The Secret Belgian Binding

Instructions by Annette Hollander

These brief instructions show you how to bind a book with an interesting pattern of weaving which laces the front and back covers to the spine. Included is the sewing of the text block (a set of four signatures) which is attached to the inside spine of the cover. (Some binding experience is necessary.)

The secret is in the weave of the cover and in attaching the text block. It is not difficult to do, but requires patience in getting the threads taut so that the book does not wobble.

Hedi Kyle rediscovered this binding attributed to the Belgians, and she solved the mystery of how to make it.

The materials and tools needed are as follows:

- thin book board & decorative paper
- colored waxed thread
- 16 sheets of text weight paper to make up the signatures
- a metal edged ruler
- x-acto knife and blades
- scissors
- pencil
- bone folder
- sewing thread (unwaxed)
- sewing needles
- pva glue
- brush for gluing
- masking tape
- 2 spring clothes pins
Secret Belgian Binding Instructions

Cut two covers out of thin book board or mat board 4" x 5-3/4", and one piece 5/8" x 5-3/4", for the spine. Cover and line each piece with solid or decorative paper.

Cut 2 thirty-inch lengths of colored waxed thread for weaving together the covers and spine. The second length will be attached with a square knot on the inside of the spine when needed.

Fig. 1 represents the outside of the cover. With an awl punch holes that are 5/8" apart and 5/8" from the spine edge.

To hold the spine and covers in place while weaving, place masking tape at the top and bottom as shown below. There should be 1/16" space between the spine and covers.

Note: It is best to test the masking tape to be sure it can be removed without pulling the paper with it. Always
remove it carefully to prevent it from tearing the paper. After weaving a few rows, the top masking tape may be removed.

Thread the thirty-inch length of the thread onto a needle. With the cover design facing you, start on the inside of the front cover (Fig.2) and bring the thread through the top hole. Leave 2” of the thread and secure it with masking tape. It will later be tied into a knot.

Weave the thread over the front cover and under the spine, then over the back cover into the top hole. Turn over and check that the thread is pulled taut but leave the 1/16” space between the covers and the spine. Weave the thread back under the back cover, (Fig. 3) over the spine and into the back of the hole of the front cover. Keep turning the cover to make sure the thread is not loose.

Weave back (Fig. 4) under the spine and into the top hole of the back cover.

Knot the thread at the end of the cover on the other side, as shown above.

Bring the threaded needle down the back to the second hole in the back cover. (Fig. 5)
Continue weaving the covers together as in Fig. 2, 3, and 4 until you reach the bottom of the book. Knot the end.

The Textblock

Cut 16 sheets of paper 5-1/2" x 7-3/4"
Separate into 4 stacks of 4 sheets each.
Fold each stack in half and bone the crease with a bone folder.
Each stack is called a signature.
Place the 4 signatures on top of one another
Mark sewing stations on the folded edges.
The first and last marks are 1/2" from the edges.
The rest are 5/8" apart to match the weaving on the cover.

Using unwaxed thread, insert the needle into the first hole of the first signature. Leave a 2" tail:
Open the signature. Use a clothes clip to hold the signature in place while sewing:

Lay the signature on the left side and weave in and out catching the lacing on the inner spine as it is sewn across the signature:
At the end of the first signature insert the needle into the second signature as shown below. Weave in and out of the holes catching the lacing in the spine as before. At the end of the second signature tie the thread to the 2" tail with a square knot. Continue sewing into the third signature in the same manner. At the end of the third signature the thread must be fastened to the second signature or there will be a gap. Do this by making a kettle stitch into the second signature before entering the fourth signature. At the end of the fourth signature do the same. Be sure all threads sewn from the text block to the spine are taut before securing the last stitch with a kettle stitch knot.
The Secret Belgian Binding is no longer a secret.

Annette Hollander is the mother of Tom Hollander. She is one of the early pioneers of the book arts movement.

Hollander’s website:
http://www.hollanders.com/secret-belgian-binding

Erin Fletcher, instructor at North Bennet Street School, tutorial site:
http://www.herringbonebindery.com/blog/2013/11/19/tutorial-top-secret-belgian-binding/

You can also find a tutorial on Ms. Fletcher’s blog on how to make a collapsible punching cradle.
Secret Belgian binding
https://en.wikipedia.org/wiki/Secret_Belgian_binding

The **Secret Belgian Binding** is a method of bookbinding that uses a primary and a secondary sewing, resulting in a distinct thread pattern on the cover and spine of the finished book. The primary sewing is used to create the textblock. The secondary sewing is used to bind the textblock to the cover boards.

**History**

This binding was invented in the mid-1980s by Anne Goy, a Belgian bookbinder. She was looking for a Western version of the traditional Japanese stab binding techniques. She wanted a book that would open flat but with the appearance of the stab sewing. Anne Goy calls this binding the "crisscross binding". [1]

**Methods and materials**

The book cover is made using three separate pieces: front cover, back cover, and spine piece. The covers are attached by sewing through holes on the cover boards and passing over and under the spine piece. The previously sewn textblock is attached when the sewing threads that pass through the stitches on the inside spine piece. The spine piece is held in place only by these threads passing over and under it. It creates a distinct thread pattern on the cover and it is a very sturdy binding that allows the book to open completely flat.

