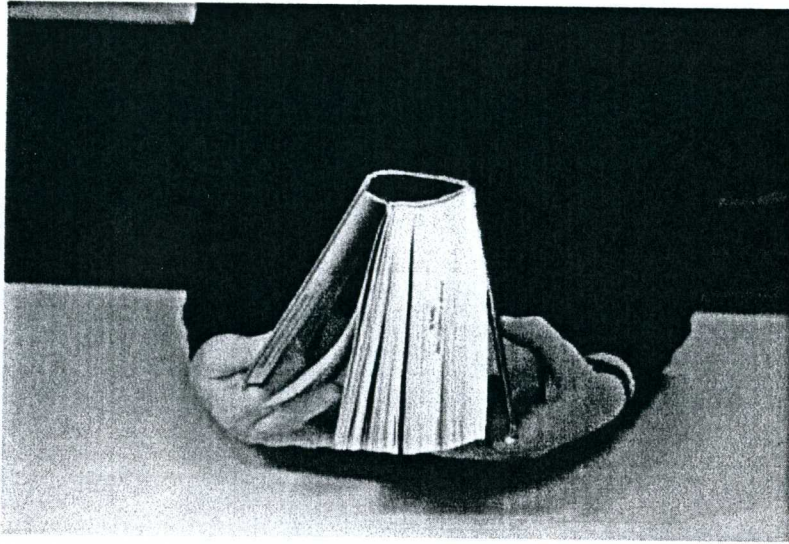
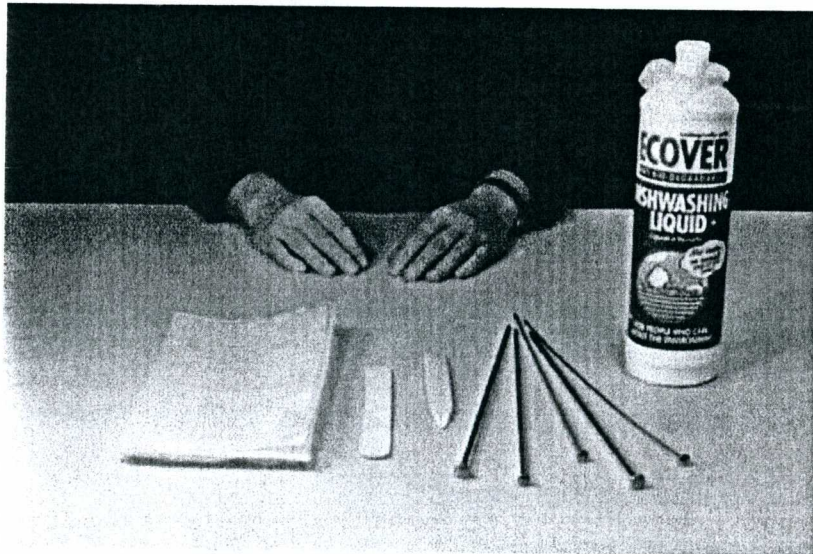


Three Basic Book Repair Procedures - Hinge Tightening I



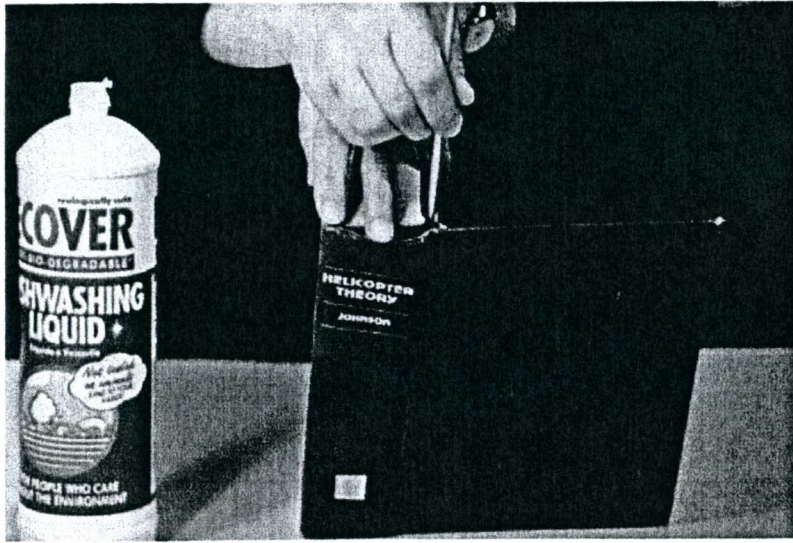
Inspect the hinge of the volume at the head and tail to see if the text block has become loose in its case. If the endpapers are pulling away from the inside of the case but are still securely attached to the text block, Hinge Tightening I may be an appropriate treatment. If neglected, a text block that has become loose in its case is likely to sustain additional damage each time it is used until the binding fails altogether.

