

MASTERCLASS

with

David Savage

Two very different chairs have passed through the workshop recently. One resurrects the ancient art of gesso to accept a watercolour finish



Nick and Martin applying a gesso finish to the rhubarb chair

from constructional veneers of either 2mm or 1.5mm thick. We went for the 2mm where the curves were relatively gently but, on the lowest arm that formed the top of the front leg the curves were getting very, very tight, and we used 1.5mm constructional veneers to create that leg. Constructional veneers are quite expensive but it is possible, by using consecutive veneers cut from the same piece of wood, that when they are reassembled they create a curved form with no evidence of the laminating process visible at all. That is, if you get your joints right which of course Martin did.

Fitting the crest rail on this chair was the most difficult part. Martin is getting pretty good at that now. It's mostly down to marking out and then cutting very exactly to the line. Each leg is fitted to the top rail with a double mitre joint, or bird's mouth joint, and we pull it all

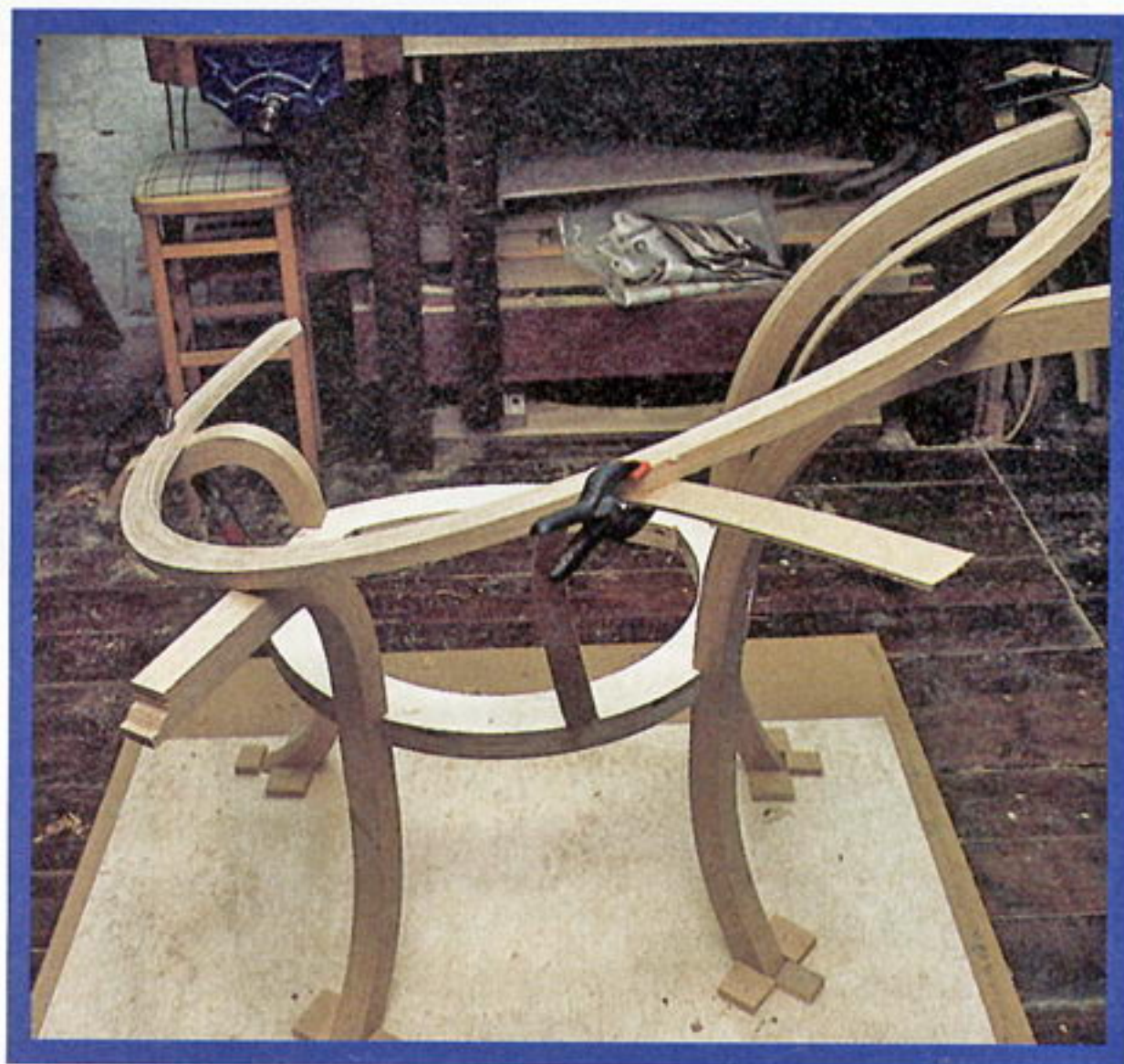
