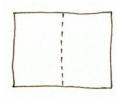
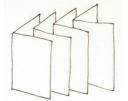
# The Satisfaction of a Simple Binding

# Instructions to make a link-stitch binding

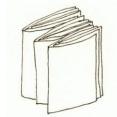
## Terminology



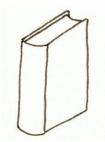
One folded sheet = one <u>bifolio</u>



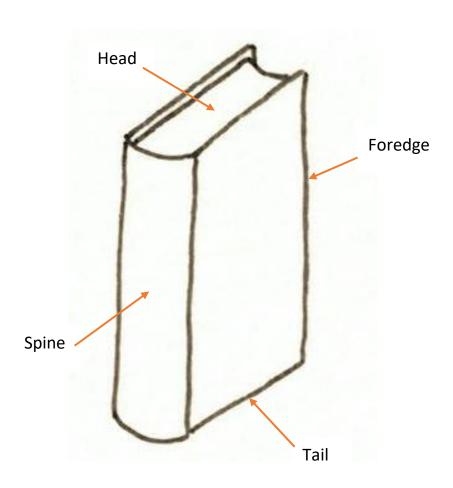
Multiple bifolios = one <u>section</u>



Multiple sections = one <u>textblock</u>



Textblock with binding = one book



## Tools

- Bone folder
- Craft knife
- Scissors
- Blunt knife
- Pencil
- Awl
- Needle
- Brush
- Metal ruler
- Cutting mat
- Weight/tin
- Bulldog clip



## **Tools**

Working on a **Cutting mat** gives you a surface to work on & to cut on and it protects the table or surface underneath.

A **Bone folder** is used for folding (& scoring) paper and is called a bone folder because they were originally made from animal bone – now you can buy plastic or Teflon folders.

**Scalpel or craft knife** for cutting – this is sharp, make sure the blade is covered when you're not using it. If you don't feel confident using a scalpel or craft knife, ask someone to help you.

**Scissors** for cutting the sewing thread.

**Kitchen knife** – a blunt knife used for slitting the paper for the sections.

Metal (steel) ruler for measuring and as a cutting edge to guide your scalpel.

Pencil with a fine point that makes more accurate guide marks for piercing or cutting.

Awl/pin vice – a metal point set into a handle for piercing sewing holes through paper. You could use a needle.

**Needle** – with an eye large enough to take the thread.

**Bulldog clip** – to hold the folds of paper together whilst piercing the sewing holes.

**Weight** – to hold a section in position whilst sewing – you could use a kitchen weight or a tin of tuna.

**Brush** for glue/adhesive.

### **Materials**

- 16 sheets A4 printer paper to make an A6 binding (148x105mm or quarter the size of an A4 sheet of printer paper). Grain direction running head to tail.
- Sewing thread this is a linen thread in a contrasting colour to show against the white paper.
   The thread should be fairly thick & without any stretch or give.
- Decorative paper or a plain paper for your book board covering. Grain direction running head to tail.
- Card this could be any card you have to hand – cereal box, brown packaging card etc. Grain direction running head to tail.
- Glue PVA glue. You may want to wear an apron to protect your clothing when using glue.
- Waste paper eg. newsprint



## **Purchasing Tools and Materials**

Some of the tools & materials you need you may have already like scissors, pencil, a blunt kitchen knife, printer paper etc. Many are available from somewhere like Hobbycraft as follows –

Self-healing cutting mat A2 - £13 or A3 - £11.

Steel ruler 30cm - £3. Remember to use a metal ruler because it is used as a cutting edge with the scalpel.

Thick linen or cotton thread – 95p - £3.50

Sewing needles e.g. Milward No18-24 – 6 pack - £2.50

Paper creaser/folder (plastic) - £2

Beading awl tool with wooded handle - £4

Paint brush – flat, 1inch – from £2

Craft PVA glue – 500ml - £3

Decorative paper e.g. A4 paper pack - £5

Amazon has a good range of craft knives from £1.50

Bookbinding tool kits are available on eBay & Amazon – some can be good value but don't overspend on tools you may not use.