Materials required



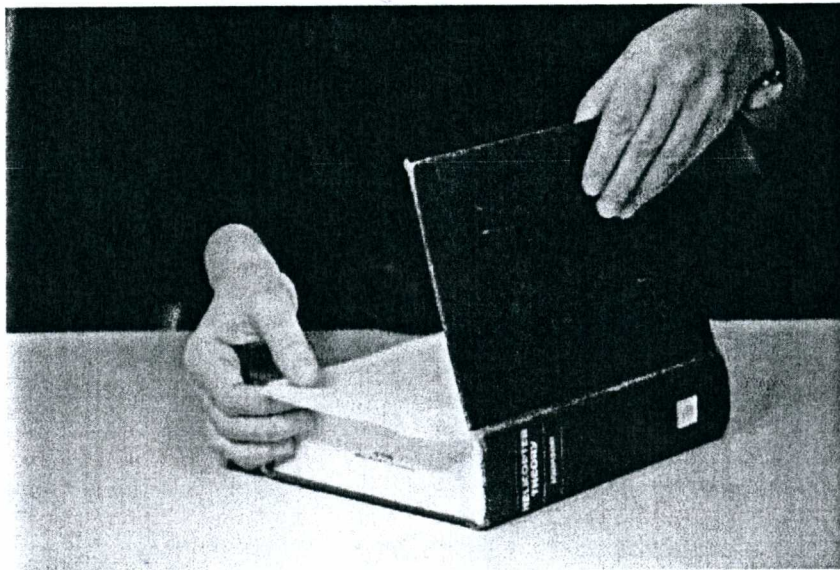
Assemble the following: polyvinyl acetate adhesive (PVA) in a tall thin container, knitting needles or plastic rods of various thickness, waxed paper, and a bone folder. A book press and metal-edged boards (or appropriate substitutes) will also be needed.

Step 1: Applying adhesive in the hinge



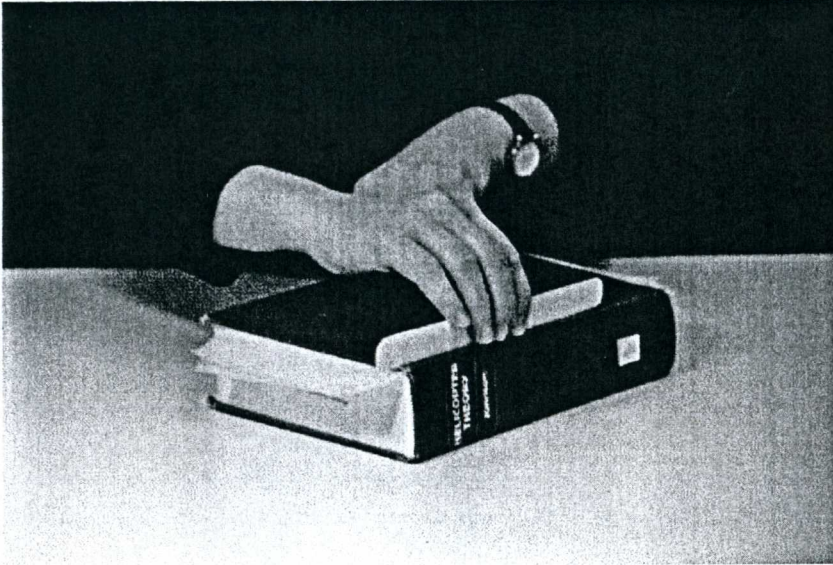
Stand the book on its tail. With one hand, prop open the loose hinge as wide as possible. Dip the knitting needle into the adhesive, scraping excess adhesive off as you draw the needle out of the container. Push the needle into the hinge as far as it will go, using a twirling motion. Apply the adhesive thoroughly to the exposed area. Turn the book on its head and perform the same procedure if needed at this end as well.

Step 2: Preparing for pressing



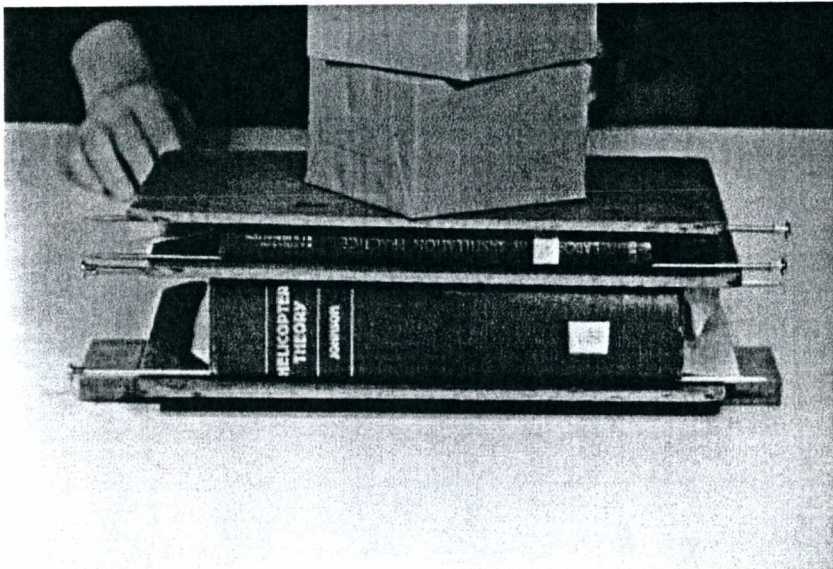
Lay the book flat and align the text block squarely in its case. Open the cover part way, and using the long edge of the bone folder, gently press the fold of the endpaper into the hinge. Insert a sheet of waxed paper as far as possible back into the hinge. This will prevent excess adhesive from sticking to the endpaper and assure proper opening of the book after drying.

