

Making a Hardbound Book

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Step 1

Have a place to work where tools and materials are close at hand. I have a separate studio, which is ideal, but even a kitchen table could suffice.



Step 2

Decide on the number of pages for the book and the trim size. I've decided on four 16-page signatures equaling 64 pages. Each 8 ½ by 11 sheet will be cut in half and folded, giving a trim size of 4.25" by 5.5"



Step 3

I stack my sheets, go to my paper cutter and cut them in half. (A metal straight-edge and a mat knife will work if you don't have a paper cutter.) The sheets now measure 5 ½ by 8 inches.



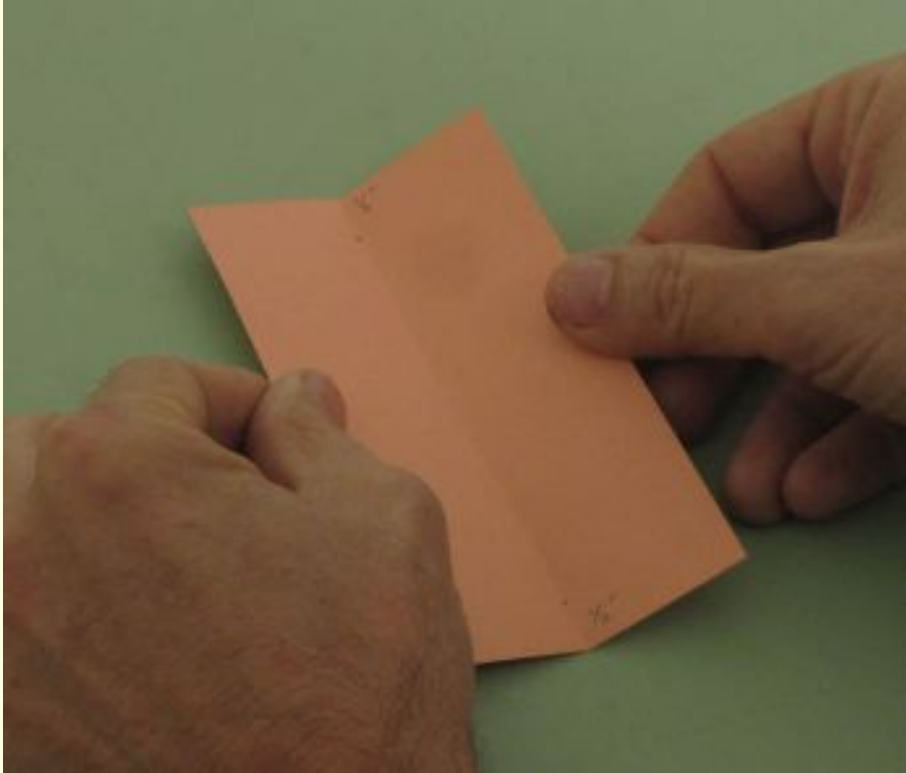
Step 4

Now is the time to do the printing, which might include the cover and the book's pages (text block). Alternately, the printing can be done before pages are folded and cut to size.



Step 5

The cut sheets are folded in half and assembled into four 16-page signatures.



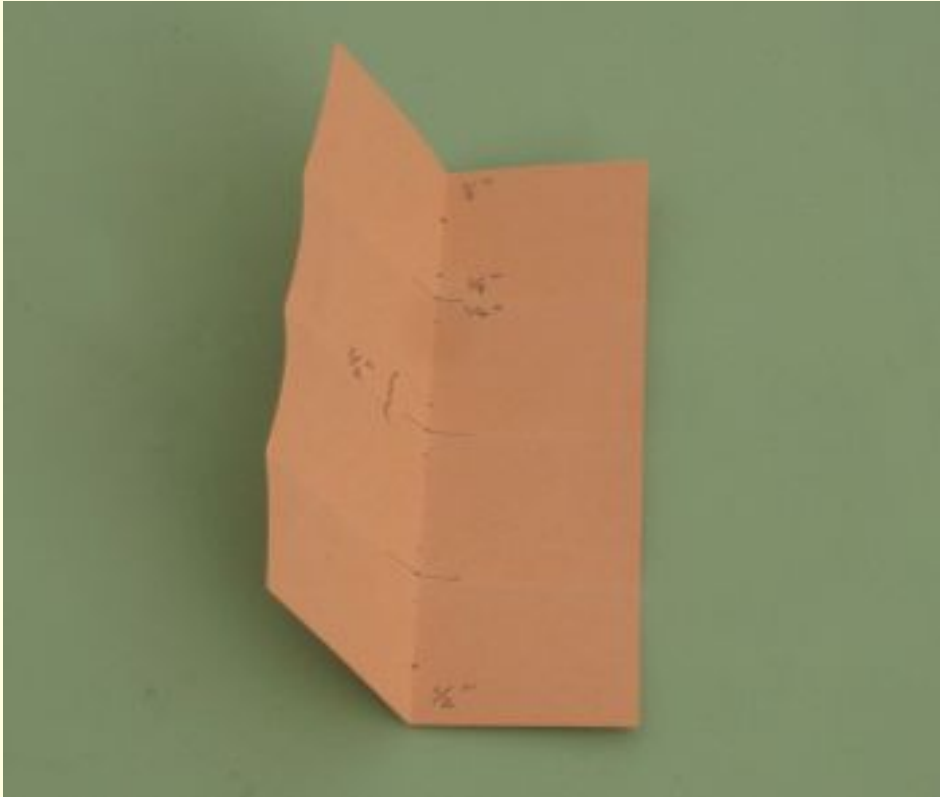
Step 6

I find some card stock, cut it to the same height as my book block, and fold in half. I make a pencil mark half an inch from the top and bottom.



Step 7

I fold the strip in half and then fold both ends into the center.



Step 8

I make pencil marks $\frac{1}{4}$ inch above and below each of the three folds.



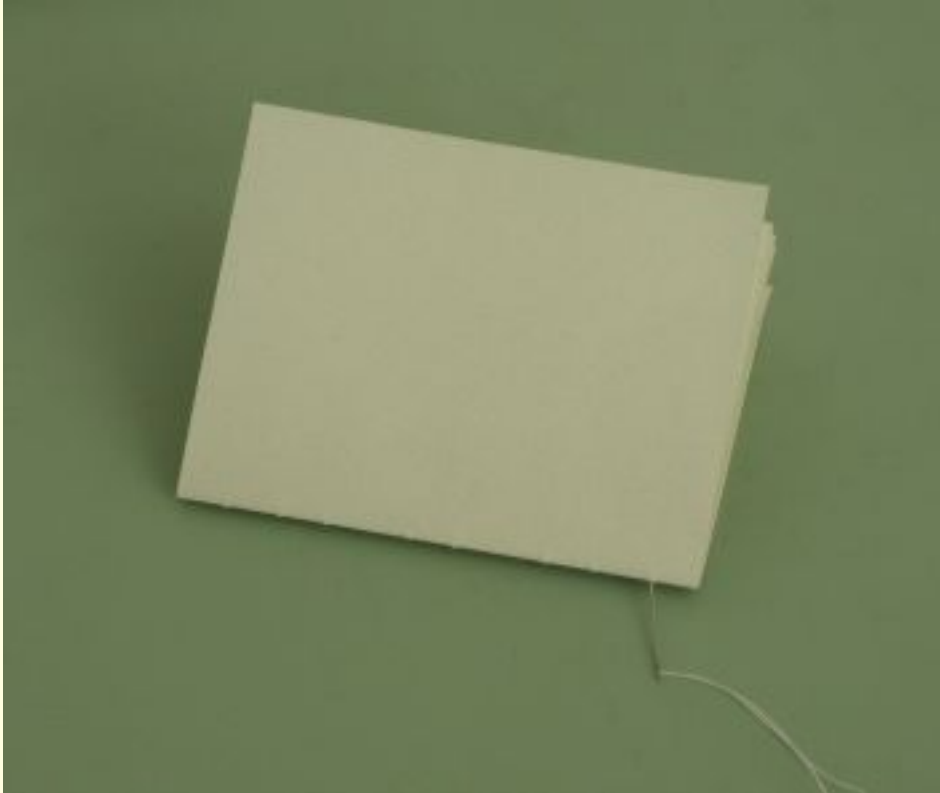
Step 9

I use my awl to punch holes at my pencil marks ($\frac{1}{4}$ inch above and below each fold and $\frac{1}{2}$ from the ends).



Step 10

The guide is now placed in the middle of each of the four signatures and holes are punched.



Step 11

Linen thread, measuring 5 to 6 times the length of the spine, is threaded through the needle. Sewing begins with the bottom hole of the last signature. Sewing goes “in and out” all the way to the top, leaving about 4 inches of thread at the bottom.

