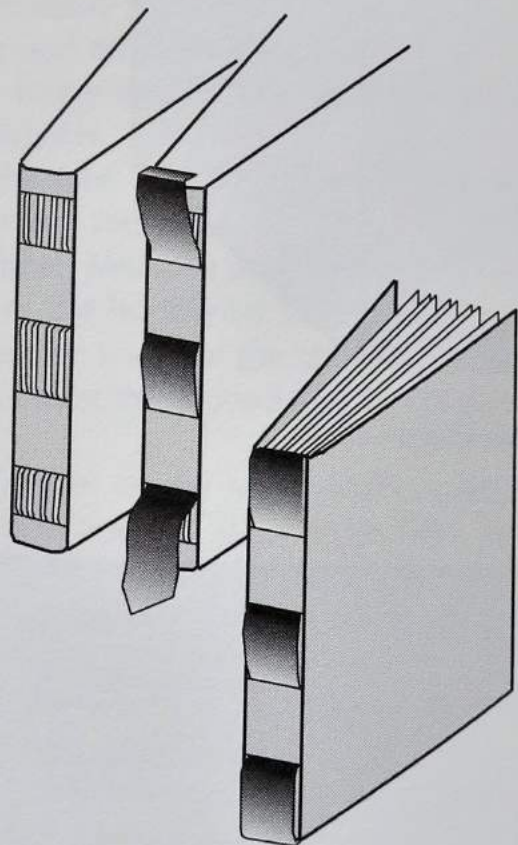


LONG STITCH with WOVEN SPINE TAB

In the previous binding, *Variation on the Long Stitch*, the second and fourth divisions of the spine are free-floating, not attached to the backbone. This presents the opportunity of weaving a single tab in and out of the five divisions of the spine to hide the stitches. A cover weight paper tab, the height of the backbone and a little narrower, could be woven behind the second division of the spine, lay on top of the third and woven underneath the fourth division.

This binding variation would be sewn with the rapidity of the long stitch, have a single flat back cover with foredge turn-ins but offer the option of an interesting paper-woven motif on the spine with no thread visible on the cover.

However, the tab would not be attached at the head or tail, and could easily be bent. To correct this shortcoming, the *Variation on the Long Stitch* has been modified so that a spine tab can not only be woven, but tucked inside at the head and tail between the spine-cover and the book block. This modified binding will be referred to as *Long Stitch with Woven Spine-Tab*.



PREPARATION

Sections and cover are prepared the same as for *Long Stitch through Slotted Wrapper Cover*. If you wish to attach the optional *Laced Jacket B*, described on page 126, sew the book block onto a flat back cover without foredge turn-ins.

Sewing Stations: Measure and mark the first section:

1. There will be 4 sewing stations which are equidistant, dividing the height of the back into five divisions. Mark these four stations.
2. There are two more pierced stations. One is about 5/16" from the head. The other station is about 5/16" from the tail. Mark these two additional stations on the first section.

These two additional stations take the place of wrapping around the head and tail. Since the sections will not be attached to the spine at the first 5/16" at the head and tail, this gives room to tuck the woven tab around the head and tail, to rest between the inside of the spine-cover and the book block. The station closest to the head is number 1, the station closest to the tail is 6.

Now that the first section has 6 stations marked on the fold, use it as a guide to mark the remaining three sections. Pierce the stations. Lay the unfolded cover open on the table with the inside facing up. Place the first section on the cover, lining up the fold of the section with one hinge-fold. Mark the six sewing stations on the hinge-fold, using the section as a guide. Move the section over, lining up the fold of the section with the other hinge-fold. Mark the stations on that hinge-fold.

Place the cover on your cutting surface. Make a horizontal slit from the top dot on one hinge-fold, across the spine to the other top mark. Do the same with the five remaining stations. Be sure not to cut onto the side-covers.

Thread: Length of thread depends upon height of the backbone, and number of sections. For four sections, thread is seven times the height of the back. Use heavily waxed #12 thread.