Step 3: Setting the hinge



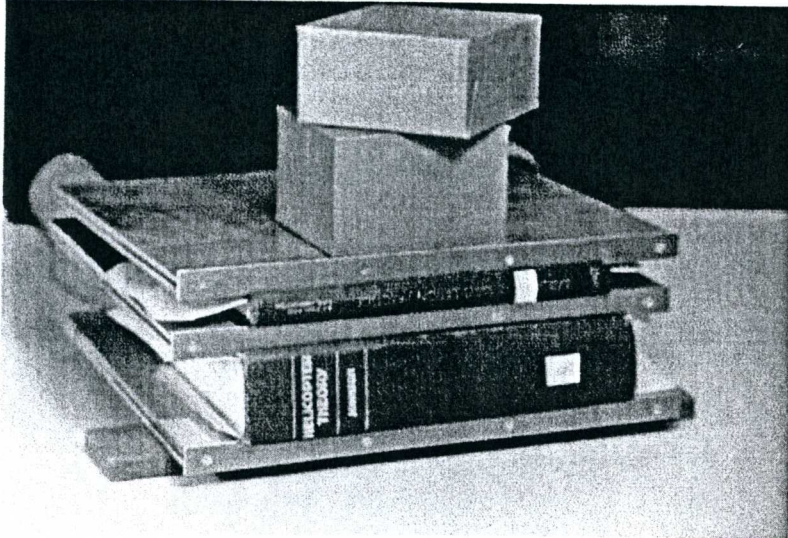
Check to make sure that the text block is still square in its case. Then run the long edge of a bone folder down the length of the outer hinge of the case, applying even pressure.

Step 4: Pressing the book using plain boards



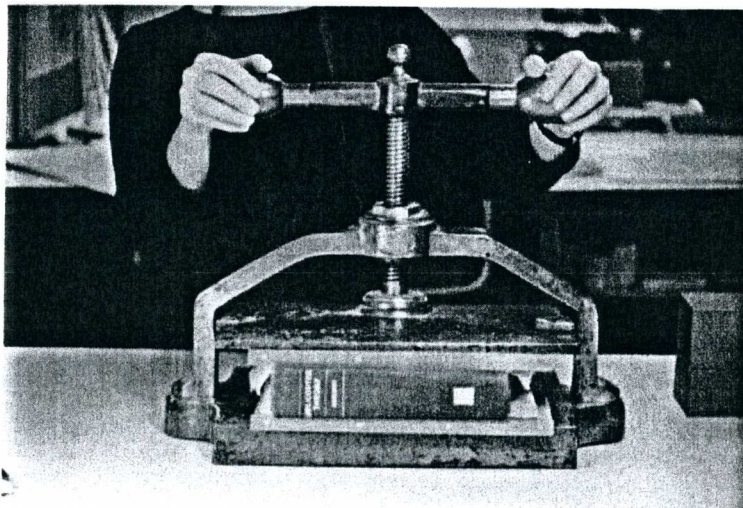
Press the book for several hours or over night, making sure that even pressure is applied in the joints. This can be accomplished using thin, rigid boards (Masonite, for example), appropriately sized knitting needles, and about 10 lbs. of weight. Select two needles that fit in the joints and are slightly thicker than the covers. Align the needles, sandwich the book between the boards, and apply weight.

Step 4: Pressing the book using metal edged boards



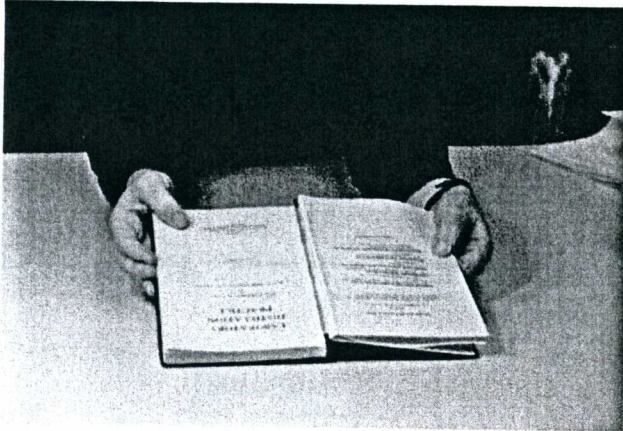
Metal-edged boards eliminate the need for knitting needles because one edge of each board is fitted with a metal strip that overhangs the board approximately 1/8" on each side. The resulting flange fits into the joint of a book and, under weight, exerts even pressure along it.

