

Right The finished chair frame, coloured, polished and waxed



PHOTOGRAPHS BY THE AUTHOR

Restorer beware

A chair to restore proves to be an excellent step on the learning curve for one of **John Lloyd's** students

Buyer beware might be a sensible adage to adopt when doing a spot of shopping. However, 'restorer beware' is the phrase which needs to be etched indelibly on a restorer's mind when dealing with the repair of chairs in general, and upholstered chairs in particular.

My very first restoration project, when I was training, was an upholstered Victorian nursing chair which my cousin had sourced for me in his local antique shop.

When presented with the rather tired looking specimen, I noticed one of the back legs was missing. I handed over the princely sum of £5, thanked my cousin with what I hoped would appear to be genuine enthusiasm, and thought to myself that it would not make much of a restoration project. At least it wouldn't take too long to finish, and I could then move on to something a little worthier of my attention.

Experience

Nothing quite beats a bit of experience in life, but at that point in my career as a furniture restorer, experience was in rather short supply – well, non-existent. In the place of experience, I had an eager, but rather deluded optimism. I should, perhaps, have noticed the knowing look in the tutor's eye when I showed him my rather pathetic first project, apologising to him for the fact that there was so little to do to it, and assuring him that I would try very hard to find much more challenging pieces in future!

I started working on the chair that morning, fully expecting to have it repaired and polished by teatime – I was still working on it two weeks later!

The lesson learnt from that experience has stuck in my mind ever since. Upholstered chairs have the potential to have a seriously detrimental effect on profit margins. It's impossible to know what horrors might be going on under the cover material and stuffing. As a professional restorer it is very foolish to commit to a firm price for the restoration of an upholstered chair until the



upholstery has been removed, and the chair's frame has been revealed for inspection.

One piece

On that first job, just about the only thing keeping the chair in one piece was the upholstery. The missing back leg proved to be the least of my problems. By the time all the upholstery had been stripped off, the frame was in about 20 pieces.

The chair I am looking at this month is of a similar style, but the upholstery has been removed, which helped the estimating

procedure, although there were still one or two surprises. The other similarity with that first chair was that a student, Alan, from Ryecotewood College, who was doing a couple of weeks' work experience with me, tackled it. I didn't give him the job as some sort of bitter and twisted attempt at revenge – I just thought there might be some useful lessons to be learnt!

Having successfully dismantled the frame – see sidepanel – the various components were inspected for damage, and, as is

often the case with beech and walnut frames, there was plenty of worm damage. As I mentioned earlier, one of the seat rails was missing, but the one that wasn't missing might just as well have been. Judging by the weight of it, it consisted of more air than wood!

On a more important piece we might have taken the decision to consolidate the original rail, but in this case we decided to replace it using the original as the pattern for both sides. Getting the angles of the ends of the rails right needed a bit of trial and error and a few

1 Oh dear... the chair before with the upholstery stripped

2 & 3 A worm damaged leg and seat rail

4 Broken dowels

5 Dismantling a joint with knife and hammer...

Symptoms

The main symptoms with this chair were a missing seat rail, a generally loose frame and some broken joints to two legs, which had parted company from the rest of the frame.

With the frame flapping about, the assumption might be that it would completely dismantle with a few well-aimed taps with a rubber mallet. Assumptions are rarely good things to make, and there are always one or two joints that just don't want to play the game. These joints were initially attacked with an old knife. The ones with bone handles that your granny keeps in a canteen and brings out for special occasions are better than the modern variety. The blades on these knives have parallel sides and nice, rounded ends. They have a slight taper across the width and can often be successfully encouraged into a joint, between the shoulders, with a few taps from a pin hammer.

The slight taper on the blade has the effect of opening the joint slightly... if you're lucky. Once the joint is beginning to open, a softwood wedge can be tapped into the gap, and with the introduction of some methylated spirits or some hot water to try to break down the old animal glue, the joint may come apart. If it doesn't, drastic measures could be required. I am always rather reluctant to cut through joints with a saw, but sometimes this approach is the only one that will keep a job moving forward in a commercially viable way, particularly with dowels. Doweled joints are notoriously bad at coming apart, and even if they do, the dowels will often be damaged and need replacing anyway. Therefore resorting to the saw treatment is not really such a bad option. Damage to the two shoulders can be kept to a minimum by using a Japanese saw because the blades are so thin and don't have too much set.