ELABORATED SEWING PROCEDURE

Sewing the First Section: Lay the first section within the cover, tangent to the proper hinge-fold. Start on inside.

1. Proceed through station 2 to outside. Pull all but 4" of thread through to the outside of the spine.

Proceed along the spine, towards the head to the slit on the spine. Go through station 1 to inside. Proceed inside the section to station 2. Adjust the thread until the dangling thread is shortened to about 1-1/2". Tie a knot at the station.

2. Proceed on the inside of the section to station 3. Take the needle through the section and the slit, close to the hinge-fold.

Proceed on the spine to station 4. Take the needle through the slit, close to the hinge-fold, through the sewing station to the inside of the section.

3. Proceed on the inside of the section to station 5. Go through the station and the slit, close to the fold, to the outside of the spine.

Take the thread along the spine, close to the hinge-fold. Take the needle through the slit on the spine, through the sixth sewing station, to the inside of the section.

4. Proceed inside the section to station 5. Take the needle out through the section only. Do not go through cover slit.

Sewing the Second Section:

5. Grasp the second section, take needle through the mountain peak of station 5 of the new section. Do not go through cover. Pull thread to inside of this section. Holding the thread taut, slide the section back into position with its fold against the inside of the spine, tangent to the first section. Proceed inside the section to station 6.

6. Take the needle through section and the cover slit. Proceed along the spine to station 5. Go through slit and section to the inside. Proceed to station 4. Go through section and slit to outside. Proceed along the spine. Go through the next slit and section to the inside of station 3.

7. Proceed inside the section, go out station 2 and the slit. Proceed along the spine to the next slit. Go through slit and section to inside. Proceed inside to station 2. Go out the section, but do not go through the cover slit.

Sewing the Third Section:

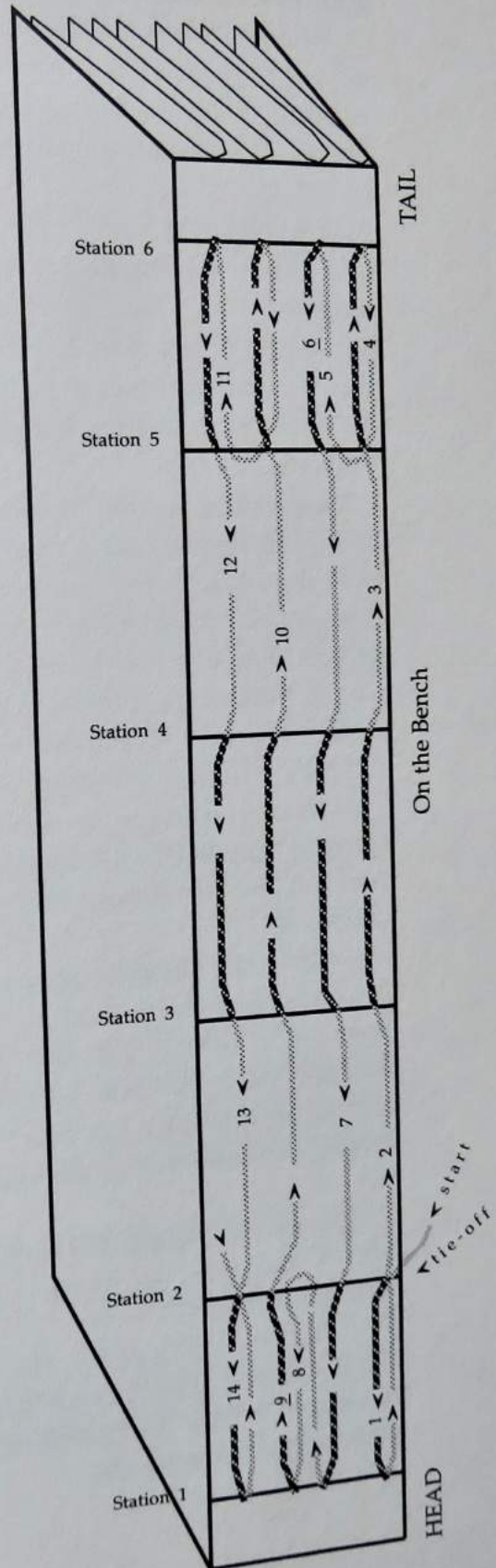
8. Grasp the third section, take the needle through the mountain peak of station 2 of the section, only. Pull the thread through. Holding the thread taut close to the section, back the third section along the thread until the mountain peak rests against the inside of the spine-cover, tangent to the second section. Proceed inside the section to the first sewing station. Go through the section and cover slit to the outside.