Step 4: Pressing the book in a book press



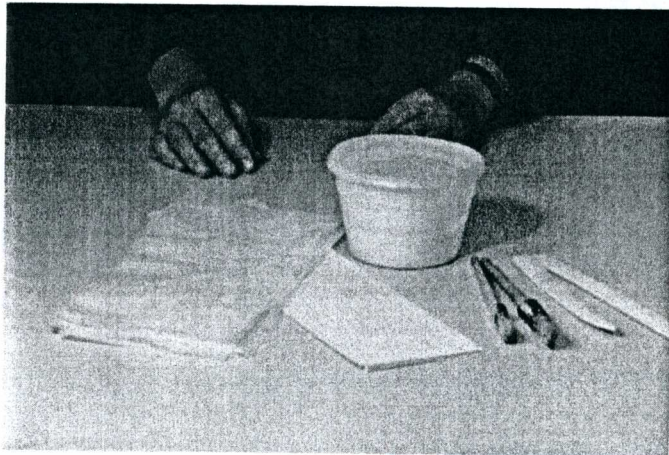
The easiest and most efficient means of pressing is to use a book press and metal edged boards. This traditional equipment facilitates careful control of pressure.

Three Basic Book Repair Procedures - Hinge Tightening II



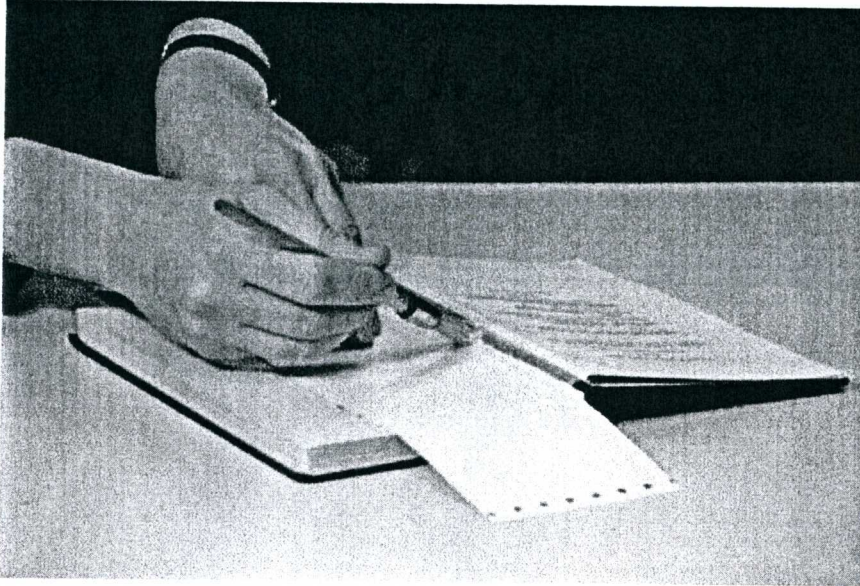
Open the cover. If the endpaper (or the endpapers and the title page) are pulling away from the inside of the case and the spine lining is visible and intact, Hinge Tightening II may be an appropriate treatment. If neglected, a text block in this condition is likely to require major repair or rebinding in the very near future.

Materials required



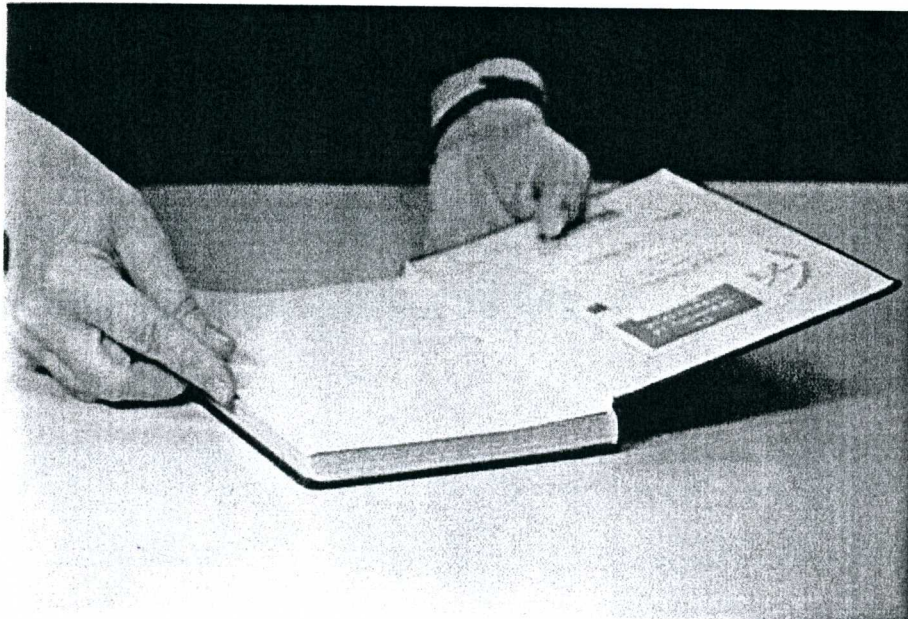
Assemble the following: polyvinyl acetate adhesive (PVA) in a low container, a glue brush, waxed paper, wide strips of scrap paper, and a bone folder. A book press and metal edged boards (or appropriate substitutes) will also be needed.