MISS WHIPLASH

It's funny the names I give chairs isn't it. Last month I promised you the details of how I was playing around with colour on a development of the writer's chair we featured a few months ago. This chair is lower than the writer's chair. Do you remember she was faced with the problem of a work surface 6in higher than any known desk, so she needed a correspondingly tall chair. But the chair we are making here is taking the idea of that writer's chair, with its big sweeping curves, and developing a salon chair of a more standard height.

We started off with the idea of making a matched and handed pair of chairs – that is, a pair of chairs that went together, but one was swooping to the left and one was swooping to the right. The

construction of the chair was based on the writer's chair and this time it was Martin Dransfield who was making the chair for me. We don't have a client for these chairs so there was no problem if Martin took longer than usual, which is what I would expect from somebody new to this business.

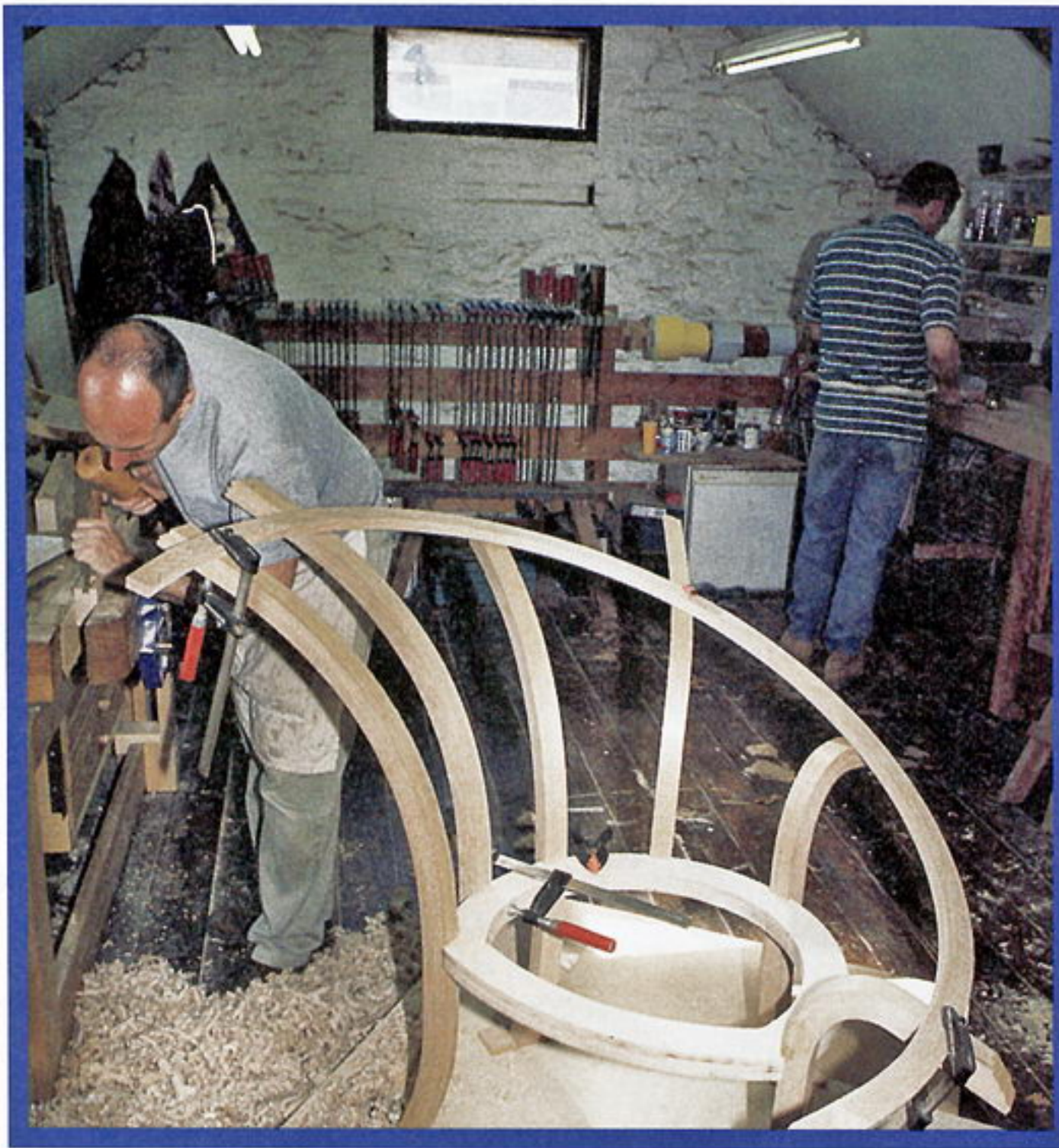
All of the legs and the crest rail are in this case laminated up



