

The Repair of Organ Books

René Cauche

Owning a fair, dance or carousel organ, and enjoying yourself while you or other people are listening to it obliges you to renew your instrument's repertoire from time to time. Organ book sources are rather numerous: there are arrangers (in case you want more modern tunes) and organ builders who offer copies of old arrangements, etc. But there are also the "stocks" from old showmen, often resting in a barn. It's rather rare, but it still happens! It's in this way that I have been able to acquire about 100 meters of old books, of which about 67% fit my organ. The others have been exchanged or given away to other collectors. Unfortunately, the condition of these books wasn't very good: tears in the folds and missing pieces, damaged by keys that weren't adjusted correctly. In some cases, they had been repaired (the show must go on!) with any material that was on hand: Scotch tape (still acceptable, because it can be easily peeled off) but also band-aids, friction tape, or glue with a simple piece of paper or even fabric. I once even found a joint repaired with a thick red wire!

With a little time and patience, one can overcome most of these problems. I suggest you take a look at the method I'm using. Most organ books are made of cardboard that is folded and glued two by two alternately (often two times a 3 or 4/10th of a millimeter [mm] thick). Others, with a single thickness, are just an endless book. It is the first type of books, which is certainly the most widespread one, which we are trying to repair here. First of all, let's be clear about the terms used: the bottom of the cardboard is the side that is touching the key frame, the top is the one that is visible when playing a book. The internal surfaces of these pieces of cardboard are glued together, and they are "shifted" one to another thanks to a fold (Figure 1).

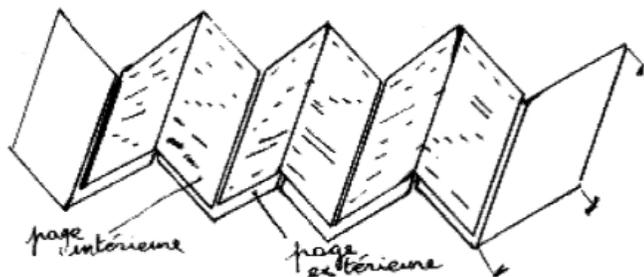


Figure 1. Bottom (below) and top (above) pages of a typical book.

In this article I am going to make a distinction between three types of damage: torn pages; pages torn at the fold; and a torn fragment (i.e. a tear around perforations).

Torn pages

In the first case the fold has become worn, and is actually torn. But when a page itself is torn, there's a real chance that (lots of) others will get or already are torn.

It's this type of damage that we are going to examine first: a torn part. A part of the cardboard can be torn because of a wrongly adjusted key; moreover, a torn part can have disappeared altogether. Or complete pages can have become detached of the book, but have been preserved.

The basics: since "finished" organ cardboard consists of two separate pieces of cardboard that are glued together inversely, we have to cut off and remove the top of the cardboard, without damaging the bottom. Then we have to "fill" the cut with a piece of brand new cardboard that is as wide as the original (Figure 2).

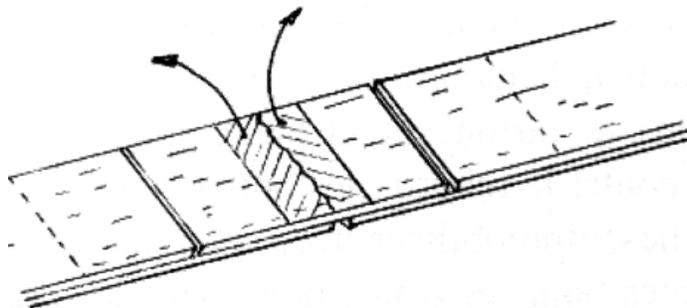


Figure 2. Both arrows indicate the parts of the damaged book to be removed.

Of course, we need to use new cardboard of the same thickness, which is actually half of the thickness of the final book, i.e. usually from 0.3 to 0.4 mm.

Several more or less sophisticated methods are certainly being used for this type of repair. The method proposed in this article restores the cardboard completely but it only serves as a starting point that can be adapted to everyone's needs.

A Page Torn at the Fold

Here we are dealing with the fold, which actually "divides" the cardboard in two pieces. First of all, we

need to align precisely the two parts of the cardboard that have been torn apart at the fold. Therefore, a small and easy-to-make construction [jig—ED] can be of great help. We need a small plank of the proper size, with a rim to “support” the two parts that need to be joined together. We also need sufficient space (on each side of the part that needs repair) to place the two piles of cardboard. In total, this would be about six times the width of one folded page (Figure 3, bottom) We start to prepare a strip of new cardboard, which needs to be longer than the height of the cardboard (we’ll cut off the remainder at the end); this strip also needs to be about 1cm wider than necessary, e.g. $6 + 1 = 7\text{cm}$.