**References**


Local Suppliers:

Paper Source  
1810 Massachusetts Avenue  
Cambridge, MA  
617-497-1077  
www.paper-source.com  
Porter Square T stop on Red Line

Rugg Road Paper Co.  
105 Charles Street  
Boston, MA  
617-742-0002  
Charles/MGH T stop on Red Line

Supply Catalogs Online:

Gaylord Archival  
www.gaylord.com  
Talas  
www.talasonline.com  
University Products  
www.universityproducts.com
Related Sites:

The Book Arts Web       www.philobiblon.com
John Neal Bookseller    www.johnnealbooks.com

This list is not comprehensive, and does not constitute an endorsement of the suppliers listed.

Local resources for more training:

Boston Center for Adult Ed
Cambridge Center for Adult Ed
North Bennet St. School
Paper Source
Crossed-Structure Binding

What is crossed-structure binding?
Crossed-structure binding is a type of non-adhesive binding that doesn’t require an application of adhesive to consolidate spine and attach a cover to the text block. Spanish book artist/book conservator, Carmencho Arregui developed this binding technique (see seven variations on her website [http://www.outofbinding.com](http://www.outofbinding.com)); her inspiration came from historical late medieval/early modern long stitch archival binding structures. The basic idea of the crossed-structure binding is to have two asymmetric covers cross over each other at the spine. The sections are sewn on straps that extend and link from one cover to the other.

A crossed-structure binding is ideal to use when an old book needs a new book cover (AKA a conservation binding) because...

1. **Non-adhesive**

Some adhesives can be harmful to book materials (e.g., text papers, sewing threads, covers). Adhesives may cause degradation to the book components such as staining and cracking at the adhesive/paper interface. A strong adhesive, such as PVA (poly vinyl acetate)) is also irreversible once it is applied onto the materials, altering original materials forever. For these reasons, conservators here in the MIT Wunsch Conservation Lab avoid contact of irreversible adhesive with original materials, preserving the original state of the bindings and documents found in MIT Libraries Special Collections and Archival Holdings (Aga Khan, Institute Archive and Special Collections, the Lewis Music Library, and the Rotch Limited Access).

2. **Non-intrusive**

Text papers or book sections don’t need to be modified by bending or gluing to attach to a cover.

3. **Easy to construct**
A non-adhesive binding is usually simpler to construct than one made with adhesives. Also, there is no need to wait for the adhesive to dry.

4. Open flat

A crossed-structure binding is sewn on sewing straps that are extensions of the cover material. Since no adhesives and spine linings are not used to consolidate and stiffen the text spine, the binding can open flat.

Reference: Carmencho Arregui  http://www.outofbinding.com

Materials and tools (available to purchase at TALAS talasonline.com);
- 6 sections of text papers (1 section is consisted of 4 sheets of paper. 4 sheets of paper are folded together and trimmed to size.)
- Cover paper (Thick paper or thin cardboard. “Cave Paper (handmade western paper)” is used in class.)
- Sewing thread (12/3 linen thread is used in class)
- Thick paper or thin cardboard for making sewing slits template
- Cutter knife Scissors
- Self-healing cutting mat
- Sewing needle
- Bone or Teflon folder
- Bees wax (if you have)
- Pencil
- Ruler

Procedures:
1) Preparing sections
- Fold 4 sheets of paper together at the center of the paper. Make 6 sets.
- Put the weight on the pile of the sections to make them flat.
- Trim 3 sides (top, bottom, open side) of the section to have flush edges and desired size.
- Make 6 sewing slits on each folded side of a section using a template and cutter knife.

2) Preparing covers
- Cut front and back covers to match the templates and fold at lines.
- Insert back cover sewing straps into front cover windows. Front cover extension panes should come into contact on the inside of back cover.

3) Sewing
- Measure a piece of thread 7 times the height of a section.
- Make “All-along sewing” (make knot 2 times with thread’s end at the end of 2nd section)
- “Kettle stitches” (Kettle stitch begins at the end of 3rd section)
- To tie off, make a kettle stitch two times when sewing is finished.
*If you run out of thread and need to extend with new thread, make **Weaver's knot** for joining two pieces of thread. **See attachment**

4) **Crossing covers**
- Make slits on front cover to insert sewing straps.
- Fold cover strap inside

*The design of the Crossed-structure binding for this IAP class was modified of Carmencho Arregui’s “Expander” (http://www.outofbinding.com/04_expander.htm)
4. Cover flap = 2/3 of section width
3. Back over = section width
2. Sewing strip = thickness of a pile of sections
1. Extension strip = 1/2 of section width
Cover height = section height

Back cover

Cut

Spine

Fold: Mountain

Cut

Outsicle

Back Cover
4. Cover flap = 2/3 of section width
3. Front over = section width
2. Spine windows = thickness of a pile of sections
1. Extension panel = 1/2 of section width
Cover height = section height

Front Cover
Kettle stitch

Template for sewing slit

Kettle stitch
Sewing

Kettle stitch for connecting sections by linking a stitch under the former section
(Image: Diehl, Bookbinding Its Background and Technique, p124)

Weaver's knot for joining two pieces of thread
(Image: Diehl, Bookbinding Its Background and Technique, p125)