Like the writer's chair before it, the curved crest rail of this chair is held in place against the overlength legs and the joints marked across each intersection

together with a screw that is plugged from the underside of the crest rail. I like using screws in this situation because it enables one to do a joint that would in normal circumstances be impossible to cramp up, and also a screw gives it a considerable amount of strength to an already very strong joint. But you have got to make sure that the plug is fitted absolutely cleanly.

We have a set of matching plug cutter drill bits that give very clean results. You don't need a special set like those sold for the purpose but you do need to have



Bird's moth mitres are used to joint the legs into the crest rail

Care must be taken not to get air into the gesso as it is applied. After five or six coats it can be rubbed down gently with fine abrasives



gesso finish, because it's so absorbent. After six or seven layers of gesso have been applied, it is allowed to cure for a couple of days before it can be water polished. This is done by taking lukewarm water and a fine cloth and gently rubbing the surface, effectively melting down the top layer of the Gesso. The top coat can then be finished off with 500 grit wet and dry paper.

The whole process took us a bit longer than we thought and the closing day for the exhibition was looming large, so I was presented with a schedule of two more days to finish this chair before Mary Holland, who does our upholstery, was arriving to put the seat on. Hey, ho!

What is so nice about a gesso finish is that it is absolutely porcelain smooth, and the surface absorbs moisture, so I was able, with a fine air brush, to spray artist's water colours to achieve

AND THE RHUBARB CHAIR

matched your drill bit to the plug cutter, kept for that purpose. We recently checked the size of holes that were cut by 10mm drills. We have four in the workshop and each one can cut a different size hole. The difference is almost 0.5mm over the entire range. All the drills were new and all the drills have been bought from the same source.

Gesso And Paint

My greatest fun with this chair was applying the coloured surface. This was done by first applying a gesso to the wooden frame – don't worry I'll tell you about gesso in a minute. The wood was first scraped but not sanded. I wanted a slightly toothed surface for the gesso to take on. The chair was then given a coat of thin rabbit skin glue size. Rabbit skin glue is a little bit like



The finished Rhubarb Chair. Six or seven coats of gesso prepare the wooden surface for the watercolours used to paint the chair

hide glue but it's a paler slightly weaker glue and is used here because it will not darken the finished surface. Gesso was then applied.

Gesso is a very fine mixture of whitening powder or powdered chalk and rabbit skin glue, very much like single

cream, which can be painted on to the job like a posh coat of emulsion paint.

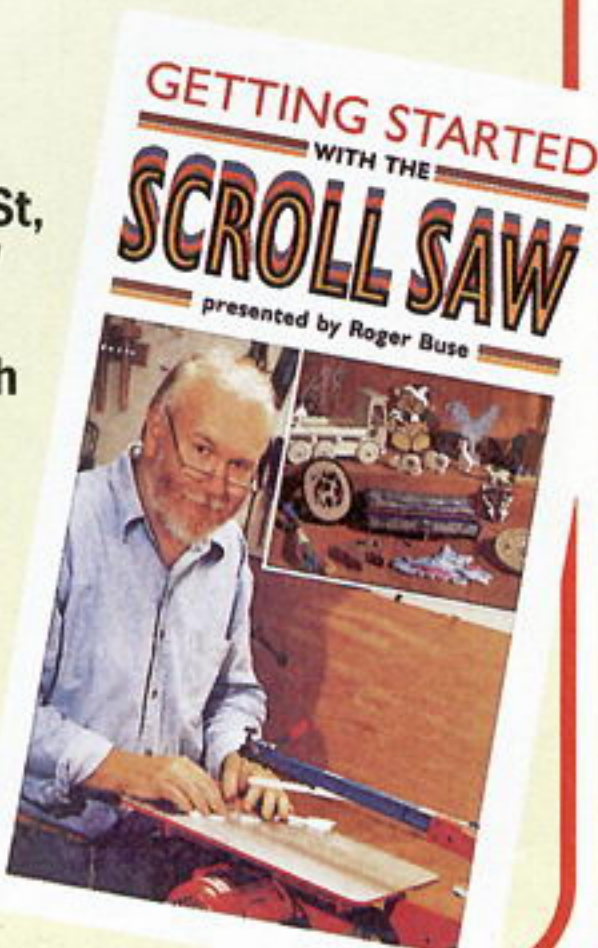
What you have to do is apply approximately six or seven coats of this thin creamy liquid. As each coat is applied it is sucked on to the surface by the previous layer. This is one of the reasons I wanted a