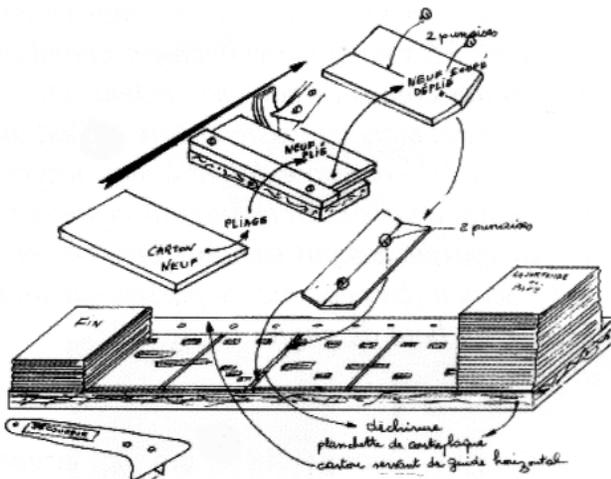


Figure 3. Top: new cardboard being folded and ends cut—note the thumbtacks inserted in the fold. Bottom: the book being repaired on a wooden plank showing the insertion of the new folded cardboard.

We fold this strip in the middle, making sure the fold is deep enough (if the cardboard is too stiff, you can make a very small incision in the top). Once folded, we make this strip exactly 6 cm wide, by cutting both pages at once. To avoid having to measure every time, it is advisable to make a small jig, which also ensures perfect parallelism (Figure 3, top)

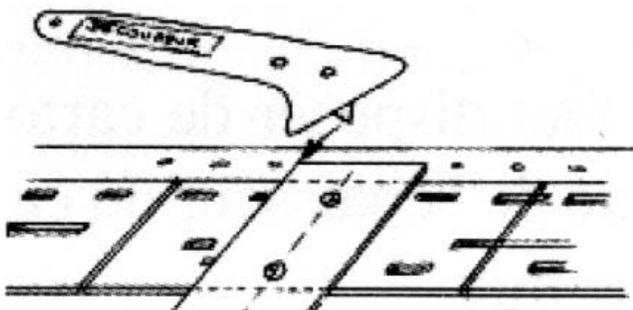


Figure 4. The “cutter” knife used to trim the edges of the new book portion that was inserted (in the above photograph).

We now have a folded strip, 6 cm wide, which is longer than the thickness of the cardboard. We place the cardboard on the plank with the edges well aligned against the rim and the edges of the tear next to each other. The strip can be fixed with two thumbtacks (no panic about the holes: most arrangers do it this way!) Figure 4.

We now put two thumbtacks in the fold of the strip we’ve just prepared; the points of these thumbtacks will allow us to align the strip perfectly with the torn parts.

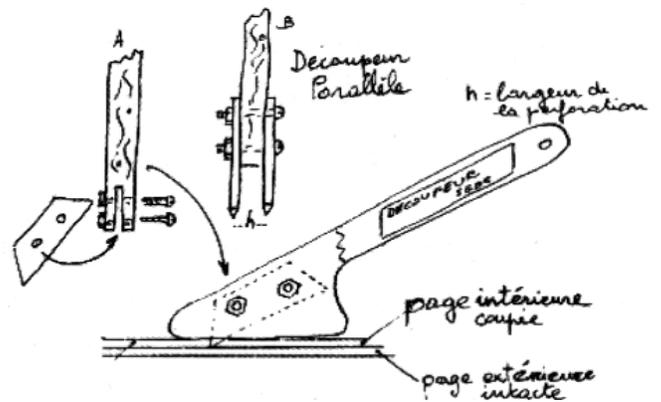


Figure 5. The parallel “Cutter.” “h” equals the width of the perforation. Note the knife blade only extends through one leaf of the book.

To cut off the remainders, we can use a small device (let’s call it a “cutter”) which consists of a handle made of hard wood of about 5mm thick (Figures 5). A kerf in the middle of this handle allows the insertion of a blade of a Stanley knife or a razor, but this blade can only protrude about 6/10 or 8/10 of a mm—enough to cut the top (= new layer) of the cardboard, while “leaning” on the edges of the strip which we have fixed with thumbtacks (see Figure 3).

