

Text: Mark Finney
Pictures: Steve Taylor

A simple and stylish bookcase to grace your home



Pine bookcase

This pine bookcase was designed to fit into an alcove. It's simple to make and shouldn't cause too many problems. If there is one difficult area at all, this is in the preparation and jointing up of the sides. These are quite long

and will take time with a jack or fore plane to guarantee that they're flat and straight.

The bookcase is made of selected redwood (pine) and is shown in the white (ie sanded but not finished). When the photograph was taken, it was-

n't glued together either - holding itself together by its joints only! When the piece was completed, it was stained dark brown and then sealed and wax polished to achieve a deep colour and simple natural sheen.



The sides will need sawing accurately before planing the edge joints



ABOVE & SECOND FROM BOTTOM - The trench and the tongue of the housing joint are cut using an electric router pushed against a wooden fence made from scrap wood

Making the carcass

The first stage of cabinet making is to edge joint all of the wide planking that is needed. This includes the sides, shelves, base and the solid top. It is unusual to be able to buy true pine in widths wider than 225mm (9") although sometimes 275mm (11") boards are available. If you do locate some wider planking, take extreme care as it will have a tendency of cracking along its centre, as well as having a strong inclination to warp. This is why here, two pieces are joined together.

To help with jointing, select the wood and plane it straight. Check that the edges to be jointed are not damaged and do not have a knot hole present or any other defect that will make a poor joint. Mark the best faces with pencil and identify which boards are to be put together. It is best to arrange their rings (by looking at the end of each plank) alternately for extra stability.

After jointing (simple butt

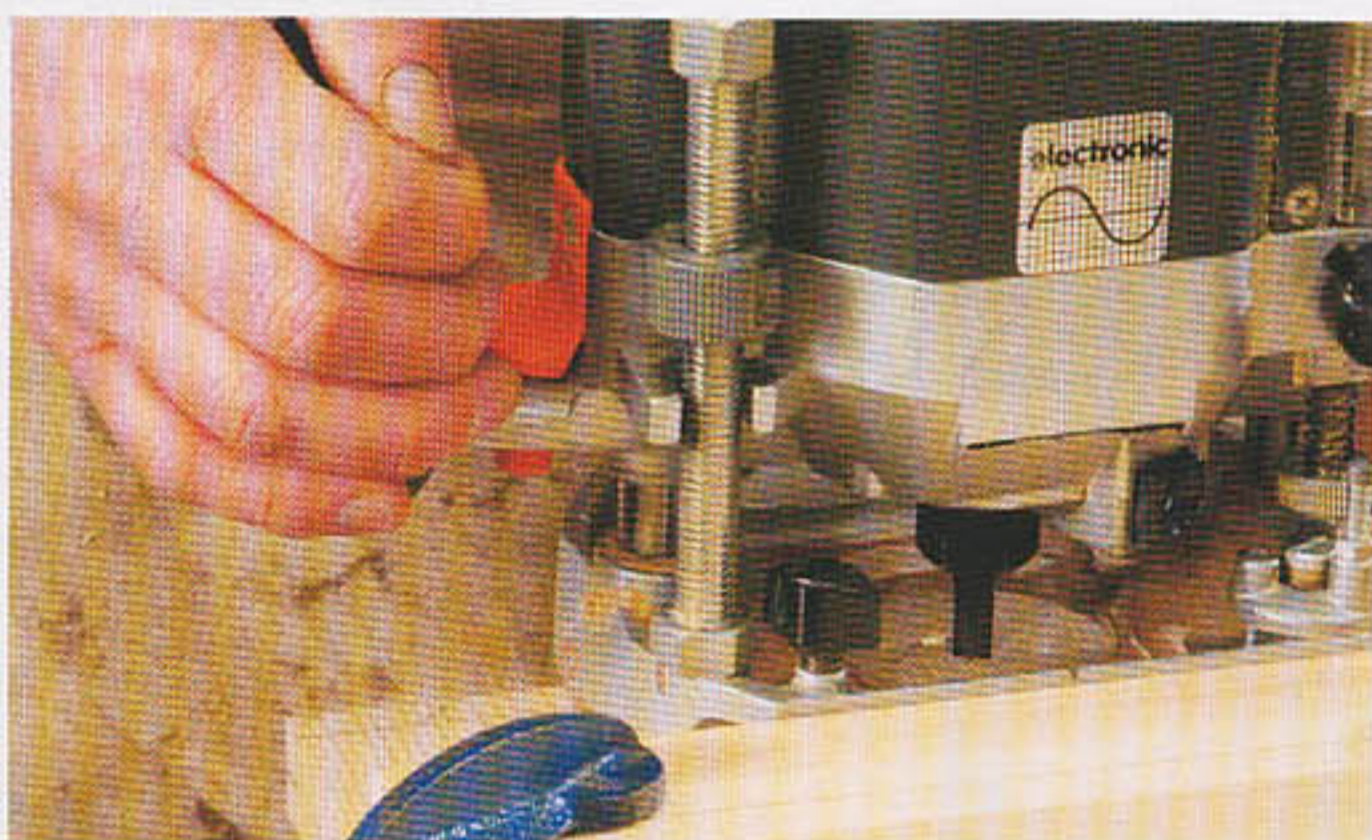
joints will suffice if your planing isn't good enough), you can use a smoothing plane to remove the slight ridge created where the boards have been glued together. Be careful not to make one shelf or side significantly thinner than the rest during the planing of these wide boards.