9. Proceed along the spine to the second slit. Go through slit and section to the inside. Proceed inside the section to station 3. Go through to the outside. Proceed along the spine to next slit. Go through station 4 to the inside.

10. Proceed within the section to station 5. Go through section and slit to outside. Proceed along the spine to the slit. Go through slit and section to inside of station 6. Proceed along the inside to station 5. Take the needle out through the section only. Do not go through the cover slit.

Sewing the Fourth Section:

11. Grasp the fourth section, take needle through the peak of station 5 of the new section. Pull thread to inside. Place the peak against the inside of the spine tangent to the third section. Proceed inside to station 5. Go out the station, through slit to outside. Proceed along the spine to the fifth slit. Go through the slit and section to the inside.
12. Proceed within the section to the fourth station. Go out section and slit. Proceed along the spine to the next slit. Go through the third station to the inside of the section.
13. Proceed within the section to the second station. Go through the station and slit.
14. Proceed along the spine to the bottom slit. Go through to the inside. Proceed inside the section to the second sewing station. Tie a knot on the inside of the section at the second station by passing the needle behind the inside stitch between the second and third stations. Tighten knot by pulling downward.



REVIEW, or CONDENSED SEWING PROCEDURE

Sewing the First Section: Illustration starts on inside.

1. Go through station 2 to outside. Pull all but 4" of thread to the outside. Proceed along the spine, to station 1. Go through to the inside. Proceed on to station 2. Pull, reducing loose end of thread to 1-1/2".
2. Proceed to station 3. Go through to outside, close to the hinge-fold. Proceed to station 4. Go through, close to the hinge-fold, to the inside.
3. Proceed to station 5. Go through close to the fold, to the outside. Go through station 6, to the inside.
4. Proceed to station 5. Go through the section only. Do not go through cover slit.

Sewing the Second Section:

5. Grasp the second section. Take needle through the mountain peak of station 5. Do not go through cover. Pull thread to inside of this section. Slide section back into position, tangent to the first section. Proceed inside the section to station 6.
6. Go through to outside. Proceed to station 5. Go through to the inside. Proceed to station 4. Go through to outside. Proceed to station 3. Go through to the inside.
7. Proceed inside to station 2. Go to outside. Proceed along the spine to bottom slit. Go through station 1 to inside. Proceed to station 2. Go out station 2 of the section, but do not go through the cover slit.

Sewing the Third Section:

8. Grasp the third section. Take needle through the mountain peak of station 2. Do not go through cover. Pull the thread through. Back the third section along the thread until the mountain peak rests against the inside of the spine-cover. Proceed inside to station 1. Go through the section and cover to the outside.
9. Proceed to station 2. Go through to the inside. Proceed to station 3. Go through to the outside. Proceed to station 4. Go through to inside.
10. Proceed to station 5. Go through to outside. Proceed to the slit at station 6. Go through station 6 to the inside. Proceed inside to station 5. Take the needle out through the section only. Do not go through the cover slit.