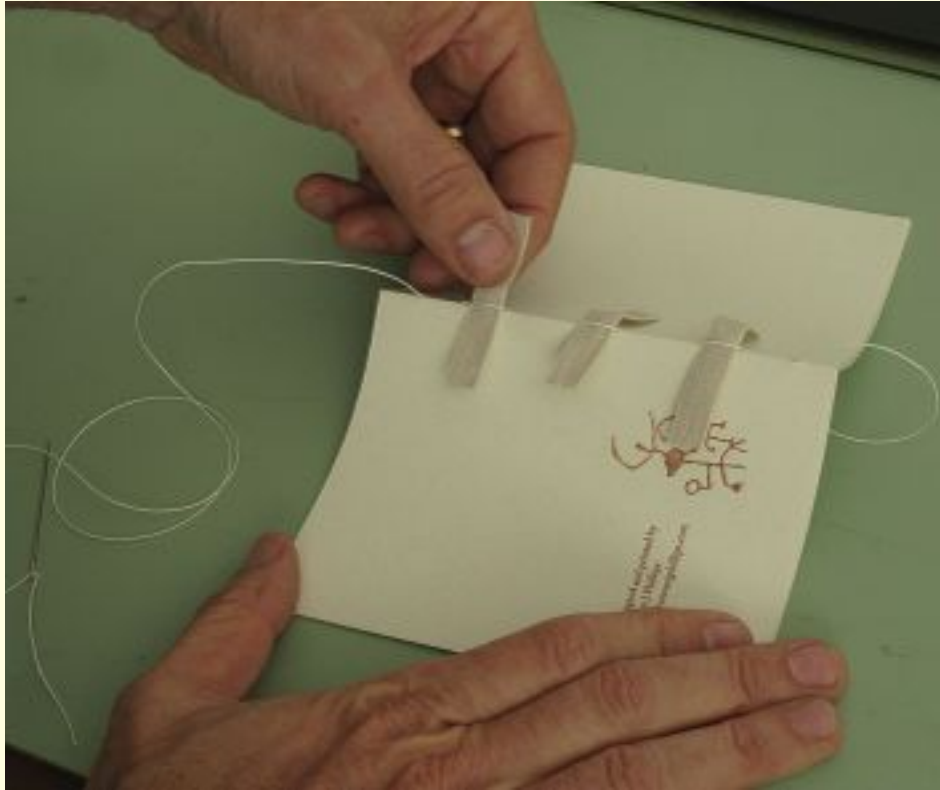
Note: At the end of this presentation you will find a list of bookmaking suppliers where you can purchase the materials mentioned.



Step 12

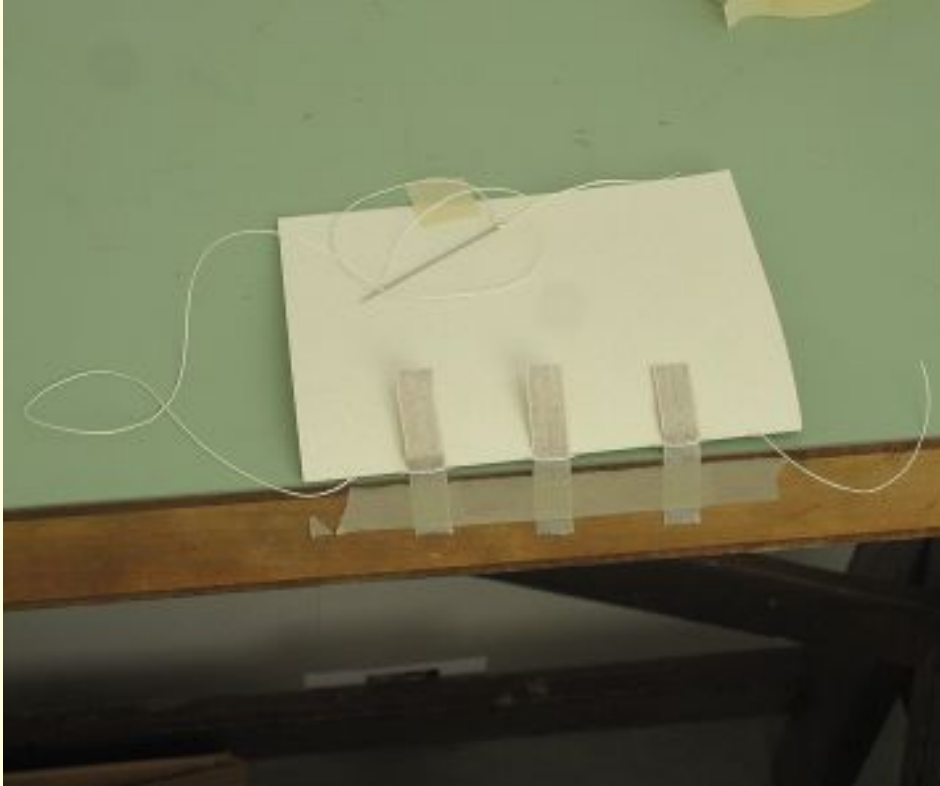
Here's what things look like after the bottom signature is sewn.

Notice the three loops.



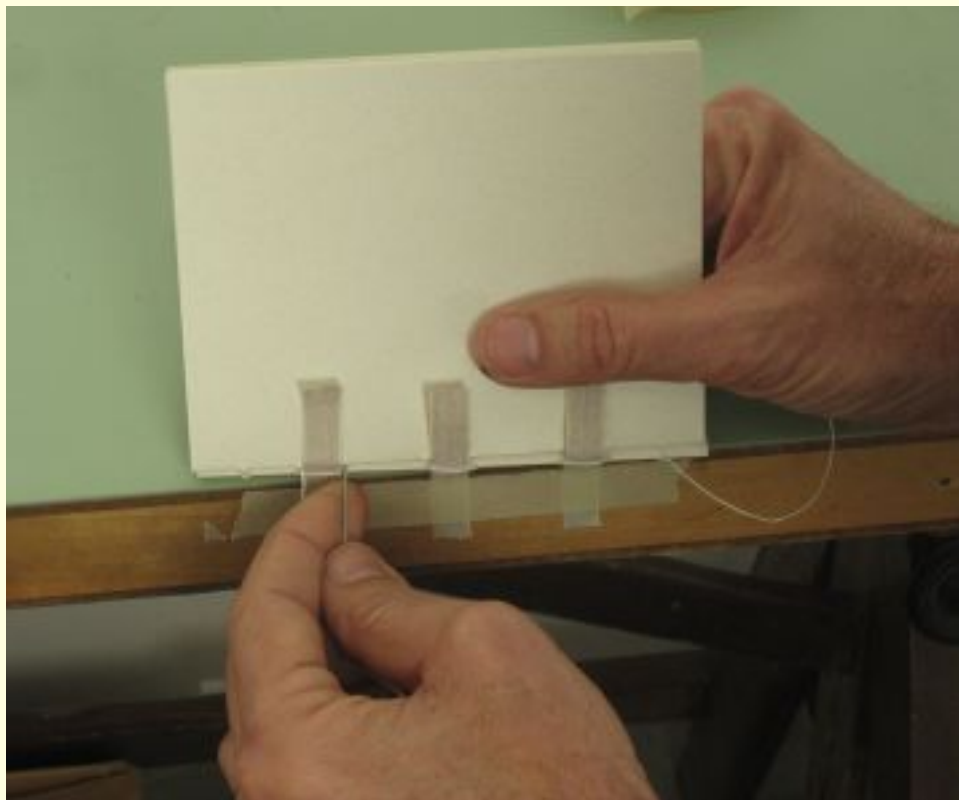
Step 13

Linen tape is now threaded through the loops. The tape should be two inches long, plus the approximate width of the spine. After the tape is in place I use my awl to tighten the thread nice and snug. Notice the three loops.