Step 1: Applying adhesive to spine lining and hinge



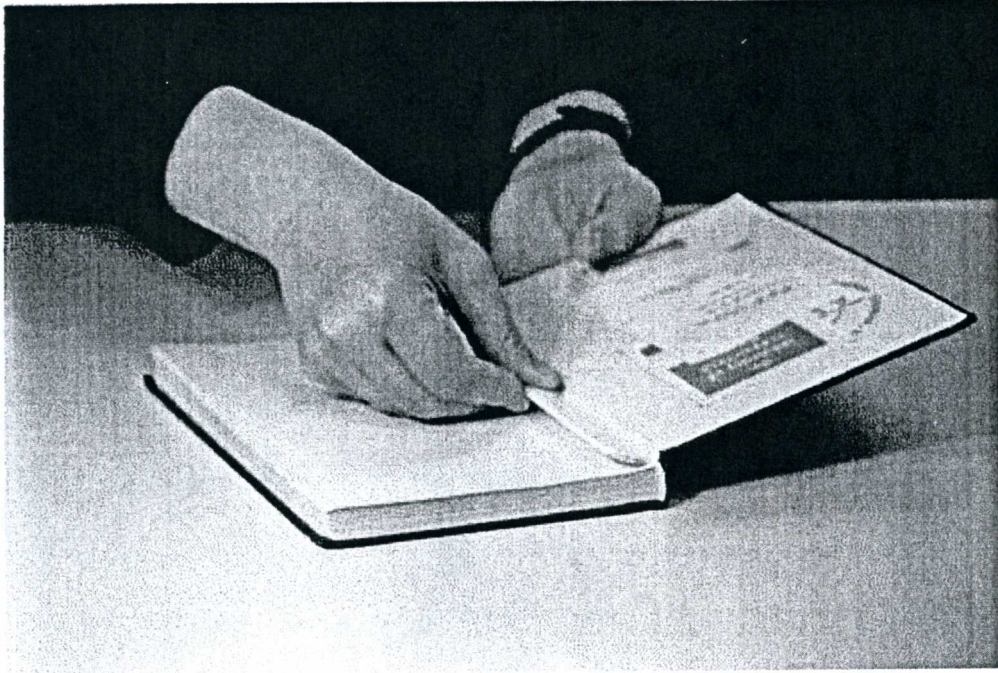
Open the book to the place where the text block and endpaper have separated. Lay a piece of scrap paper along the text block about 1/8 inch from the exposed hinge area. Carefully brush PVA on the exposed spine lining and on the underside of the fold of the endpaper.

Step 2: Aligning the endpaper and the text block



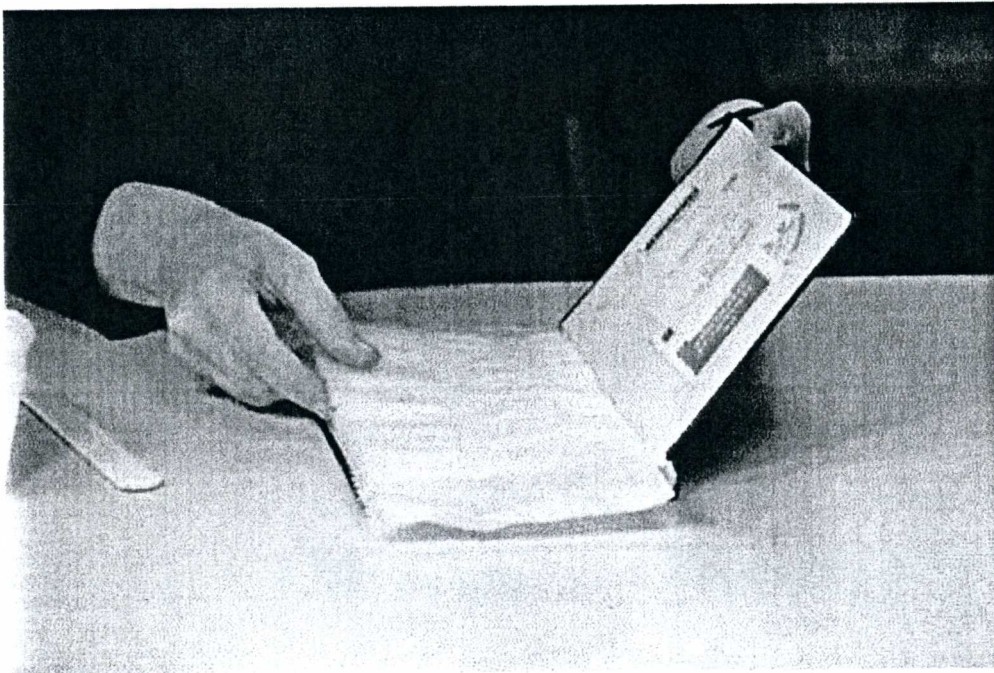
With the book still open, carefully align the endpaper and the text block to ensure that the fold of the endsheet exactly meets the shoulder of the text block. This will help to assure proper opening of the book after drying.