Sewing the Fourth Section:

11. Grasp the fourth section. Take needle through the peak of station 5 of the new section. Pull thread to inside. Place the peak against the inside of the spine, tangent to the third section. Proceed to station 6. Go out section and slit to outside. Proceed along the spine to station 5. Go through to the inside.
12. Proceed to station 4. Go out section and slit. Proceed to station 3. Go to the inside of the section.
13. Proceed to station 2. Go through to outside.
14. Proceed along the spine to the bottom slit. Go through to the inside. Proceed to station 2. Tie a knot on the inside at the second station, by passing the needle behind the inside stitch between the second and third stations. Tighten knot by pulling downward.

SPINE TAB

Cut a piece of cover stock 3" longer than the height of the spine. Width of the tab is $\frac{1}{16}$ " less than width of the spine. Actual length needed is $\frac{5}{8}$ " longer than height of the spine, but the additional length will function as a needle, and may be bent during the weaving. Cut the leading edge of the tab to a point. After tab is woven, it will be trimmed to extend $\frac{5}{16}$ " over the head, and $\frac{5}{16}$ " below the tail.

Gently insert tip of bone folder down from the head into station 5 slit to open it for the tab. Weave the pointed end of the tab underneath the 4th division of the spine. Pull tab down across top of third division. (If you have a two ply cover, weave under the outer spine only.)

Insert tip of bone folder, coming down, into the slit at station 3. Weave the tab behind the second division. Pull tab down across the bottom division. Pull the point and crumpled areas, if any, $\frac{5}{16}$ " beyond the tail. Trim head and tail overhang to extend $\frac{5}{16}$ " beyond the cover.

Fold tab at head and tail, and tuck the ends around the spine, between the cover and the sections.

If you have trouble pushing the tab under a division, it may be too wide. If that is not the problem, thread a darning needle with #18 thread. Stitch onto the point of the tab. Start the weaving by taking the needle under the fourth division and pulling.

LACED JACKET B

Optional for *Long Stitch with Woven Spine Tab*

Instead of weaving the spine strap directly onto the sewn cover for the binding *Long Stitch with Woven Spine Tab*, the strap can be used to weave a laced jacket onto the sewn cover. The strap can be the same cover stock of the same or different color, or, the strap can be a cloth ribbon.

If the jacket is added, do not use foredge turn-ins on the sewn cover, and do not reinforce spine. The jacket will provide these.

Dimensions of Jacket: The jacket is measured in the same manner as *Jacket A*, See: page 117.

Spine Cuts: Stand the folded jacket to the left of the sewn book, with the spines tangent. Mark the positions of the slits of the sewn spine onto the right hinge-fold of the jacket. Stand jacket on the right of the sewn book, spines tangent and mark the positions of the slits on the sewn spine on the left hinge-fold of the jacket.

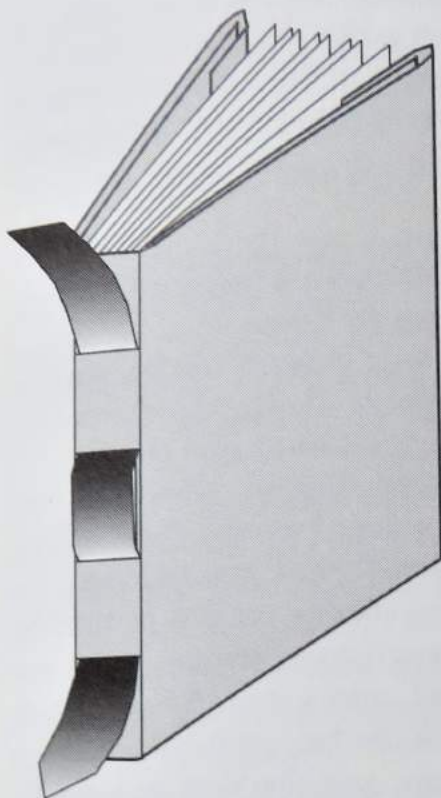
Cut the four slits on the jacket, creating five divisions. Cut along both hinge-folds starting at the end of the first division, down to the beginning of the third. This will remove the second division from the spine of the jacket. Cut along both hinge-folds starting at the end of the third division, down to the beginning of the fifth. This will remove the fourth division.