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Q: What is the other name for a scroll saw?



the kind of colours that I wanted. Firstly, I was after a very pale green, to reflect the colour of the suede leather seat that we were going to use, and then this rhubarb red colour around the tops of the arm. I got the whole idea from growing forced rhubarb on my vegetable patch. Each spring I put a large Victorian square chimney pot over my rhubarb so that the young shoots grow up through this chimney pot searching for light, making long thin and very delicious stems of rhubarb. What caught my eye this year was the colour, the pale green at the bottom of the stems going up to this vivid rhubarb red at the top.

But Will it Last?

Having finished the piece I must admit to having some worries about this finish. These really revolve around how well it will withstand further use. Gesso as a surface is vulnerable to chips and damage and, although it's what was used in the Louis XIV period of gilded chairs, in that situation it takes chips and damage relatively well. The gesso merely shows through the gold as a relatively unobtrusive part of ageing.

The back upholstered panel is located into the frame on to two dowels at the top. The bottom panel then holds everything in place



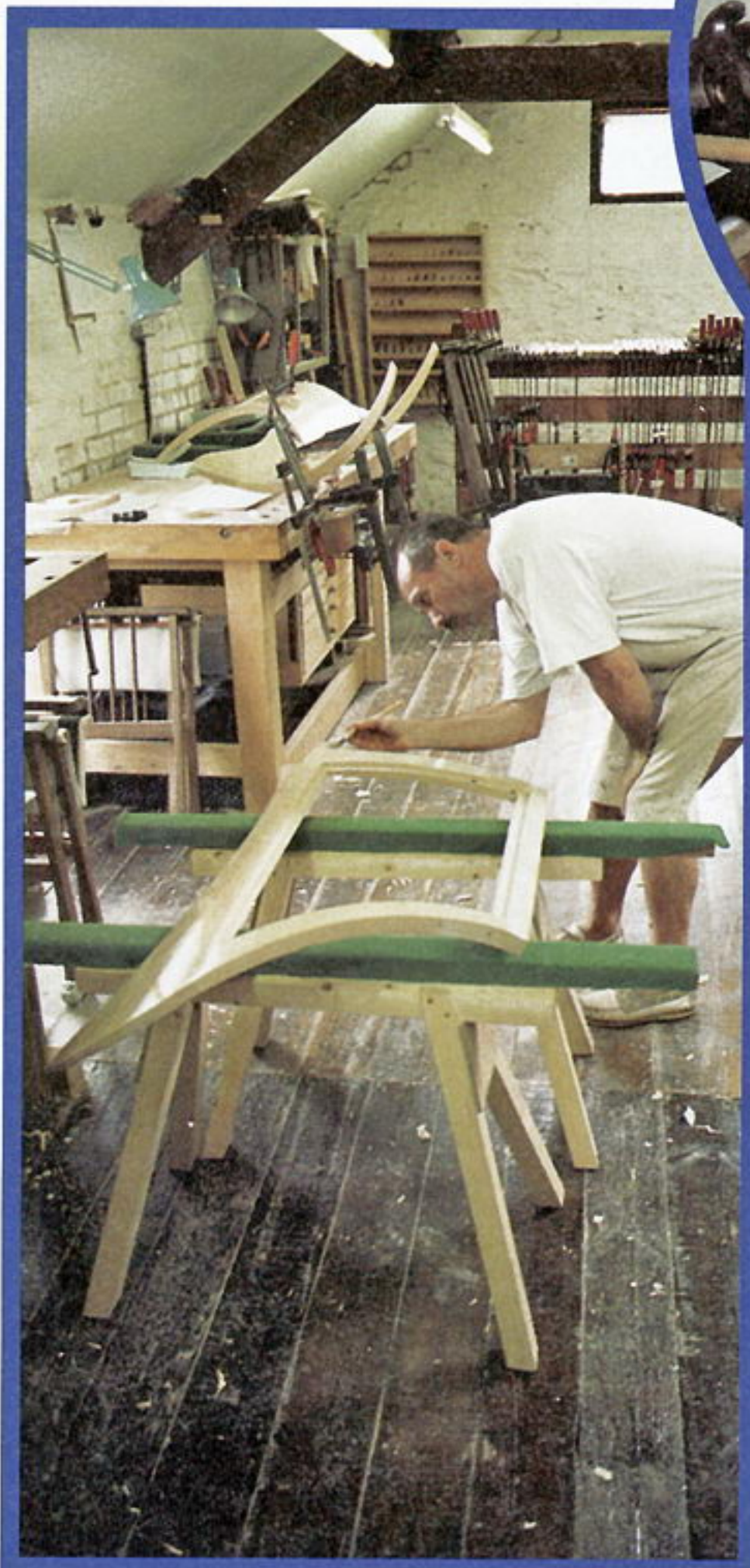
But I'm not so sure how well this chair will age. I've a feeling that in a little while it might just look tatty. So after our exhibition I may take it back and play with it again a bit further. The surface we have at the moment is fairly strong, being covered in protective water-based lacquer, but I would like to have something a little stronger than this.