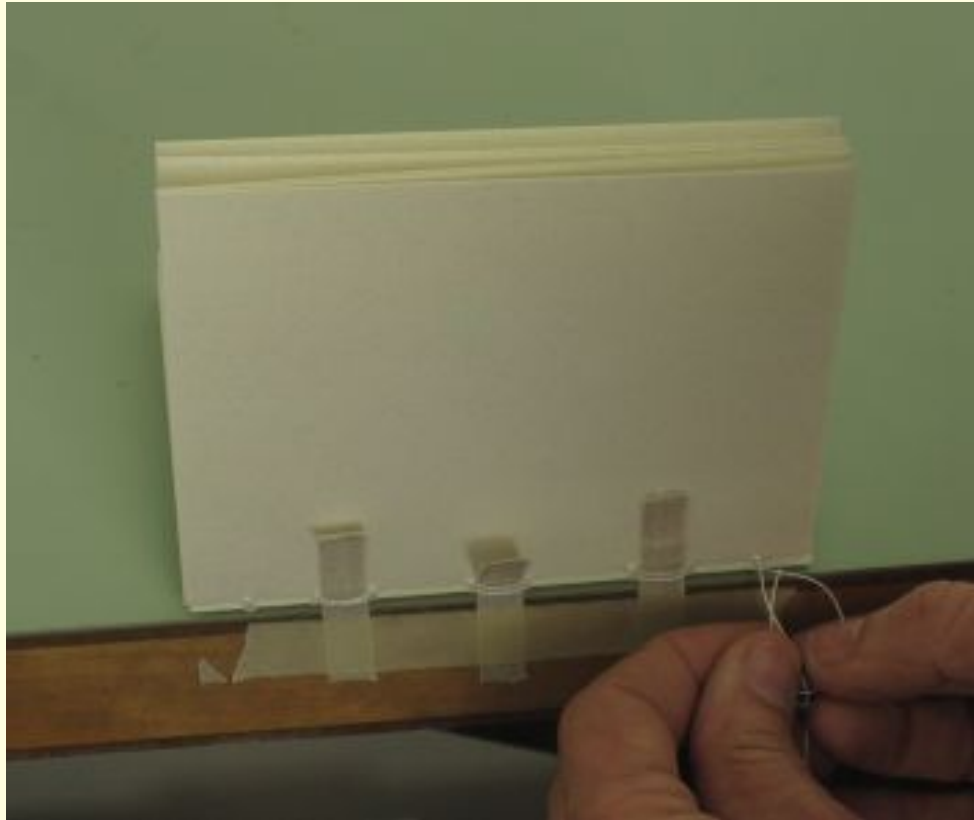
Step 14

The linen tape is taped to the edge of the work surface. A couple of other pieces of tape can help keep the signature in place as sewing continues.



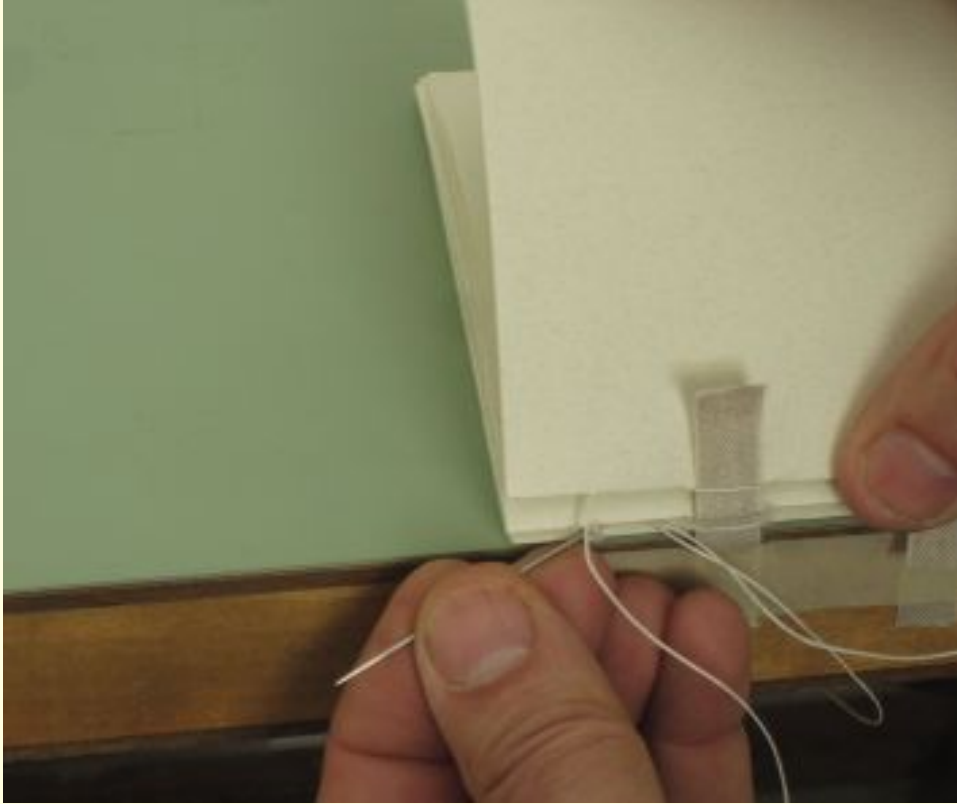
Step 15

I start sewing in the second signature, making sure my thread goes around each of the linen strips.



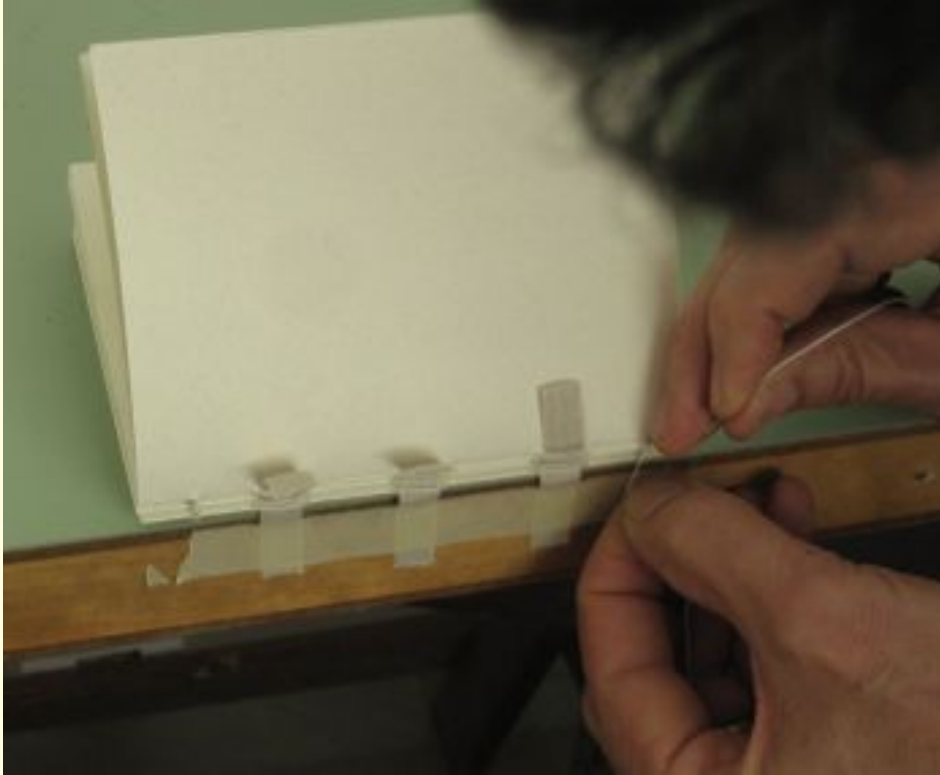
Step 16

After the second signature is threaded, I snug everything up and tie a square knot.



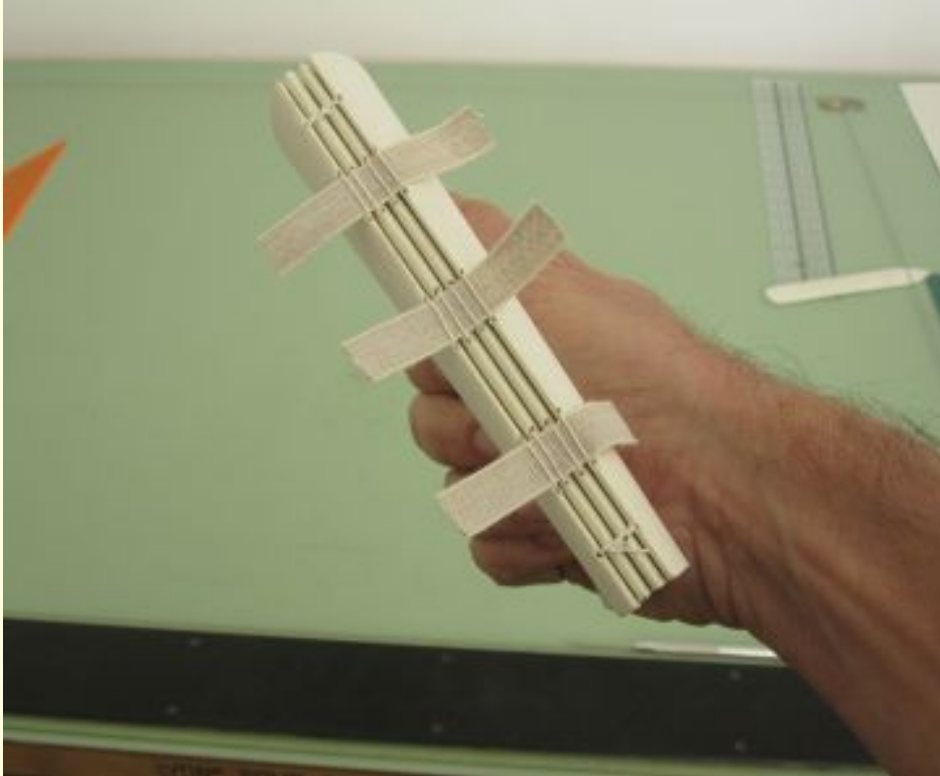
Step 17

After the third signature is sewn in, I tie it off with a double kettle knot. (You can find out how to tie a kettle knot online.)