Step 3: Setting the endpaper alignment



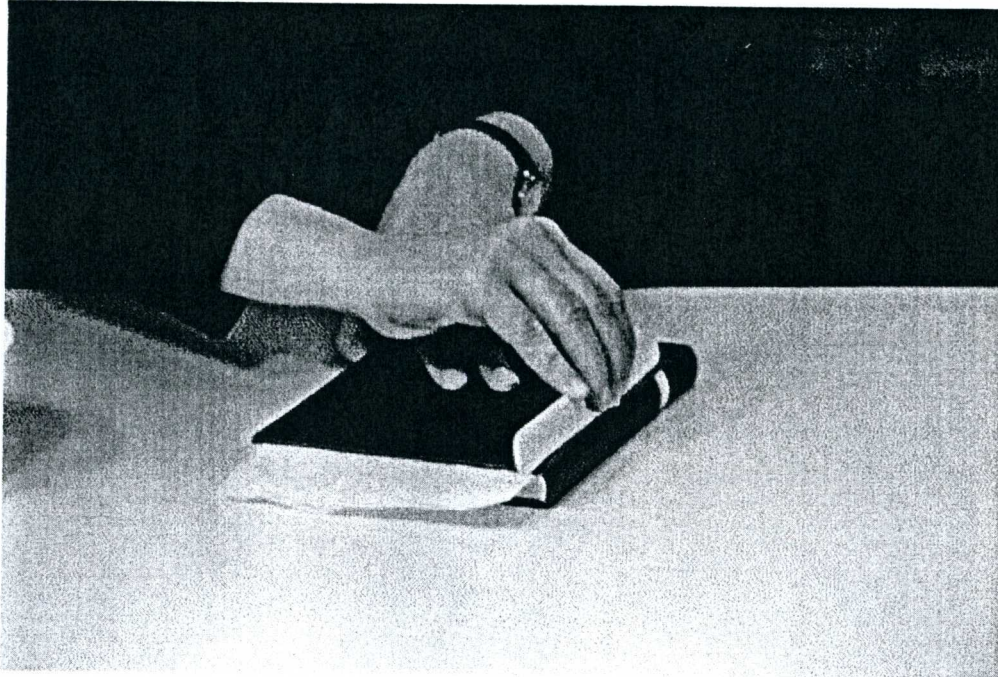
Using the long edge of the bone folder, gently press the fold of the endpaper into the hinge.

Step 4: Preparing for pressing



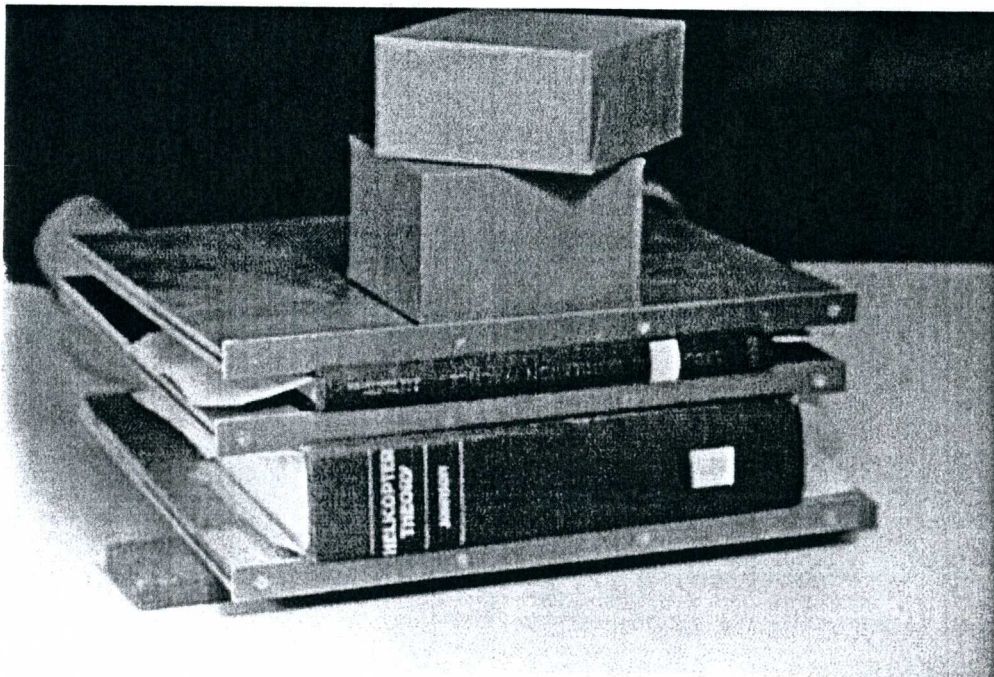
Insert a sheet of wax paper as far back as possible into the hinge. This will prevent excess adhesive from sticking to the endpaper and also help to assure proper opening of the book after drying.