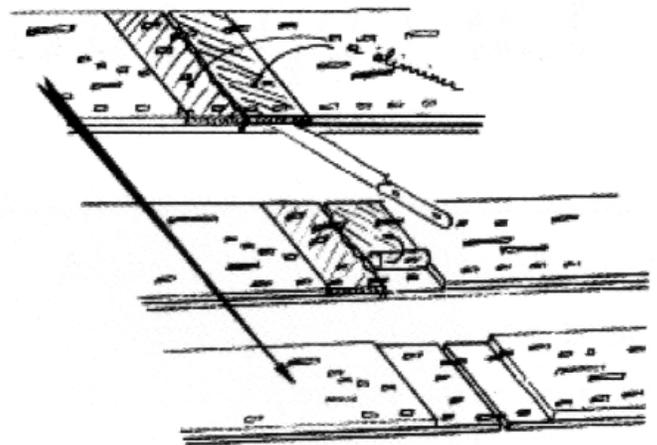


Figure 6. Top—arrows show the portion of the book to be removed. Middle—peeling off the top layer with a wet thumb. Bottom—the bottom layer after the old glue and cardboard fragments have been removed.

Now, we have to be careful, because we can only cut off the top page of the cardboard without touching the bottom, original page.

Once we have cut both sides of the fixed strip, we remove the thumbtacks and with the help of small kitchen knife (which shouldn't be too sharp) we try to find the separation between the two layers of cardboard (**Figure 6, top**).

Now that we have found the separation, the part of the cardboard that needs to be removed can often easily be "peeled off" by rolling it up with a wet thumb (**Figure 6, middle**). But do preserve the perforations!

The next step is to scratch off the remainders of the glue that held both layers of cardboard together, together with the rest of the old cardboard (**Figure 6, bottom**).

Once done, we can proceed to the final gluing. We can use carpenter's glue, bookbinder's glue, or whatever you prefer or usually use. Don't use too much glue as it will leak out of the edges of the cardboard and cause swellings. With the help of a clamp, a small piece of wood, two pieces of plastic (cut from a blister pack, and used to avoid gluing the cardboard onto the wood) we can compress the glued cardboard on the plank, taking care of a proper alignment (**Figure 7**). [*I have used common kitchen waxed paper for this "plastic" step—ED*]

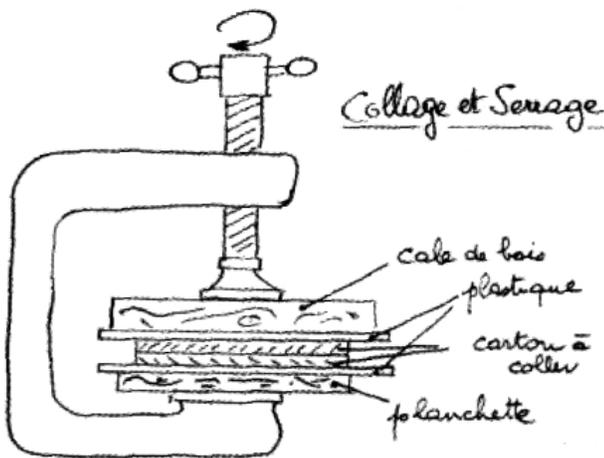


Figure 7. Using a clamp, blocks of wood and protective plastic to glue book pages together.

Once everything has dried, we need to cut the edges of the cardboard strip that are sticking out; burrs can be eliminated with the help of fine sandpaper. We also need to repair the perforations, using, of course, the ones already present in the old layer of cardboard. To perform this you can use a perforating machine, or a special knife. A useful tool to use as this knife to making perforations is the "parallel cutter:" two blades (again from a Stanley knife or a razor) are attached to a wooden handle, where the distance between the two blades (h) is equal to the

width of the perforations. In this way, both sides of the perforation can be cut at the same time. The beginning and the end of the perforations can then be cut with a normal Stanley knife.

This new part of the cardboard is now as solid as when it was new, and the whole book is now ready for a new life.

A Torn Fragment (i.e. a tear around perforations)

In this case, we have to cut around the tear in two steps: first the top layer, then the bottom one, in order to preserve the original perforations.

- Steady the tear temporarily (e.g. with Scotch tape), and start to cut in the top layer, about 2 cm around the tear; use a cutter with a blade that is only 3/10 or 4/10 of the total thickness of the cardboard. It is preferable to use a metal ruler as a stable guide while cutting.
- Prepare the cardboard using the correct dimensions: glue 1 cm on each side, steady the joint and once everything has dried, restore the perforations using the ones in the bottom layer.
- Now, repeat this procedure for the bottom layer, but this time make a cut of only 1 cm instead of 2 cm.
- Glue the ends together and restore (punch) the perforations when the joints are dry

When the damaged fragment of the book is no longer available, it can only be restored by someone with a good knowledge of music. On the other hand, we can always look for an identical passage in the rest of the book, because there often repeated passages; in that case, we can copy the missing part. Of course, we have to make sure that the keys of our key frame are correctly adjusted this time; otherwise, we'll probably have start over again.