Miss Whiplash

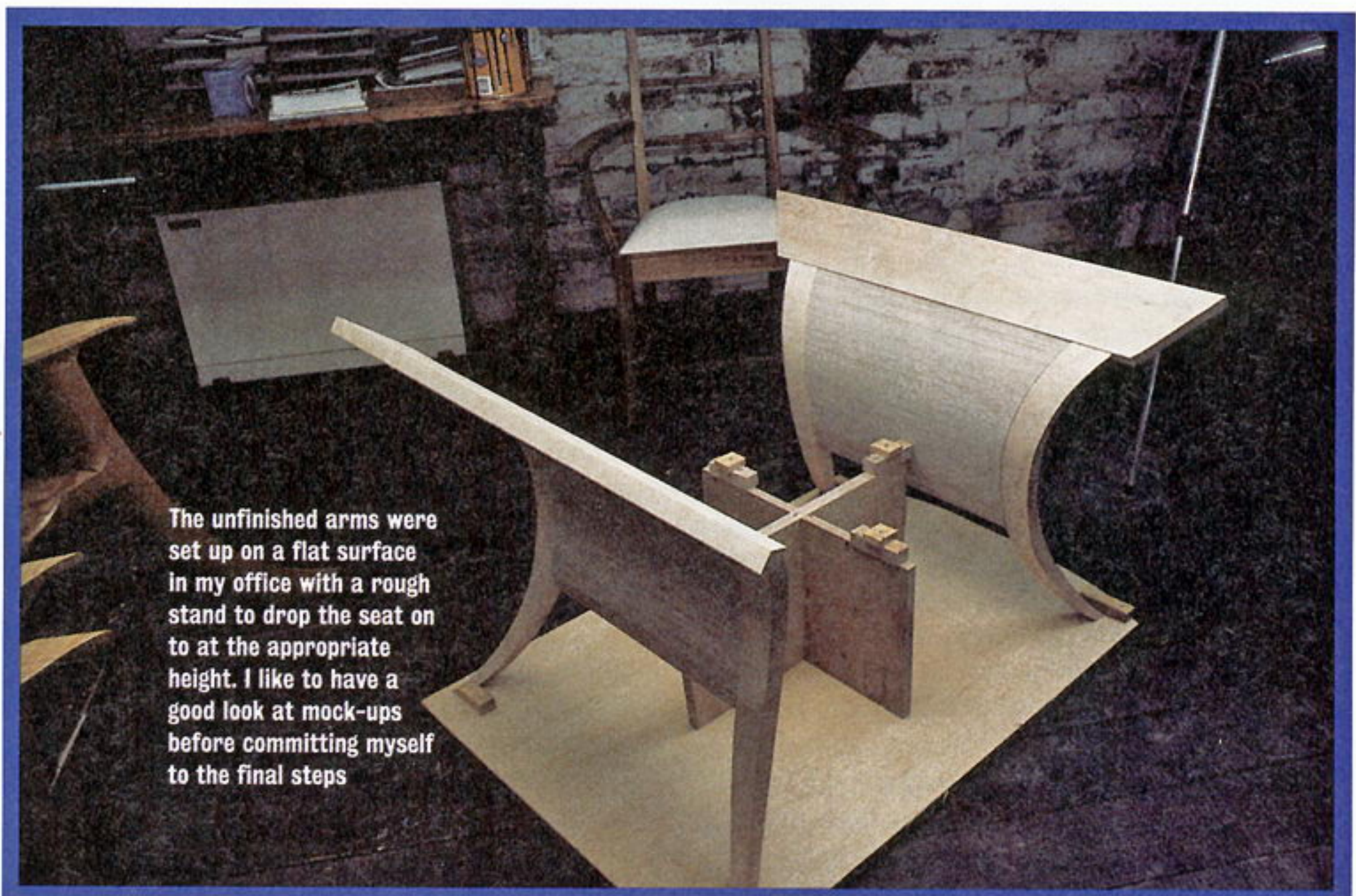
Our other chair was known first in the workshop as Madam Butterfly to reflect the kind of open winged petal shapes we were working with. Then, as the shapes became more resolved, she acquired the name of Miss Whiplash. I think I prefer Miss Whiplash! The challenge with Miss Whiplash was to make the arm sections which, although he made them superbly, took Nick an inordinate length of time. The centre of these sections was cut out of stack-laminated plywood. On either side of