Strap: The strap will be cut at least 1/8" narrower than the width of the backbone. If the strap is made of paper, it will be cut 3" taller than the spine of the jacket. This is because the leading edge may become crumpled while weaving, and will be trimmed down to size after woven. If a cloth ribbon is used, it, too, should be a little longer than the final height of the strap.

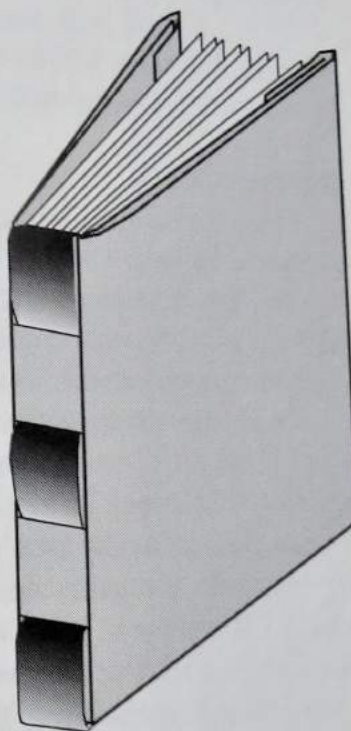
Weaving: A needle and thread are attached to the leading edge of either the paper or cloth strap to guide it under the divisions. Needle should be longer than the height of a spine division.

1. Sit the jacket in place. Gently insert the tip of a bone folder at the top of the second division of the sewn cover, to open the slit.
2. Slide needle under the second division, and pull the strap under the second, and half way over the third division of the jacket.
3. Insert tip of bone folder at the top of the fourth division of the sewn cover, to pry open the slit. Slide needle under the fourth division of the sewn cover, and pull the strap under that division, and half way over the fifth division of the jacket. Clip the thread.

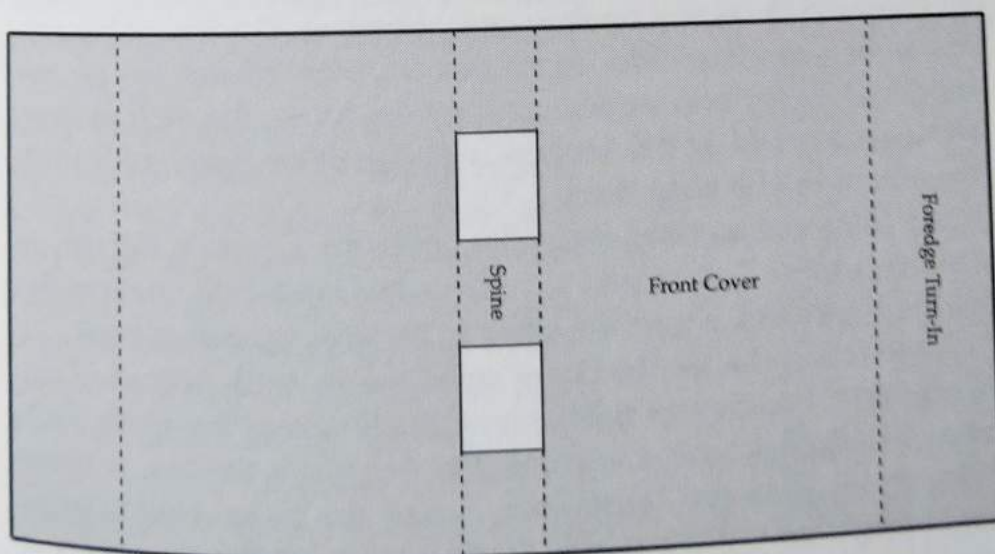
4. Pull the strap down until it extends over both head and tail. Trim both extensions to 1/4".
5. Fold the strap at head and tail, and tuck the ends under, between the sewn cover and book block.