Step 5: Setting the hinge



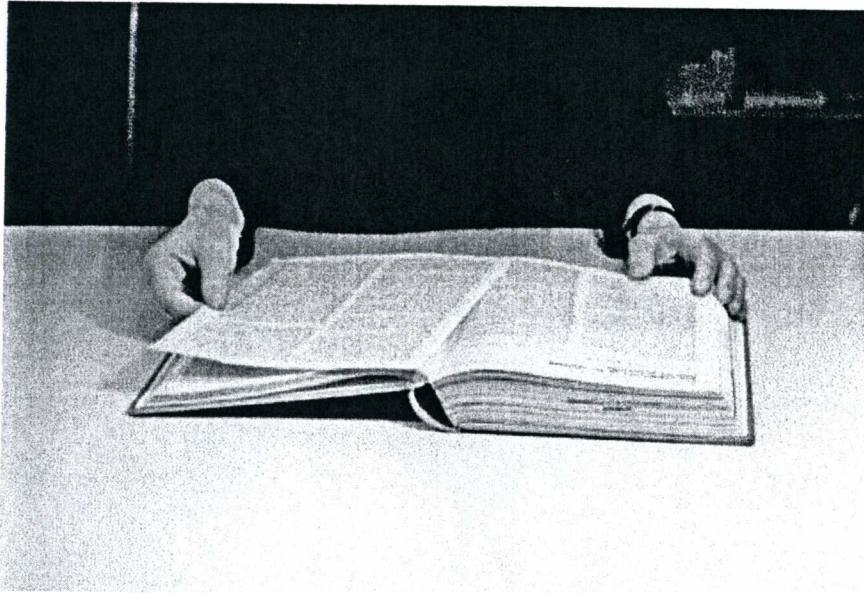
Check to make sure that the text block is still square in its case. Then run the long edge of a bone folder down the length of the outer hinge of the case, applying even pressure.

Step 6: Pressing the volume



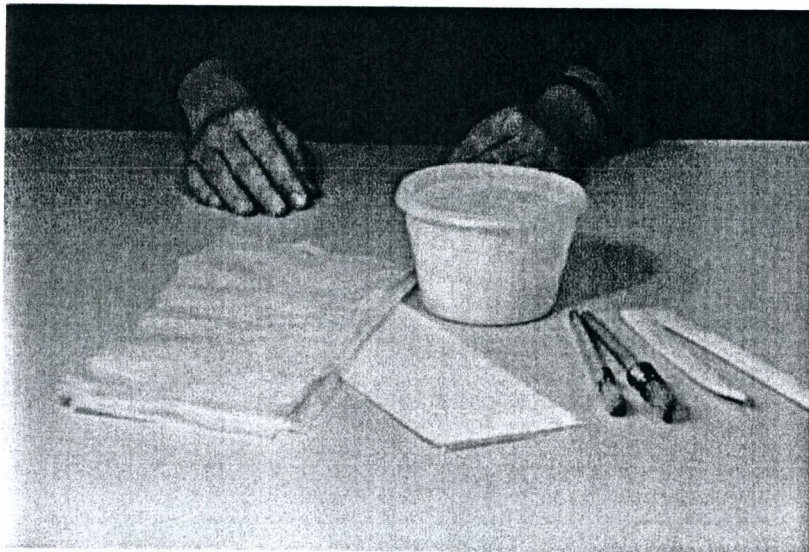
Press the book for several hours or over night, making sure that even pressure is applied in the joints. Use one of the pressing methods discussed previously.

Three Basic Book Repair Procedures - Tipping-In Loose Pages



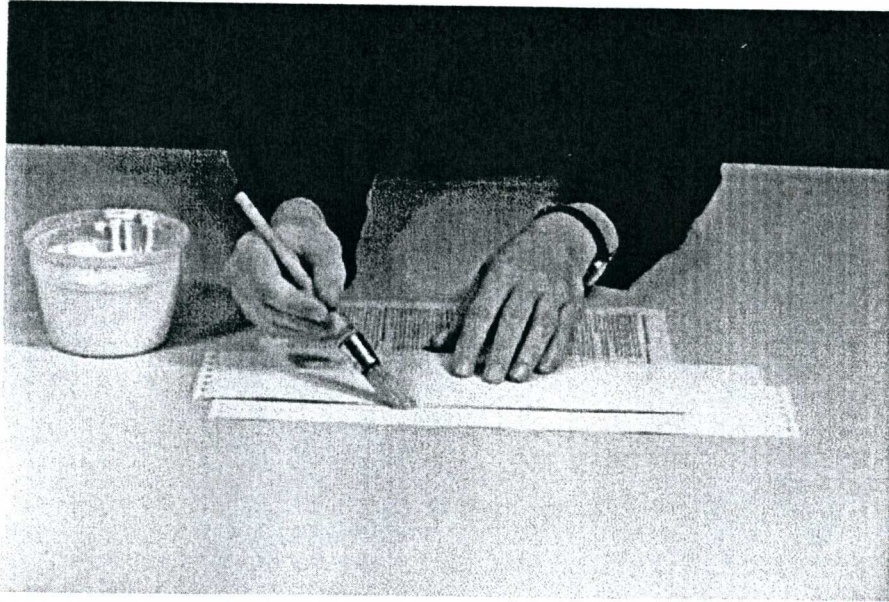
Tipping-in is a method for incorporating loose pages -- a detached leaf, replacement page, errata sheet, or other insert -- into a bound volume.