We made our own laminated plywood core for the curved arms. This needed a complicated cramping jig to attach it to the top armrest. Note the dowel holes to register the curved legs



Nick is hard at work here finishing the laminated back frame (we used a brushing acrylic lacquer) for Miss Whiplash before it is sent off to the upholsterers for a drop-in back panel



The unfinished arms were set up on a flat surface in my office with a rough stand to drop the seat on to at the appropriate height. I like to have a good look at mock-ups before committing myself to the final steps

that core, a laminated front and back leg was fixed, and the whole assembly was then veneered in a vacuum bag with constructional maple veneers. To that assembly was then fixed the top arm rail. A photograph here shows the cramping set-up used for fixing that top arm rest being checked in a dry glue-up before the core had been veneered and the legs fixed on. Compared to these the back section was relatively straight forward, made of four pieces of which I think only two were laminated. One of the slides here shows Nick lacquering these pieces.

The core of this chair is the seat assembly, a square frame to which the two side arms and the back frame are fixed, again screwing through that frame into these side and back frames. And also getting a fixing as far up the back frame as we possibly can to give rigidity. The fun part of this chair was deciding the wiggles along the arms and across the top of the crash rail. Here it's a matter of the designer coming in and waving his magic pencil all over the place. I wanted a shape that was spirited and very energetic and it was a matter of going over and over and over again to create the right kind of pencil line. One arm came very quickly. The crest rail came, if I remember, very quickly, perhaps after a couple of goes. But the third arm took dozens of attempts to find the kind of shape that I wanted.

Working with Nick is essential to my creative process. He can translate my ideas into three dimensions, making suggestions about how the thing can be developed a step or two further by twisting a line, undercutting it here, leaving it thick and fat there, making it lean and sharp here. I think that, without Nick it would be very difficult for me to do this kind of work so convincingly.

No Worries

The upholstery went relatively well. I always have worries about upholstery but this chair was upholstered in two very straight forward sections. The back went on to a laminated frame which sat inside rebates in the maple chair back. The seat was a drop-in, upholstered on a separate frame that just sat on the seat base. The front of the upholstered seat came down and oversailed the seat base and gave a nice, neat, totally upholstered look to the front of the chair. I like this kind of work because it means the upholstery can be done separate from the chair, and our upholsteress is very clever and careful at not waving her tacker gun around our delicately lacquered surfaces. We gave Mary a terrible task with the rhubarb chair, saying that she had to upholster it in record time but not touch the chair with her dreaded tacker gun at all 'cos it was very delicate and very vulnerable to dings. This she did with consummate skill.