6 ... and using a softwood wedge and hammer

7 Cutting through the dowels with Japanese saw

8 Drilling out the dowels

9 Splicing to top of front leg

10 Spliced repair in cramps



tweaks on the disc sander. To drill the dowel holes, we just temporarily secured each end of the rail against its respective leg using the vice and a cramp and drilled through the leg's dowel holes, which ensured the angles and positions of the rail holes were correct.

One of the walnut front legs was suffering very badly from worm, especially around the dowel holes, so because of its rather important structural role we decided to splice a new piece of walnut on the back face. Putting the splice on the back is not really a difficult choice to make, if the new bit of wood is round the back it's much more difficult to see! It still needs to be coloured in to blend, mind you. Colouring challenges aside, it's important to try to keep as much of the original visible surfaces as possible. Creating a successful splice just needs as long a splice as is practicable, a very sharp, well set up plane, to create a pair of perfect gluing surfaces, G cramps, a sash cramp and some glue. The G cramps get the two gluing surfaces nice and intimate, but because of the angle of the splice and the slippery nature of glue, the sash cramp is needed to stop the two pieces sliding apart.

Replacing damaged dowels needs a dowel plate and some beech which can be trimmed to roughly the right square cross-section on the band saw. The square dowel is transformed into a round one by hammering it

Students

Talking of glue has reminded me to mention the importance of inviting students to visit your workshop on a regular basis. The better well off, older students, who have taken early retirement, aren't quite so useful – it's the hungry students that are running on a tight budget that are the best value!

When I was training, there were all sorts of money saving schemes being invented by the more impoverished students. The most bizarre and desperate being Phil, who tried to make the fur from a dead badger he had found in the woods into a badger softening brush. One of Alan's contributions took the form of a thermostatically controlled glue heater. Nothing very clever about that, I hear you say. But if the glue heater is actually a cheap, second hand baby food heater which takes up little space, heats water and has room for a jar of animal glue, a brush and a syringe, it has got an awful lot going for it!

through the relevant circular hole in the dowel plate. Having replaced all the missing and damaged bits, we glued up the legs and seat rails.

Good plan

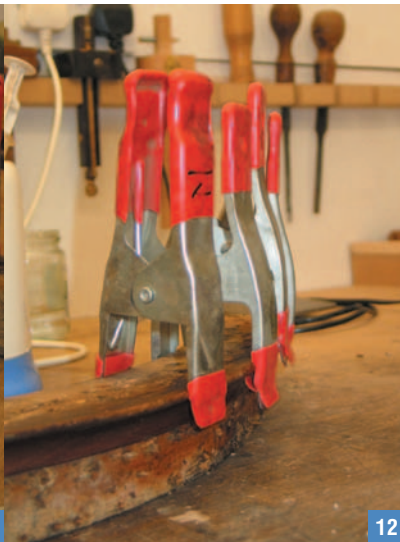
Having glued up the frame it's a good plan to ensure the legs stand flat on the floor, adjusting the frame into the right shape with two wooden battens and a big G cramp. To actually cramp up the frame we used a big lorry strap, but it was interesting to see that the original Victorian maker, who obviously didn't know any lorry drivers, had cut 'V' grooves either side of the legs to allow a cramp to apply pressure across the joints. Gluing the back onto the seat frame again revealed some little cutouts to allow cramping of the sloping back to the seat rail,

which we utilised this time. To glue the cresting rail to the back we attached some G cramps either side of the joint, and then wound strips of old inner tube around each pair of cramps to apply pressure across the joint. This is a surprisingly precise and effective way of cramping this sort of problem.

Having glued all the bits together, any visible new bits of wood were coloured and all the polished surfaces of the rather grubby frame were stripped, coloured as necessary to make all the bits blend together, and polished with shellac. The unpolished surfaces of the frame were treated for woodworm and obvious wormholes on the front legs were filled with hard wax. A final wax polish and the frame looked really smart. An excellent job Alan! **F&C**



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- 11 Glue warmer – Alan’s jam jar with glue, syringes and brush
- 12 Spring clamps gluing moulding to front rail
- 13 Drilling dowel holes into new rail using original leg holes as a guide
- 14 Trimming spliced leg repair with block plane
- 15 Making beech dowels with dowel pop
- 16 ‘X’ battens to level seat frame
- 17 Cramping cut-outs on original rail, used when bandcramps not available
- 18 Cramping cresting rail – ‘G’ cramps /inner tube
- 19 Cramping back to seat rails using cramping cutouts in back
- 20 Cleaning a leg
- 21 Filling worm holes with hard wax
- 22 Alan gets colouring