Once prepared, each 'plank' can be trimmed to length and cut and planed to width ready for jointing. On any large piece of furniture that has a plinth, you can either make the plinth first, measuring and fitting the carcass to it or vice versa. In rule of thumb I use is that if the dimensions of the carcass are critical, such as on a TV and video cabinet, make the carcass first and take measurements from it to guarantee the rest of the bookcase will fit it perfectly. Make sure you allow for the plinth to stand proud of the bookcase by the correct amount on its front and sides.

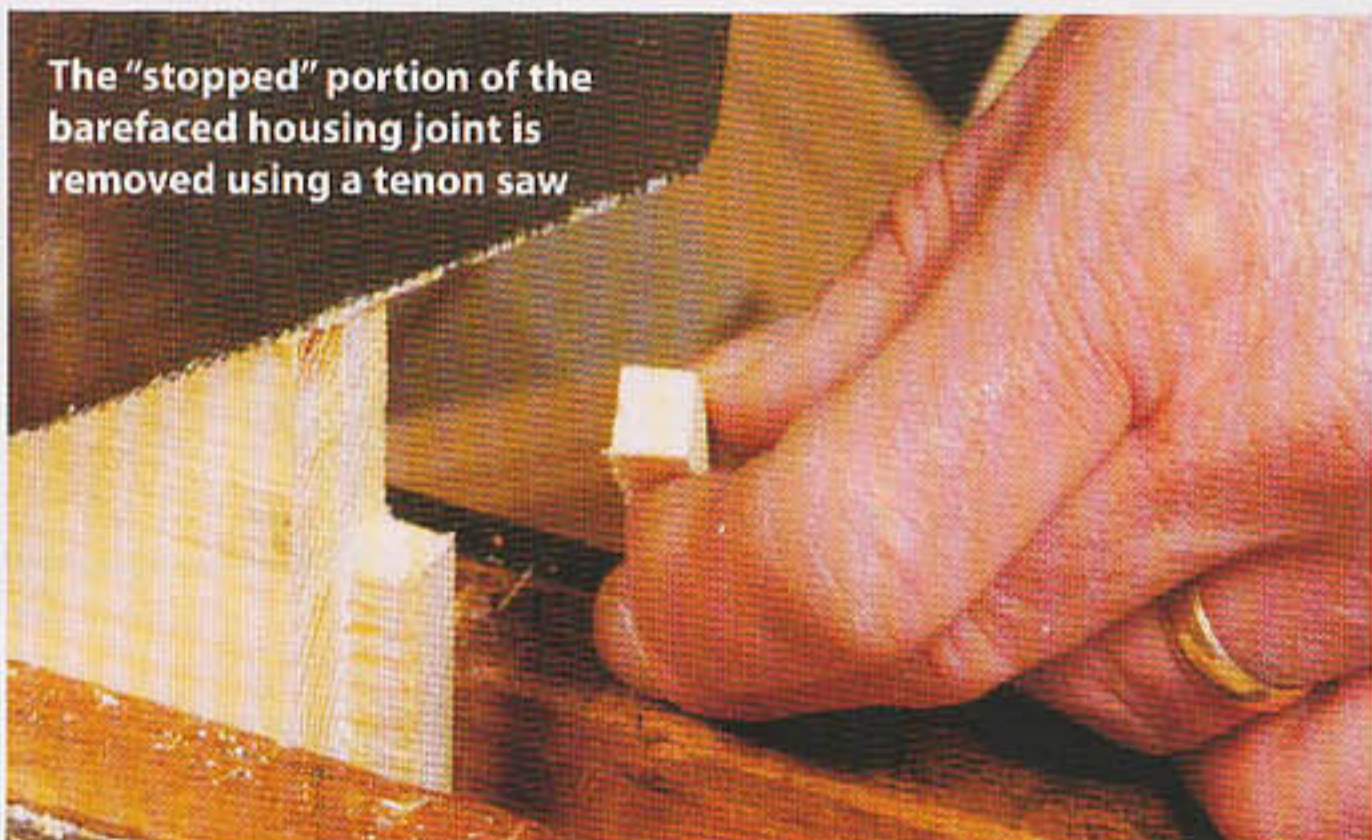
The plinth is easy to make, consisting of four lengths of