## **Instructions**

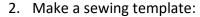
## 1. Making up your sections:

For a book with 8 sections, you will need 16 sheets of A4 paper.

Cut each sheet of paper in half, so that you have 32 sheets of A5 paper.

Fold each of these sheets in half.

Compile each section with 4 bifolios, which will make 8 sections (fig 1).



Take a fold of waste paper and cut it to the height of your sections.

Mark 6 sewing stations on the inside of the fold with a pencil, following the dimensions on the diagram (fig 2).

3. Using the sewing template as a guide, pierce the holes into each section:

Lay each section flat on the work surface, and align spine along edge of work surface.

Open the section to the centre fold, place the sewing station template along the fold, and secure the pages in place with a small weight or a bulldog clip.

Using an awl, make holes at each sewing station, guiding the awl through the inside of the fold to the outside of the section.

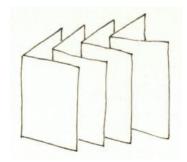


Fig 1: 4 bifolios = 1 section

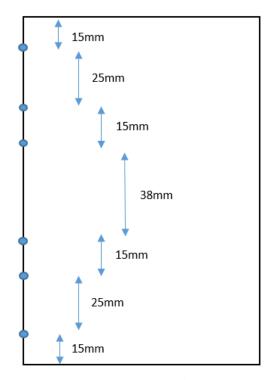


Fig 2: sewing template

4. Thread your needle and sew your first section:

Place the first section flat on the work surface with the spine aligned with the edge, and place a small weight inside the section to hold it in place as you sew. Your sewing stations (holes) are numbered from right to left (fig 3). Begin sewing from inside the section, entering station 2 with the needle and pulling through thread, leaving a tail of thread inside the section of approximately 6cm. Insert the needle back into station 3 and then out of station 4, into station 5 and out of station 6.

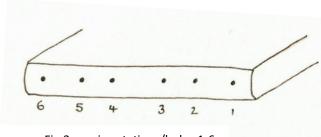


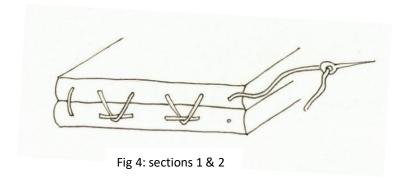
Fig 3: sewing stations/holes 1-6

Your needle and thread should now be on the outside of the section.

- 5. Remove the weight and place the second section on top of the first, aligning the spine edges. Place the weight inside the second section. Do this after each additional section.
- 6. Sew the second section:

Insert the needle into station 6 of section 2, and come back out of station 5. Create the link stitch by passing the needle behind the loop of thread that is visible between stations 4 and 5 on the first section, and then insert the needle back into station 4 on the second section.

Repeat this link for stations 2 and 3, and come to the end of the section by exiting station 1 with the needle and thread (fig 4).



7. You will need to try and keep the tension on the thread along each section even throughout the sewing process. To tighten the thread, make sure you always pull the thread parallel with the length of the spine. If you pull the thread back on itself, you may tear the paper.

#### 8. Attach the first two sections to each other:

Ensure the thread in both sections is taut. Thread the needle back into the first section through the first sewing station. Tie a knot inside the first section with the tail from step one. This is neatest if the knot lines up with sewing station 1. Then thread the needle back out of station 1, leaving the knot on the inside. You can trim the tail now or at the end.

#### 9. Sew the third section:

Place the third section down on top of the second, and insert the needle into section 3 at station 1. Exit the section at station 2.

Create the next link by passing the thread behind the stitch that is visible on section 2 between stations 2 and 3. You might find this easiest to achieve at the far left of the stitch, nearest station 3, the station you are moving towards. Then insert the needle back into the section at station 3.

Repeat this link for stations 4 and 5 (fig 5). Exit the section at station 6.