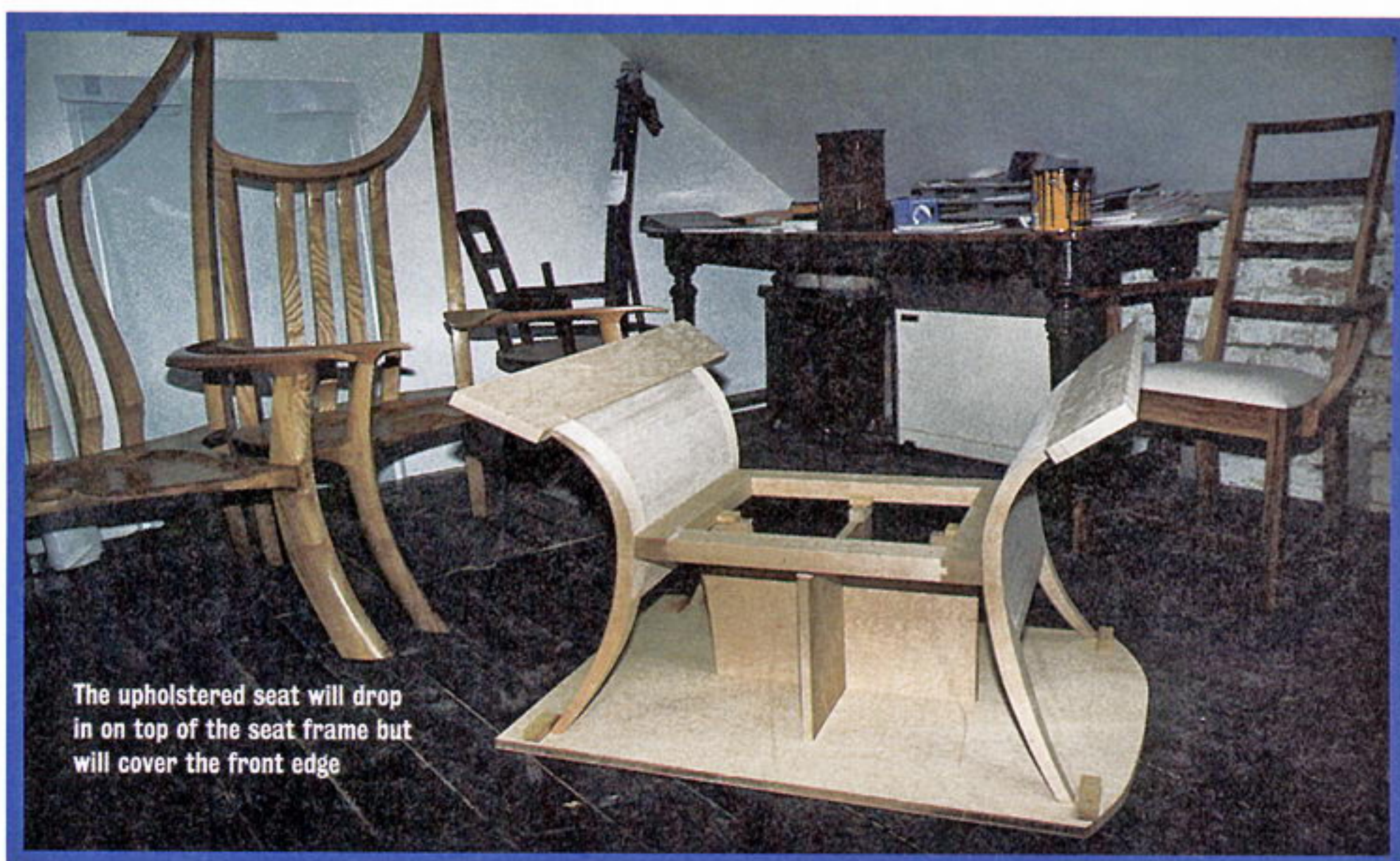
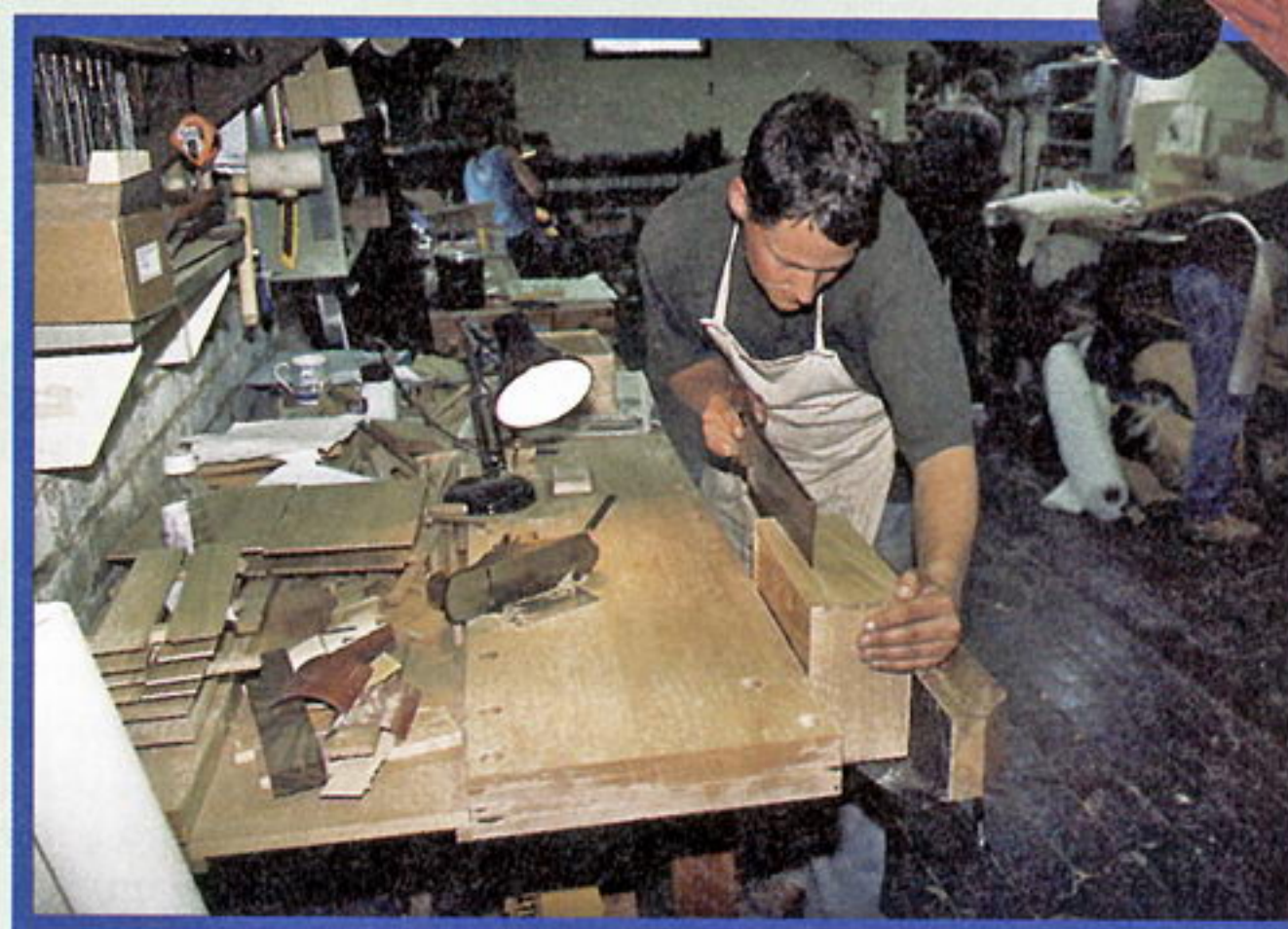


Student corner

At last you get a chance to see Martin Dransfield's wonderful little cabinet. Martin made this cabinet to show a prospective employer his skills as a trainee cabinet maker. I think he has achieved a wonderful result. This piece is now on exhibition at the Devon Guild of Craftsmen in Bovey Tracey at the annual exhibition of members' work. Do, if you get a chance, go along and see that show as there is a lot of very nice woodworking by other members including Alan Peters, and Peter Southall. You also get the chance to see Rhubarb and Zoe –the writer's chair.

I have two students at the moment making jewellery boxes, James Harvey, who joined us about three months ago, is shown here sawing the lid off one of his boxes. We've tried sawing the lids off jewellery boxes in all sorts of ways, including putting them on a table saw and firing them through the bandsaw but we come back to the safest way of using two pencil lines and a tenon saw. The aim is to start the saw cut on the far side of the box and gently and slowly lower the saw down to create a kerf coming towards you. In this way the straightness of the saw is used to your benefit to create a straight shallow cut rather than a deep cut.

David has up to four students working alongside him and cabinetmaker Nick Chandler at any one time



The upholstered seat will drop in on top of the seat frame but will cover the front edge