Each side is clamped using sash clamps set up alternating top and bottom to keep the boards flat

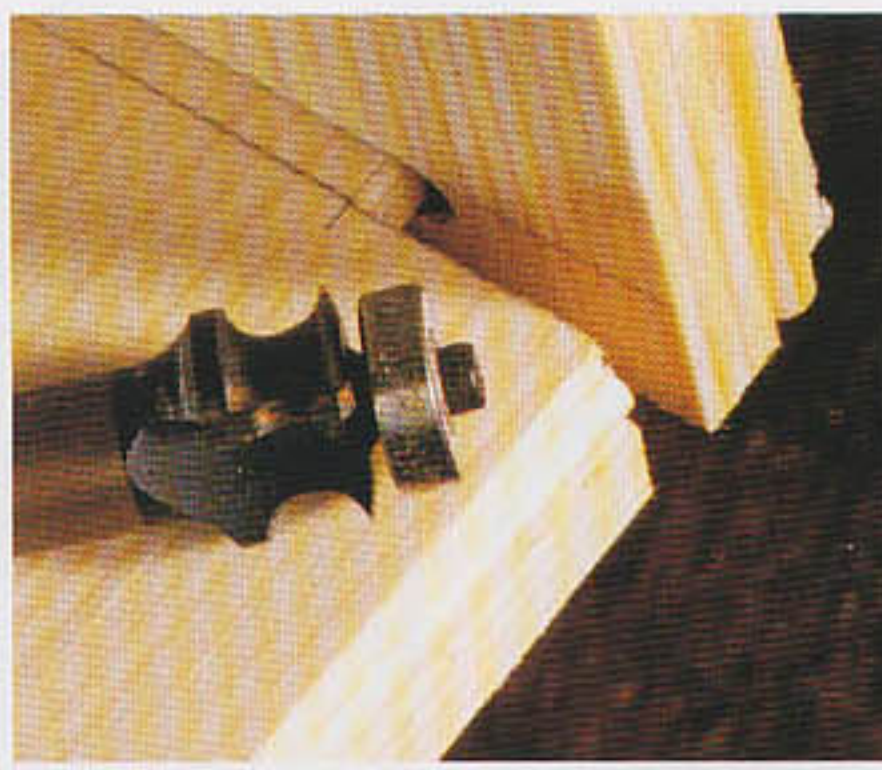


The "stopped" portion of the barefaced housing joint is removed using a tenon saw