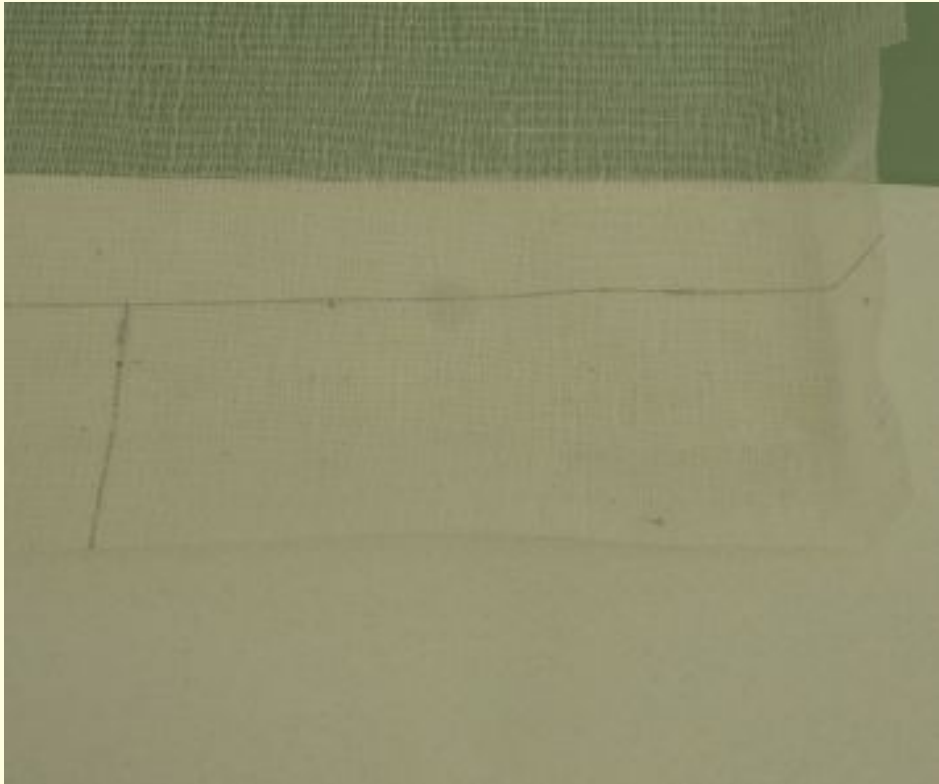
Step 18

The fourth signature is tied off with a square knot. Extra thread is trimmed.



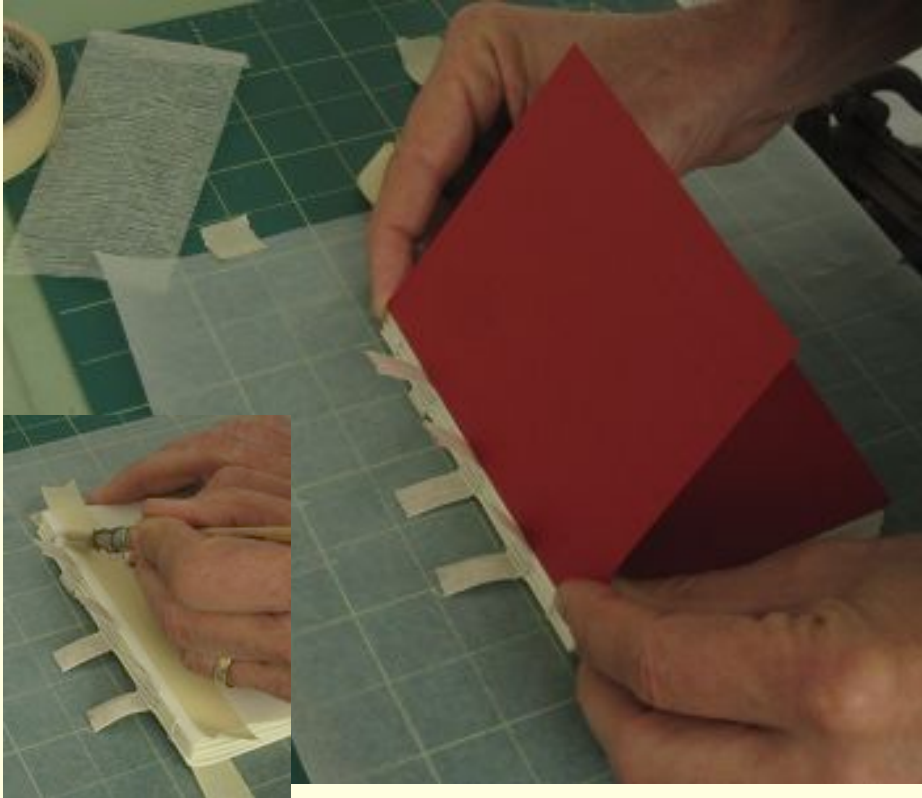
Step 19

I now make sure the linen tape is centered. If all goes as planned things should look like this.



Step 20

Time to cut some mull (the gauzy-looking material in the photo). The length should be the same as the text block; the width should be enough to cover the linen tape, taking into account the width of the spine.



Step 21

I've cut two endpapers to the same dimension as the text block. I put some masking tape along the spine, apply PVA glue (as shown in the inset), remove the masking tape and tip in the endsheet. Procedure is repeated on the back.



Step 22

The book block now goes to my paper cutter, which seconds as an excellent book press. The text block is wrapped in wax paper before being pressed. I use thin wood strips made of luan to prevent the paper cutter from leaving impressions on the endpapers. (This step would not be necessary if I were using a book press.)



Step 23

The dried endpapers and text block are removed from the book press. The three linen strips are glued down, then glue is applied to the endsheet, and mull is attached. Once the mull is attached to both sides I add a generous amount of glue to the spine.



Step 24

I've wrapped my text block in wax paper, made sure I tapped the spine so the block dries square, and put it into my book press. Nothing much to do at this stage but wait...



Step 25

At my drafting table I mark cut lines on the top, bottom, and left (end) margins of the text block. I then trim the end, top and bottom of the text block in my paper cutter.



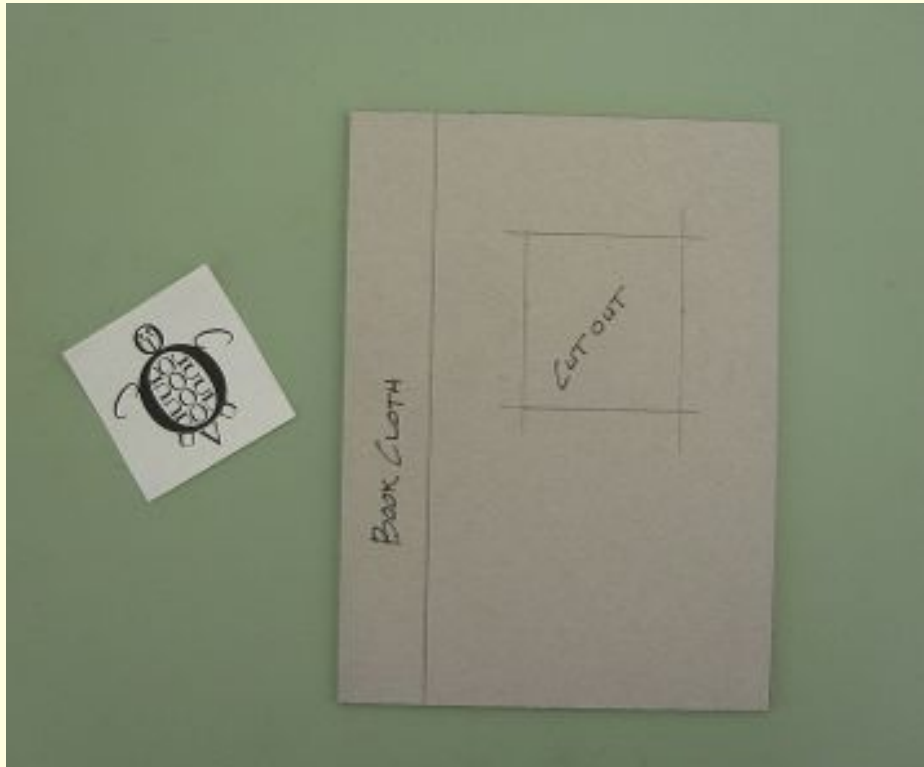
Step 26

Headbands are glued on. (This is optional but I think they give a book a professional, timeless look.) Once the glue has dried, they are trimmed to extend just a smidge beyond the spine.