Materials required



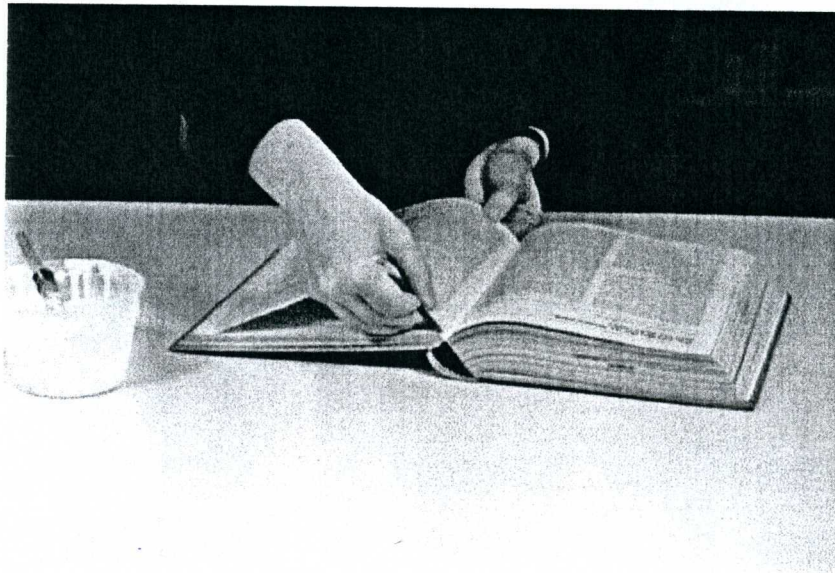
Assemble the following: polyvinyl acetate adhesive (PVA) in a low container, wide strips of scrap paper, waxed paper, a bone folder, a glue brush, a pressing board or glass plate, and a weight.

Step 1: Trimming the page and applying adhesive



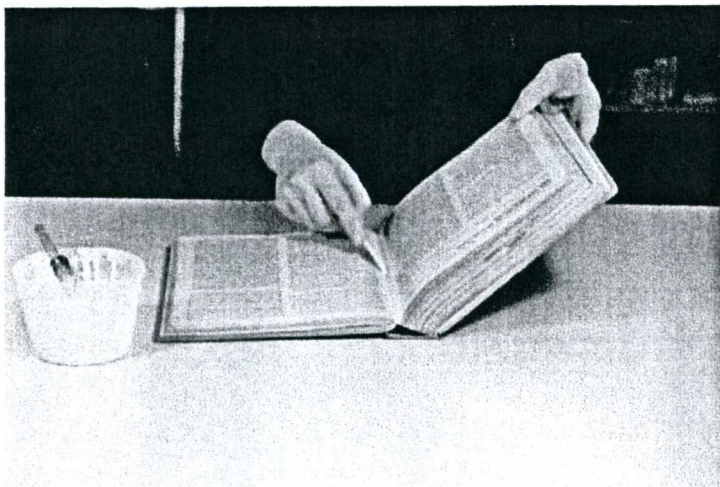
If the page to be tipped in is larger than the pages of the volume, carefully trim the page to size using a paper cutter. (For replacement pages, try to preserve original margin widths.) Sandwich the page, reverse side up, between two pieces of scrap paper, leaving 1/8-inch visible along the binding edge of the page. The top strip of scrap paper will protect the area that should not be glued. Apply a thin, even layer of PVA to the exposed 1/8-inch edge of the sheet.

Step 2: Positioning the page



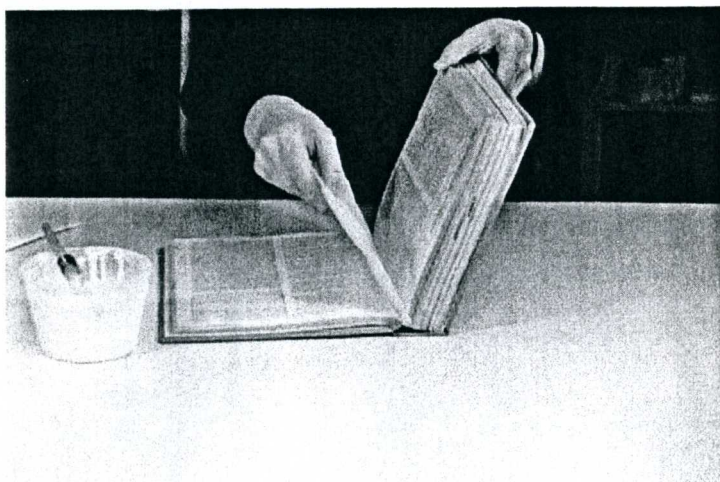
Carefully position the insert in place, setting it as far into the gutter as possible while ensuring that the edges are even with the rest of the text block.

Step 3: Securing the page



With the tipped-in sheet squarely in place, and starting in the middle of the page and working out to the top and bottom, slide the tip of a bone folder along the front (unglued) side of the sheet to press it tight.

Step 4: Protecting the text block



Place a sheet of waxed paper into the gutter between the insert and the page before it to protect the text block from excess adhesive.

Step 5: Pressing the volume

Close the book. Place a pressing board or glass plate along the spine edge and set a weight on top. Let stand for several hours.

Three Basic Book Repair Procedures by Carole Dyal and Pete Merrill-Oldham can also be found online at www.philobiblon.com/bkrepair/BookRepair.html