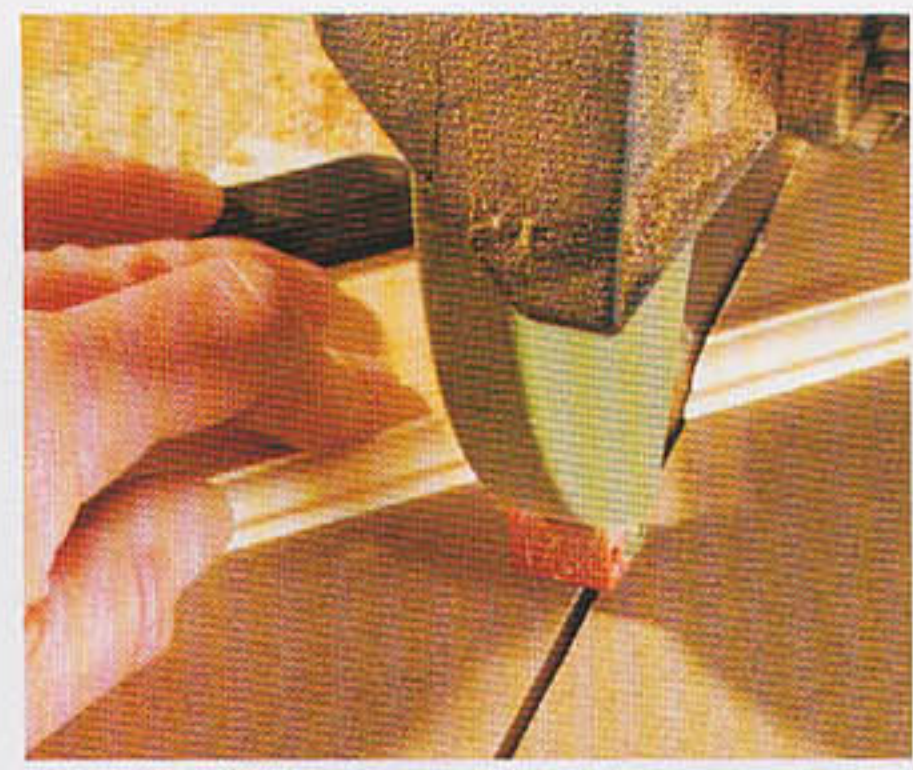




Each shelf has a decorative ovolo mould applied to the top and bottom edges...



... whilst the sides and bottom are decoratively moulded using a quirk mould along one edge



The cornice is built up from three mouldings. The top two are mitred at their corners

wood mitred at the front, but butt jointed at the back. All four joints are strengthened with glue blocks and are held in place using PVA adhesive. If you prefer, screws can also be used to hold them in position.

The top edge of the plinth has a double ovolo moulding running along both sides and the front edge only. When making the carcass, as this moulding is not put onto the plinth at the back, allow it to sit a little further back than the amount you have allowed for the sides and the front.

The double ovolo is easy to put onto the plinth and is best achieved by using an electric router fitted with a bearing bit. The bearing runs along the face of the plinth creating a perfectly straight and accurate moulding.

On the front of the plinth the 'cut out' was created by drawing one half of the pattern onto thin card first, next using this as a template. Turn the template over to create a mirror image for the other half of the pattern.



Detail of back showing the housing joint and rebate which holds the bead and butt boarding

Once the plinth has been made up, measurements can be taken and the bookcase carcass can be started.