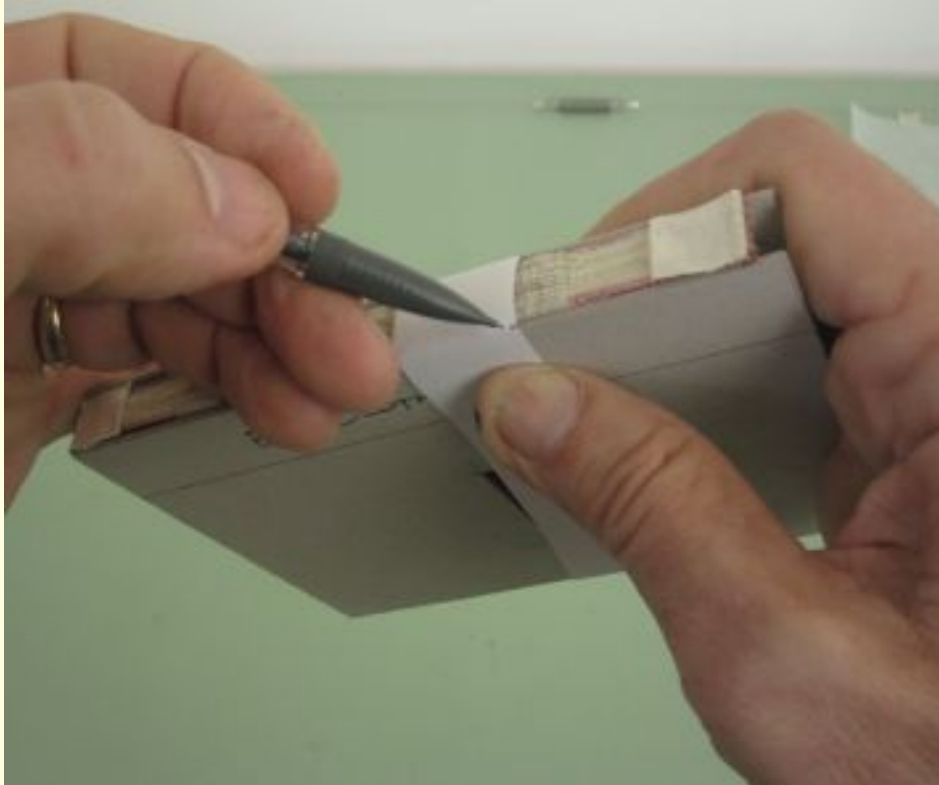
Step 27

Time to start on the case. I begin by cutting grayboard (binders board) for the front and back covers. They measure the same width as the text block and $\frac{1}{4}$ inch higher.



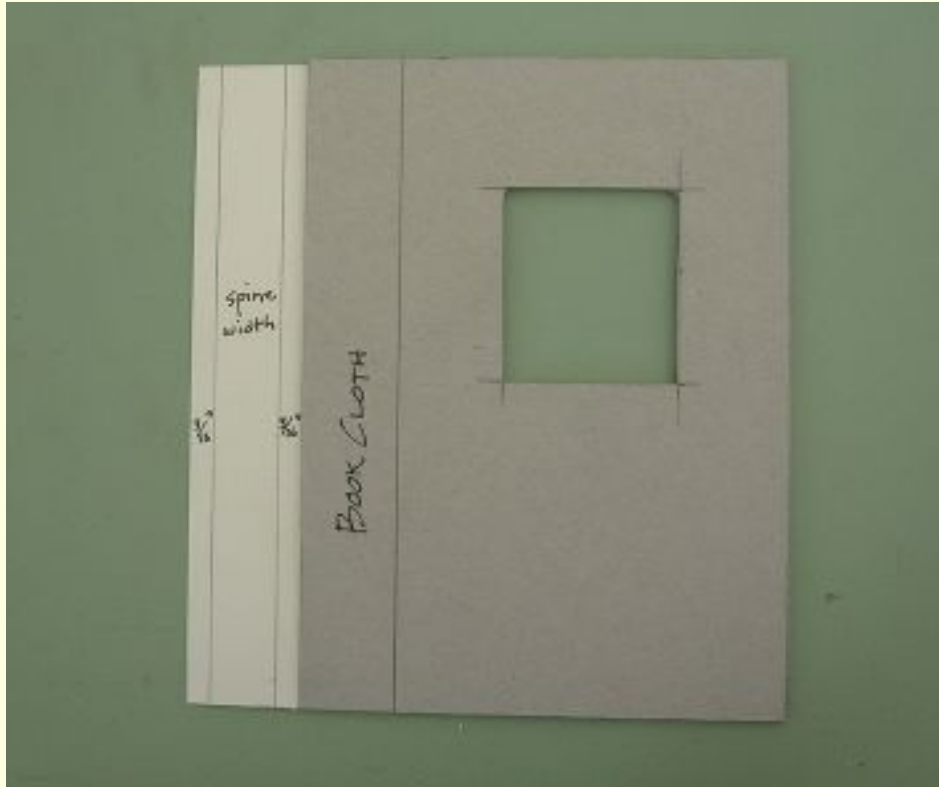
Step 28

I've decided to make a window in the front cover and use a graphic of a turtle I designed. I mark how far the spine cloth will extend, then mark my cutout so it is centered left and right.



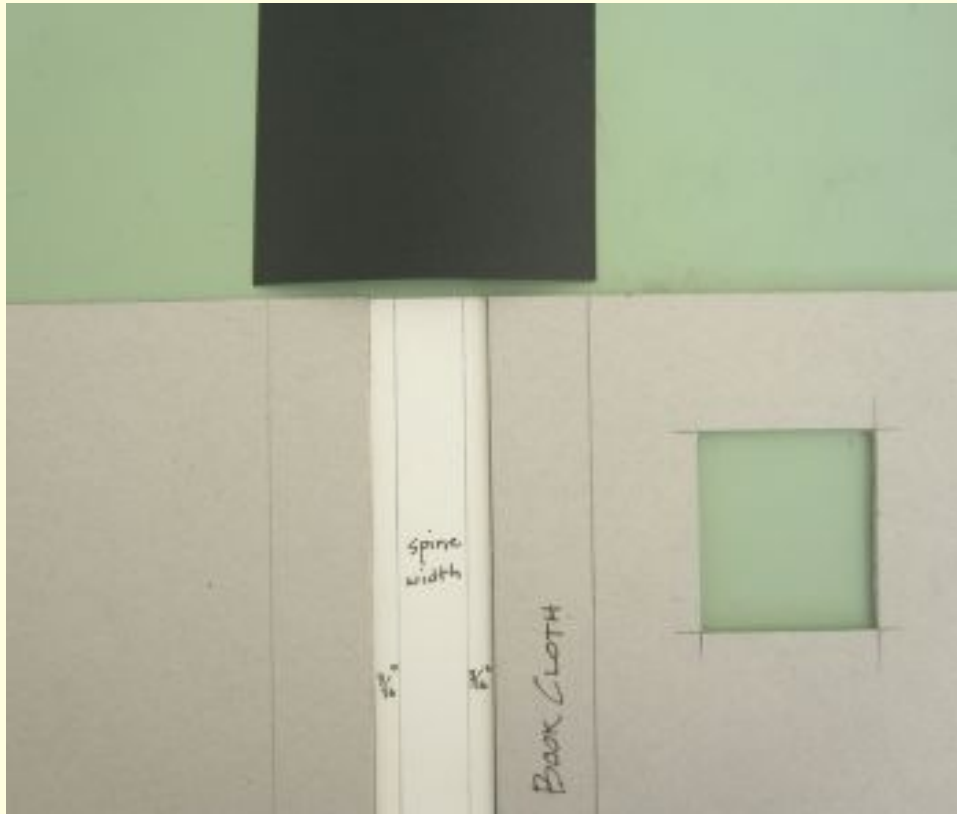
Step 29

Next I need to figure out the width of the spine. To do this I wrap a piece of scrap paper around the two covers and the text block and mark the outer edges.



