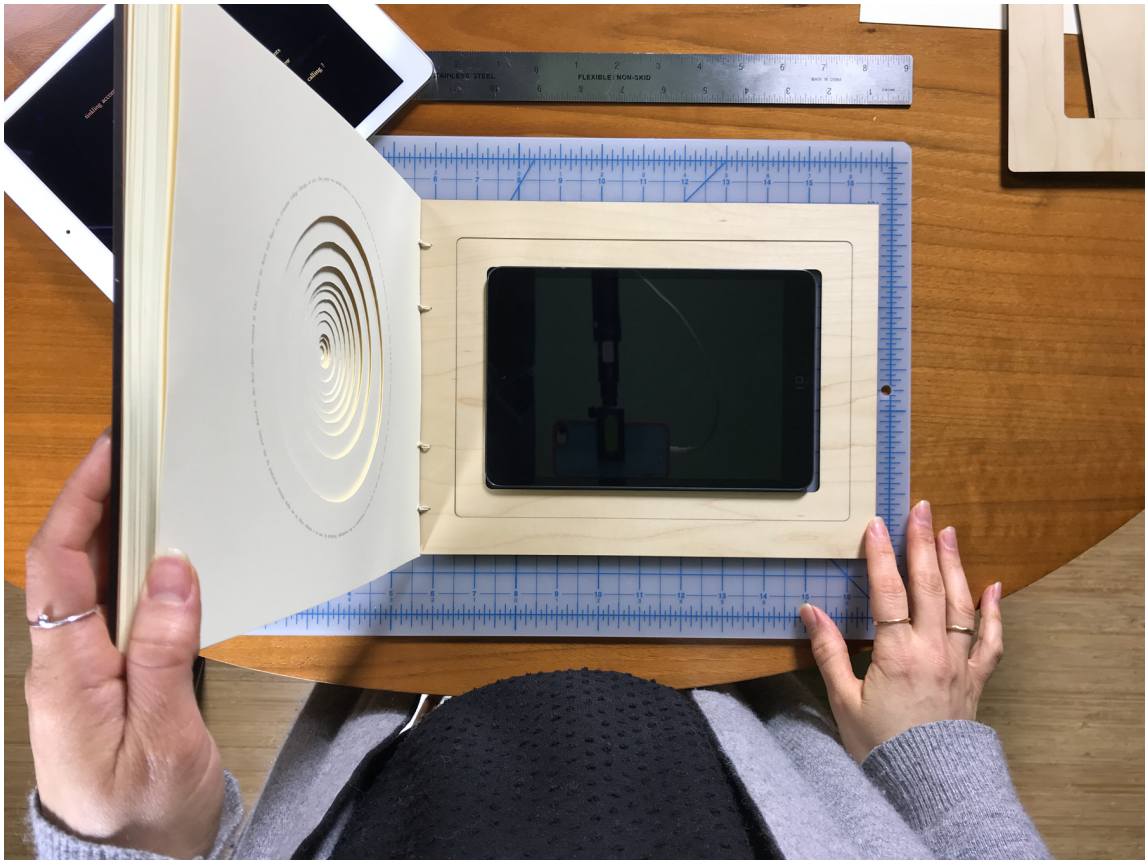




You can now lay the book on your table and insert an iPad or iPhone into the opening in the back to read the artist's book and app together.



Download the app at a-b-r-a.com or search “Abra: A Living Text” in the App Store.



Troubleshooting:

One of my threads is shorter than the others:

Open the book page by page to check if that thread got snagged on something when you were pulling it through. If so, backtrack with only that thread to release it and repeat the steps until it is caught up to the same stage as the others.

If it is short because you didn't pull your loops evenly at the start, you can add more thread using a weaver's knot. See YouTube or Keith Smith's *Smith's Sewing Single Sheets* pp. 59-64 for guidance.

I pulled too hard and tore my paper:

Stop what you are doing and remove the needle from the thread. Pull the thread out of the hole. Cut a piece of packing tape or scotch tape and tape over the hole, wrapping the tape around to cover both sides of the page. Thread the needle and try again. You should be able to pierce this tape and proceed with care.

My braids are squiggly:

Be sure to pull each knot into position above its predecessor before attaching the next sheet. First tug toward the middle of the sewing station, then tug away, pushing the column of knots into alignment.

You can do a little maneuvering after the fact by stretching and jiggling the spine and gently pushing the links in the direction you want them to go. Be careful, though!

The spine of my book is very thick, but the fore-edge is very thin:

That is the nature of the Coptic! The knots between each page bulk up the spine. You can mitigate this somewhat by curving the exposed spine outward, or you can embrace this impressive sewing that shows the time and handiwork that went into the book's binding.

This is too complicated for me:

I have tried to simplify my descriptions and to illustrate the process, but if you are a visual learner, the "DIY Single Sheet Bookbinding Tutorial" by Sea Lemon on YouTube provides a variation on this Coptic that may be easier to follow: <https://youtu.be/04vt8YfT7XM>

If you are an advanced binder or simply want more detailed illustrations, I highly recommend Keith Smith's [Smith's Sewing Single Sheets](#) for a wonderful introduction to binding books of loose pages.