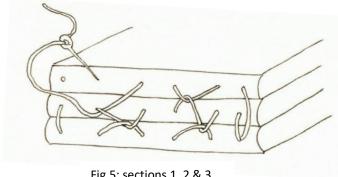


Fig 5: sections 1, 2 & 3

#### 10. Create a kettle stitch:

Ensure the thread in section 3 is taut. There is a stitch between sections 1 and 2 at sewing station 6. Pass the needle behind this stitch, between the two sections, working from the inside of the textblock to the outside. This will create a loop of thread. Thread the needle up and through this loop, and gently pull the thread taut in an upward direction (fig 6). This will knot the thread around the stitch, securing section 3 to sections 1 and 2.

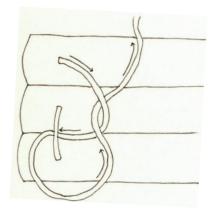


Fig 6: kettle stitch

#### 11. Sew the fourth section:

Place the fourth section down on top of the third, and insert the needle into section 4 at station 6. Exit the section at station 5. Create the next link by passing the thread behind the stitch that is visible on section 3 between stations 4 and 5. This time, you may find this easier to achieve at the far right of the stitch, nearest station 4, again the station you are moving towards.

Repeat this link for stations 2 and 3, and exit the section at station 1.

### 12. Repeat the kettle stitch at the other end of the textblock:

Ensure the thread in section 4 is taut. Pass the needle behind the stitch between sections 2 and 3 at station 6, once again working from the inside of the textblock to the outside. Thread the needle up through the loop and gently pull the knot taut around the stitch.

- 13. Repeat for the rest of the sections, linking each section to the section below it with the link stitches and kettle stitches.
- 14. If you run out of thread, it is possible to attach a new piece of thread with a weaver's knot:

Make 2 loops in the new piece of thread, and pass one loop into the other to create a slipknot (fig 7).

Pull on the ends of the thread to make the loop a little smaller, and thread the end of the old thread through the loop (fig 8).

Pull both ends of the new thread to trap the old thread.

Pull on the old and the new thread, and the knot will make a 'click' and lock into place. Trim any unwanted tails of thread.

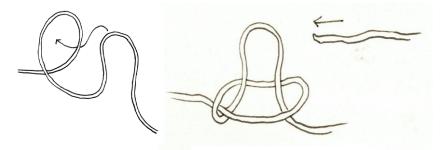


Fig 7: creating a slipknot with new thread

Fig 8: threading old thread through loop in slipknot

## 15. Sew the final section.

Tie a final kettle stitch, and then go back into the last sewing station you came out of (station 6). Tie a knot against the stitch on the inside of the section and trim the tail.

#### 16. Cut 2 boards for covers:

Place your finished textblock onto the board and draw around it.

Using a craft knife and a metal rule, lay the board onto a cutting mat and cut out the first board.

Use this as a template and repeat for the second board.

#### 17. Cover the boards:

Glue one board and place it onto the back of your decorative paper. Smooth down between scrap paper using your folder.

Using your cutting mat, lay your metal rule against each side of the board and trim margins to the width of the ruler. Trim the 4 corners at approximately 45°, allowing a distance of just over the width of the board from the corner (fig 9).

Glue the inside of the margins. Turn in the margins at the head and tail (fig 10). Smooth with folder.

Nip down the excess paper at each corner with the folder. Turn in the side margins and smooth with folder (fig 11).

Make sure there is no excess glue seeping out. Press dry under a large weight.

Repeat for the second board.

#### 18. Attach the boards to the textblock:

Take a piece of scrap paper larger than the textblock and slip it under the first page of the textblock.

Apply adhesive to the top of the first page.

Place the board lightly in position.

Turn over the book. Carefully open the book above the board to approximately 45° to check the position of the paper on the board, and smooth down the paper onto the board with the folder.

Close the book and repeat for the second board.

Press dry under a large weight.

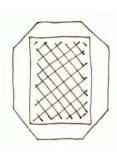


Fig 9: corners of decorative paper cut at approx. 45°

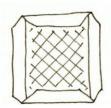


Fig 10: glue margins at head and tail and turn in onto the board

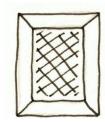


Fig 11: margins at each side also turned in