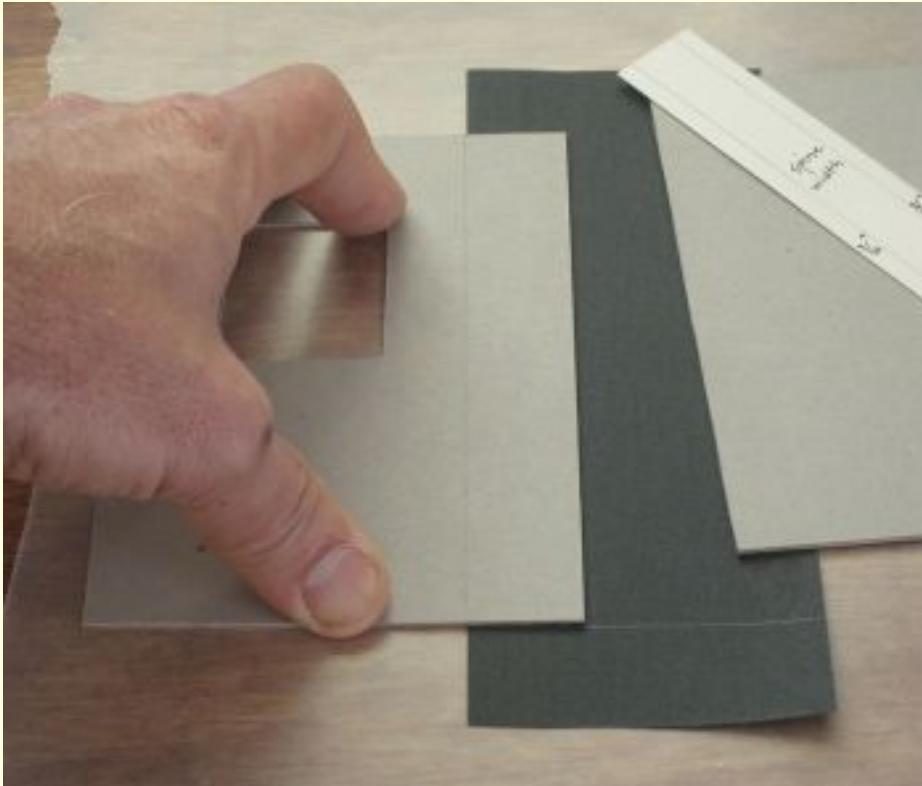
Step 30

The spine width is transferred to a piece of card stock. I add $\frac{1}{4}$ inch on both sides and cut the card stock to the same height as the cover.



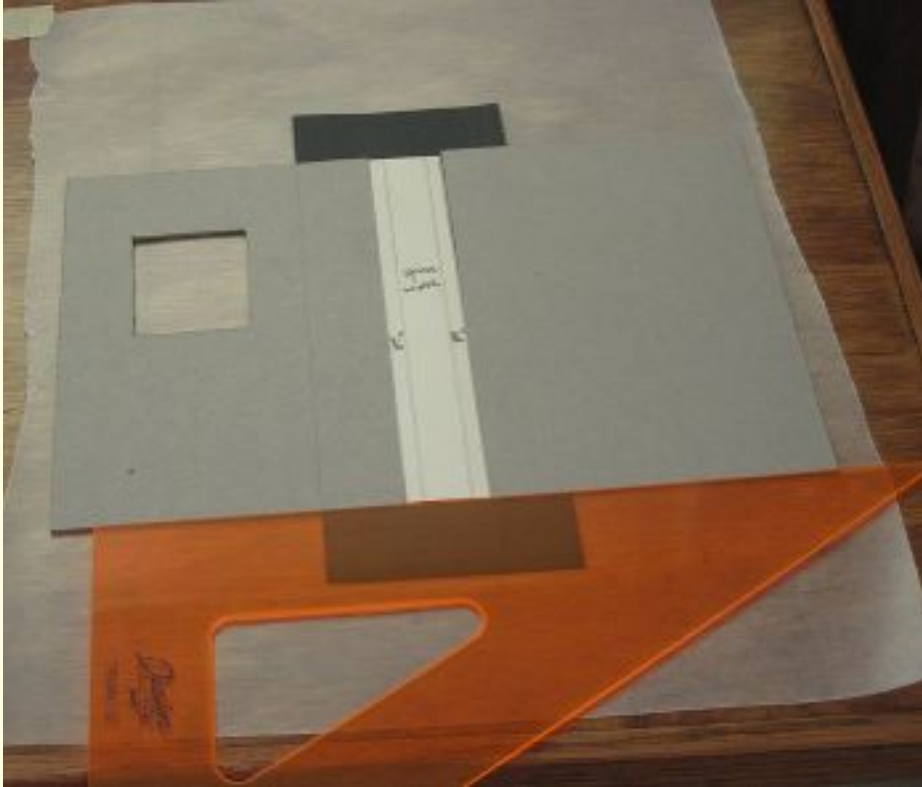
Step 31

I've decided on a black spine. The width of the spine cloth will be sufficient to cover the card stock width plus up to about an inch on both the front and back covers. The length of the spine cloth will be the height of the covers plus two inches.



Step 32

I draw guidelines on the cover and spine cloth. This will assure that my spine cloth is square. After I'm satisfied that my measurements are right I glue on the front cover.



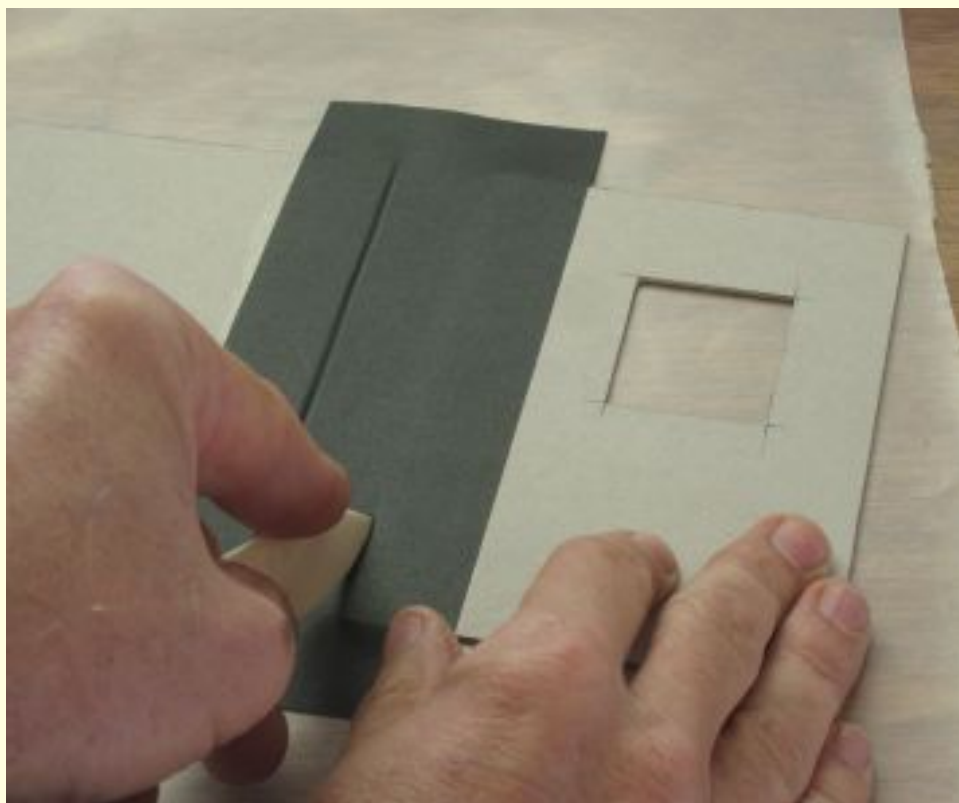
Step 33

I glue in the card stock, then place a triangle along the bottom of the front cover and glue in the back cover, making sure it is snug against the triangle.



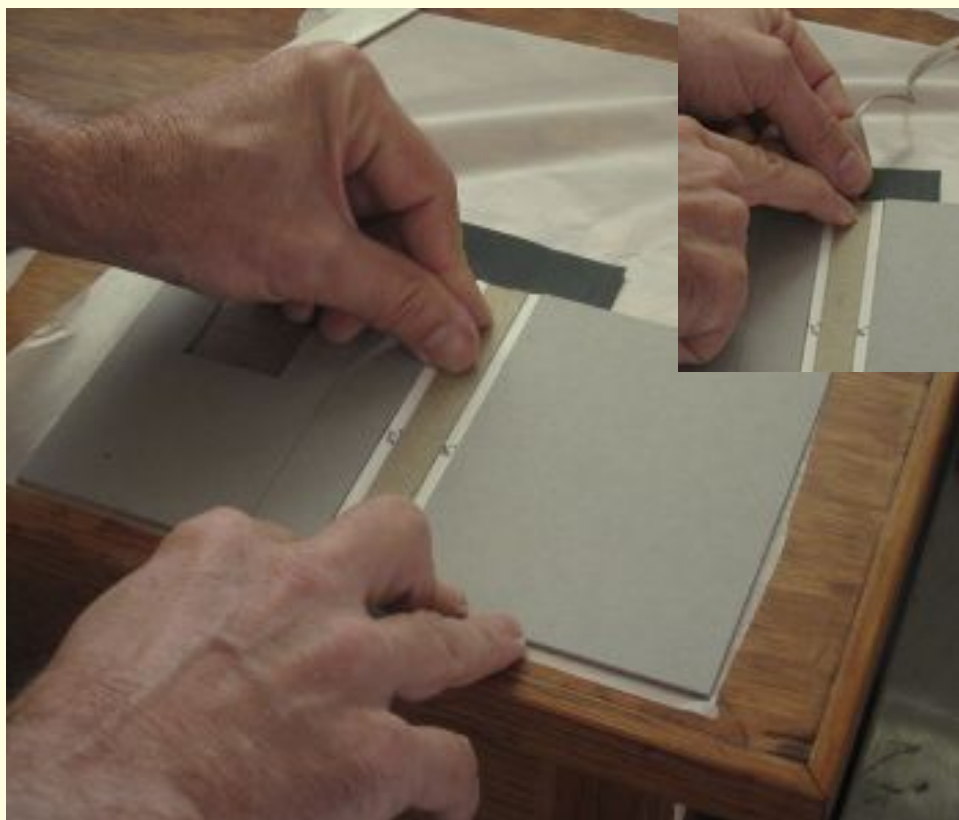
Step 34

The case is put in the book press. I've built a pressing board with a handle so my hands don't have to come near the sharp cutting blade. Anyone with a real book press doesn't need to do this...or anyone who uses another pressing method, such as a stack of heavy books.