Lacing the Jacket



Jacket B Attached



Layout of Jacket B

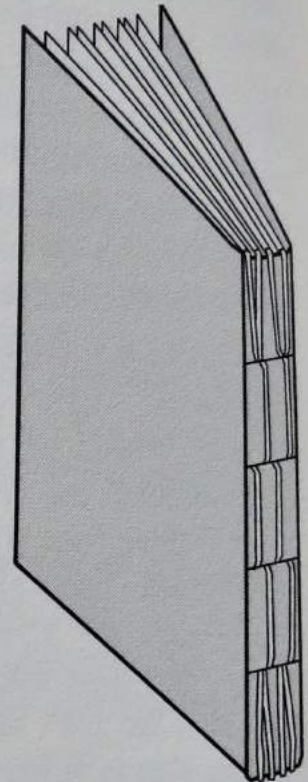
LONG STITCH through SLOTTED WRAPPER COVER

This is an older binding. Gary Frost showed me a slide of an 18th Century Italian example of this binding. It is a quick binding. A single thread sews each of how ever many sections onto the cover. The exposed sewing on the spine looks better if the text block is at least half an inch wide. This allows the staggered stitches on the spine to be more pronounced. The sections, rather than the binder, position the stitches on the spine.

The stitches go in and out of the section, catching the cover with each stitch. This standard in and out procedure requires a variation in stitching at the head or tail of certain sections. I will describe sewing four sections, with four pierced sewing stations. The head and the tail are two wrapping stations.

Varying the number of sections or the addition of pierced sewing stations will alter how the book must be sewn. The important thing to remember how to properly sew this binding is to keep in mind that every section will have a single thread wrapped around the head, and the tail of the section, onto the spine. This gives support since it ties the head and tail of each section to the cover. It also is an attractive edging, reminiscent of head bands.

If, when sewing, you find you have not made a wrap around the edge of the top or bottom of the section onto the spine, back up and correct the sewing. If you find you have wrapped around the head or tail twice in sewing any one section, again, back up, to correct.



PREPARATION

Sections: The sections must be created by assembling folios within folios. You cannot fold down sections for this binding, as the head and tail cannot be trimmed after sewing. The thread is wrapped around each section onto the spine-cover at the head and tail.

To achieve a thick text block, place four folios within each other to create a 16 page section. Or, create octavos of heavy stock. Make four such sections. The diagram will show how to sew four sections, each with four sewing stations.

Measure the spine by very slightly compressing the depth of the book block. Make sure the resulting book block will produce a spine of at least one half inch deep, to show the spine stitching.

Cover: The spine of this binding holds it shape better if it is two or three-ply. A good cover for this binding is *Flat Back with Fixed Foreedge Turn-Ins*. See: page 237.

HEIGHT of cover must be precisely same height of the sections, since the thread is wrapped around the head and tail of each section onto the cover. A slightly larger cover would be crimped by the wrapping. A cover shorter than the height of the sections would not protect the surface of the first and last page of the book.

WIDTH of the total cover equals:

width of the front cover foreedge turn-in, if any,
plus width of the book block (front cover),
plus depth of the book block when slightly compressed,
plus width of the book block,
plus width of the back cover foreedge turn-in, if any.

If you use foreedge turn-ins, you can allow for a slight overhang on the foreedge. Slightly increase the width of both the turn-in and the side-covers.

Optional Concertina Guard: A book block pleat with end-sheets might be fitted between the sections and the cover. This would serve its purpose of not having cracks seen in between sections, as the pages are turned. See: *Concertina Guard*, page 271.

Sewing Stations: The illustration is for six sewing stations. The head and tail are wrapping stations, and four stations are pierced on each section. The cover has a horizontal slit across the spine positioned at each pierced station of the book block.

Measure and mark one section. Station 1 is the head, so the first pierced station is number 2. The tail is station 6.



VOLUME I

**NON-ADHESIVE
BINDING**

BOOKS WITHOUT PASTE OR GLUE



KEITH A. SMITH