Lost Pages

- In this case, it might be possible, again, to recreate the missing part by looking for an identical passage in the rest of the book.
- A missing part can often be recreated by someone with a lot of musical talent.
- Pages are frequently missing at the beginning or at the end of a book: in such cases, often only a few chords have to be restored.

Continued on page 13 . . .

PostScript—The Sting

While thinking that the State Legislators that we entertained that day were distinguished and powerful, we were surprised when a Federal Grand Jury indicted 28 Legislators and Lobbyists in an FBI sting operation in August of 1990. “Operation Lost Trust” alleged that Legislators were selling their votes to support a pari-mutuel betting bill for proposed dog and horse racing in South Carolina. Ironically, it was later revealed that the Government’s star witness was himself a criminal and

drug addict. This individual later admitted that he had lied to the Grand Jury about the Legislators that he had implicated. Finally, a U.S District Court Judge dismissed all outstanding charges that were a part of the botched sting operation.

There were really some scoundrels in the group! Can you imagine that? Crooked politicians—who would have thought such a thing was possible?

“Adventures” to be continued in issue No. 44.

Ron and Glynn are long time members of the COAA. They are the organizers of the annual organ rally at Lake Winnie, and always enjoy sharing their band organ at COAA rallies and other public events

COAA Rally #1 Planned for Lake Winnie

The first COAA Organ Rally of 2010 is scheduled for May 29 - 31, Memorial Day Weekend, at Lake Winnepesaukah, just south of Chattanooga, Tennessee. The Rally will be the perfect opportunity to celebrate the end of a very cold and snowy winter, so please plan to join us in the Sunny South for a weekend of fun. Organs will begin playing on Saturday morning and will continue throughout the weekend, including Monday, which is Memorial Day.

The Lake Winnie Rally has become a COAA tradition, and 2010 will mark the sixth consecutive Rally at this wonderful family owned amusement park.

If you’ve attended the Lake Winnie Rally in past years, you already know the fun that we have, and we hope to see you all again this year. If you’ve never attended a Rally at Lake Winnie, then we invite you to join us and enjoy the South’s favorite family amusement park and some great Southern Hospitality.

Chattanooga is an interesting place to visit, with lots of things to see and do, so you might want to plan to stay an extra day or two to take in some of the other sights and attractions.

For additional information about the rally, please contact Ron or Glynn Keisler at 803-356-4545.

... continued from page 40

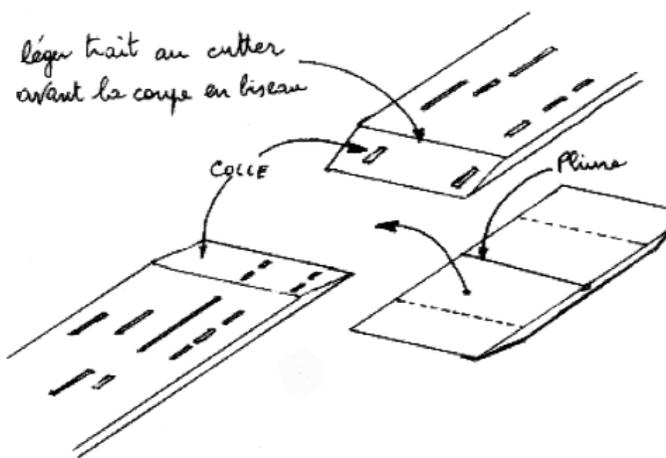


Figure 8. Using a slanted cutting edge to repair a single-thickness book. The glue is applied to the slanted edge.

Of course, from time to time, a damaged book can be beyond repair. In that case, the last resort will be the help of a gifted musician and arranger.

In the examples above, we haven’t treated cardboard consisting of one single layer, because it is much more difficult to restore: the only solution then is to cut a slanted edge, and this can only be achieved by a skilled hand (**Figure 8**)!

I won’t lie to you: all these methods require a lot of patience, time and skill. For a professional, all this work probably isn’t profitable, but for an amateur it surely is worthwhile, because one creates a book that is as good as new and will provide a lot of listening pleasure.

This article was first published in the 1st trimester 2006 edition of *Musiques Mécaniques Vivantes*, the journal of the Association Des Amis Instruments Et De La Musique Mécanique. The editor wishes to thank the French mechanical music association as well as the author, René Cauche, for permission to republish. Also, a hearty “thanks” goes to Björn Isebaert for translating this article for use in the *Carousel Organ*.