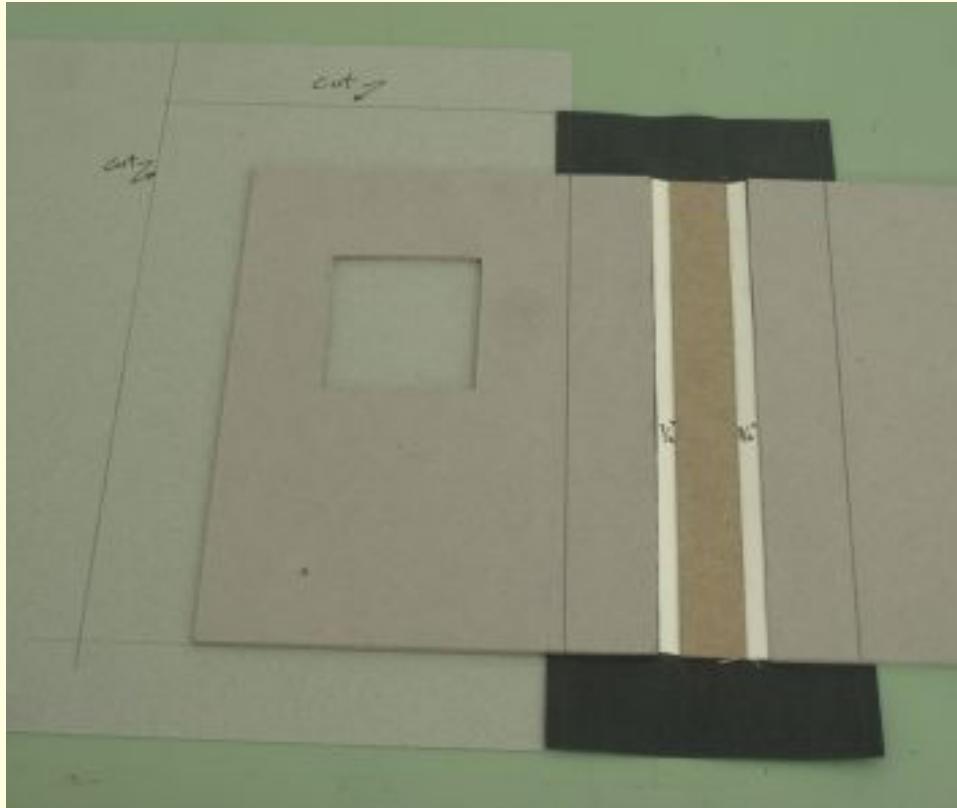
Step 35

After the case is dry I use a bone folder to score along the spine edges.



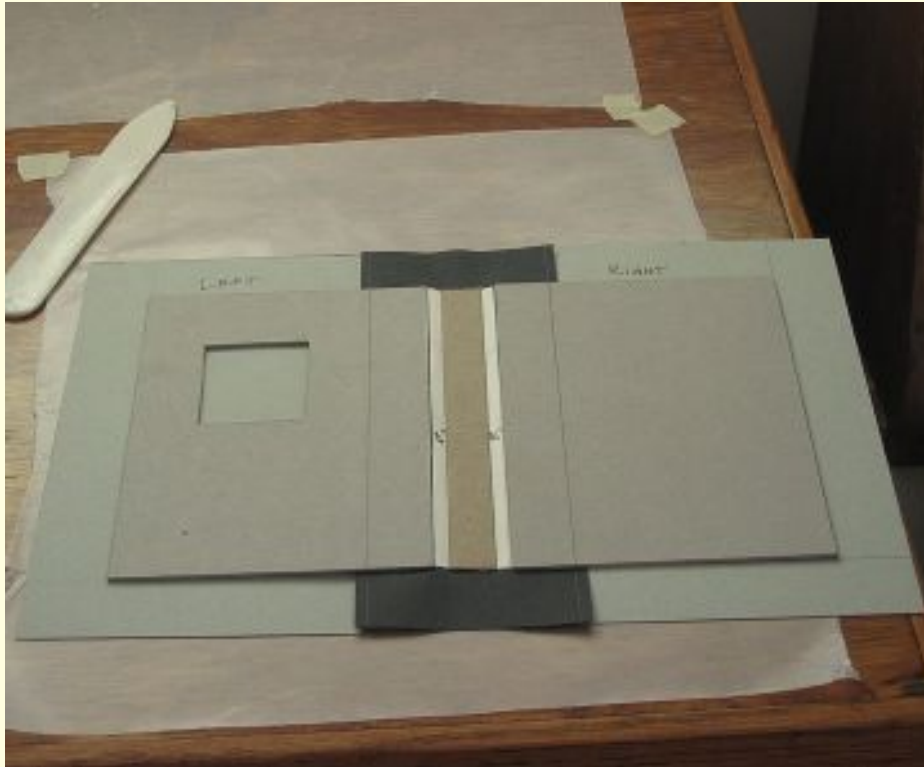
Step 36

Decision time. If I want a flat spine I can glue in a strip of stiff stock the width of my spine. Now is also the time to decide if I want to add a ribbon bookmark (inset).



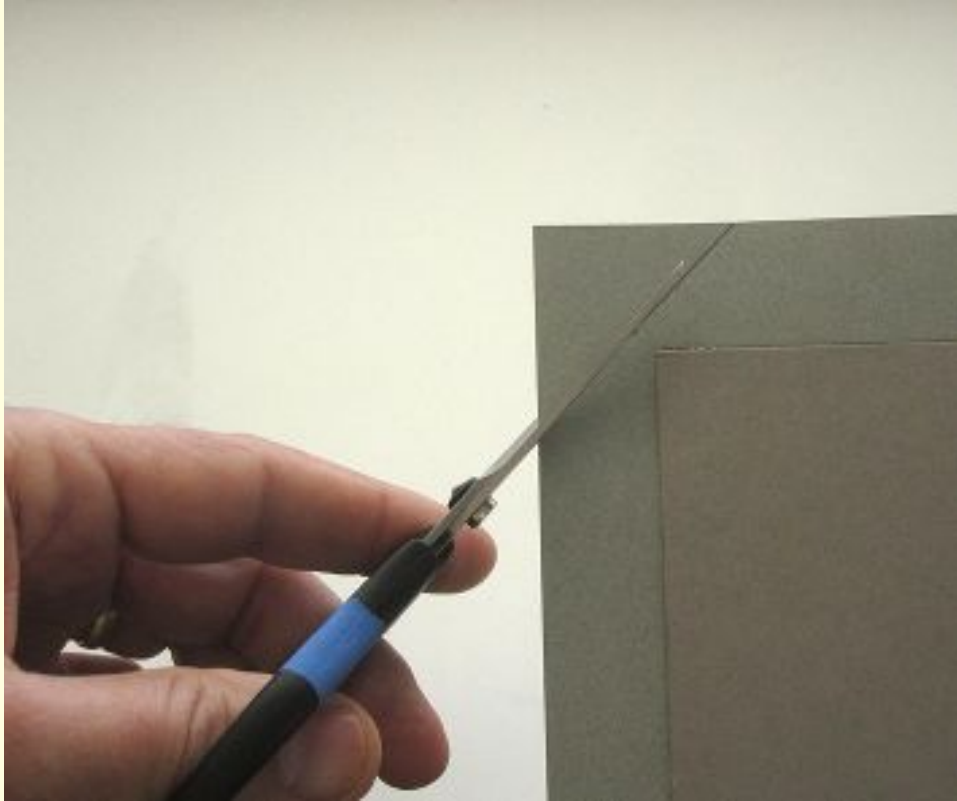
Step 37

I've decided on a gray paper for the cover. I measure out my front and back covers. They overlap the spine cloth by about $\frac{1}{4}$ inch and extend beyond the cover edges by about an inch. The photo shows where I need to trim the front cover.



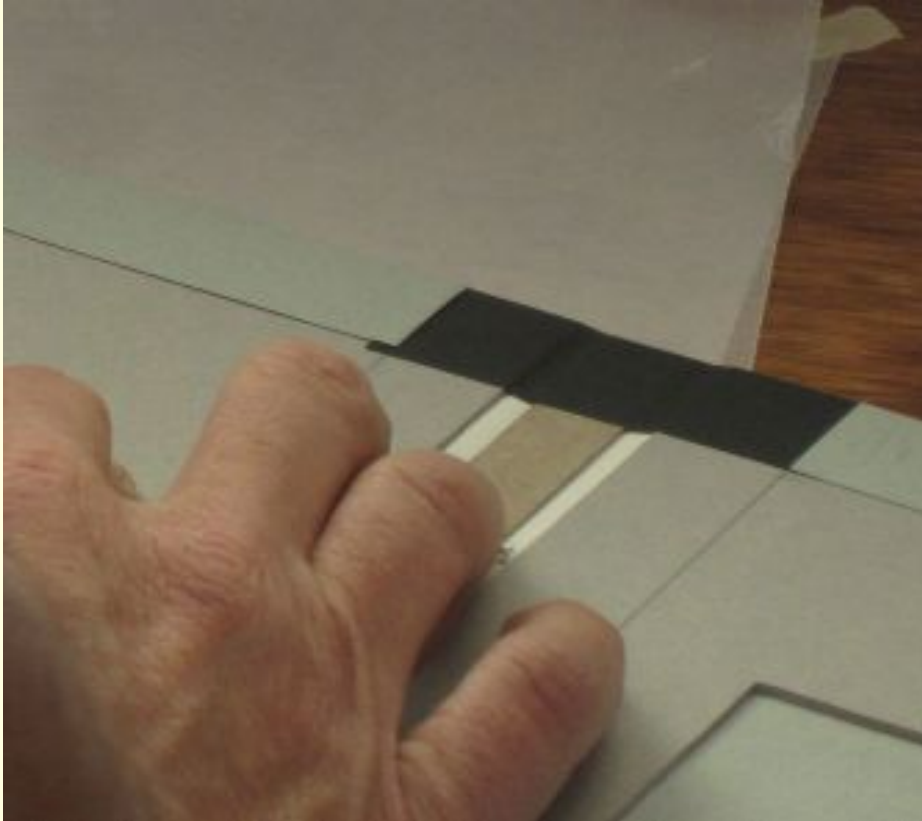
Step 38

Gluing on the covers requires precision. I make sure to include a lot of penciled-in guide lines and I mark left and right covers. Once I'm satisfied that everything is square I glue on the front and back covers.



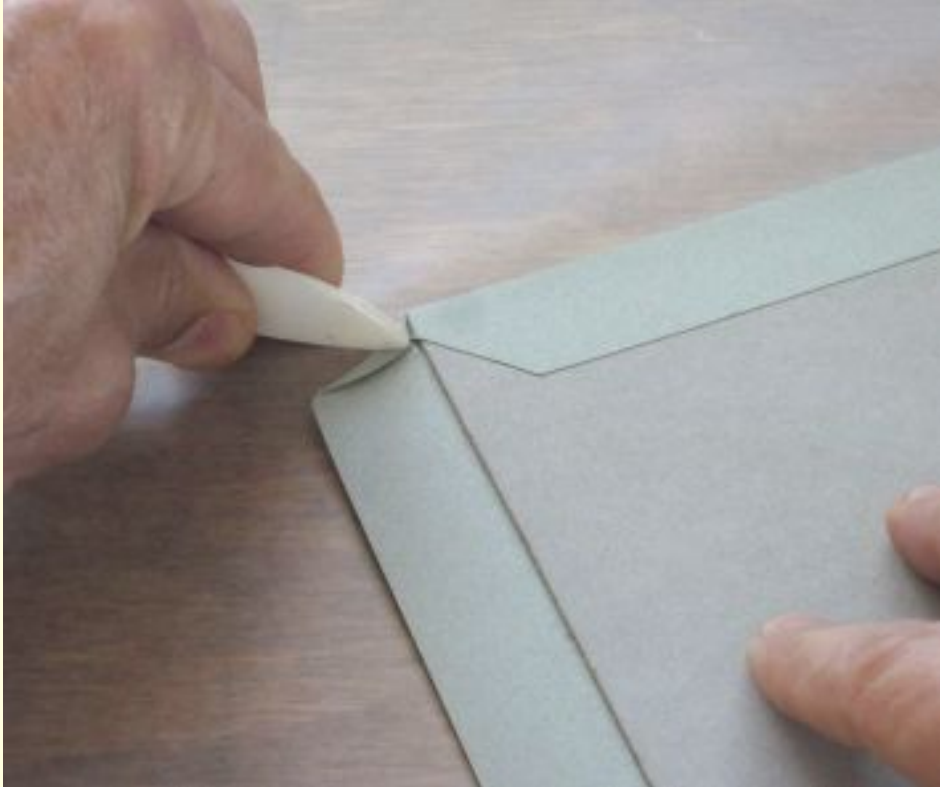
Step 39

Next I make a pencil mark $\frac{1}{4}$ inch from each corner, draw a line at 45 degrees and then cut each corner. This step reduces the amount of paper that needs to be folded over in the corners.



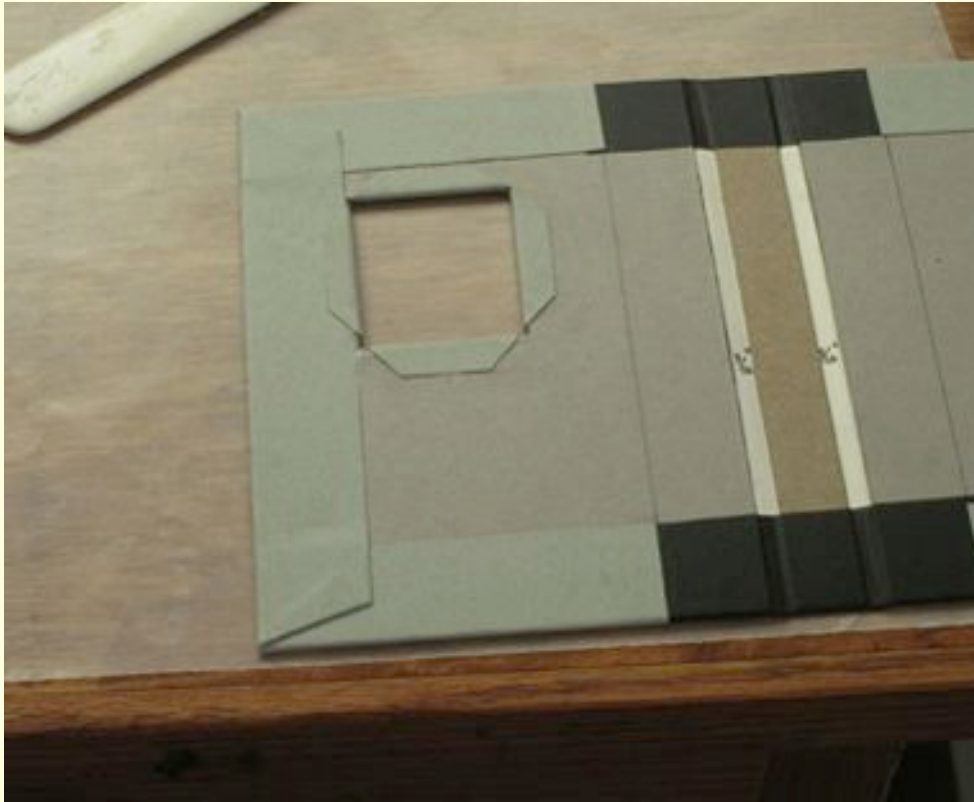
Step 40

The two long edges are glued down first. I use a folding bone to wrap the edges over the board and to flatten down the paper and spine cloth.



Step 41

Once the long edges are glued I crease the corners and glue down the short edges. These steps can be messy so I replace the wax paper as necessary. The case goes to the book press.



Step 42

The window is cut out and glued back. After checking for any unwanted glue -- it's not too late to wipe it off! -- the case goes back to the book press.



Step 43

I remove the case from the press and glue in the image. I use some translucent paper over the sea turtle image hoping it will give it an underwater feel.



Step 44

The last major step: attaching the text block to the case. Glue is spread on the front cover and endpaper, then the cover and endpaper are aligned and pressed together. The process is repeated on the back cover. Wax paper is used between the endpapers to avoid (or at least limit) errant glue. Clean wax paper is put between the endpapers and the book goes to the book press to dry.



Step 45

I check the book in 5 or 10 minutes to make sure everything is going well in the book press. If satisfied I return the book to the book press and allow it to dry overnight. The next morning I go to my shop to retrieve my new book.

Where to get supplies

Talas

www.talasonline.com

Hollanders Bookbinding Supplies

www.hollanders.com

John Neal, Bookseller

www.johnnealbooks.com

BookMakers, Inc.

www.bookmakerscatalog.com