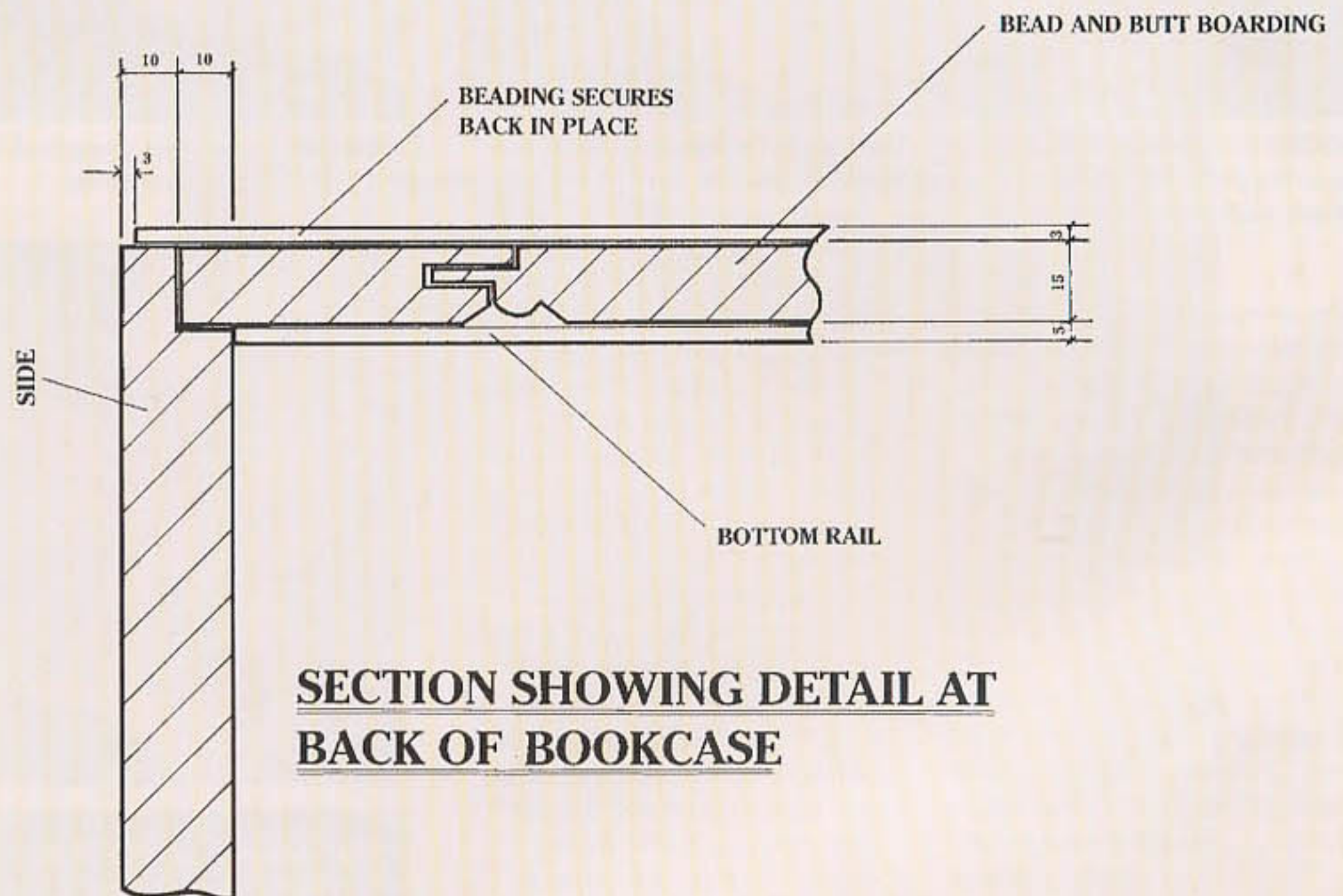
The carcass

The joints holding the sides in place are stopped barefaced housing joints. The following notes will help in marking out. Cut and plane the shelves to length allowing for the depth of the joint, but use a marking

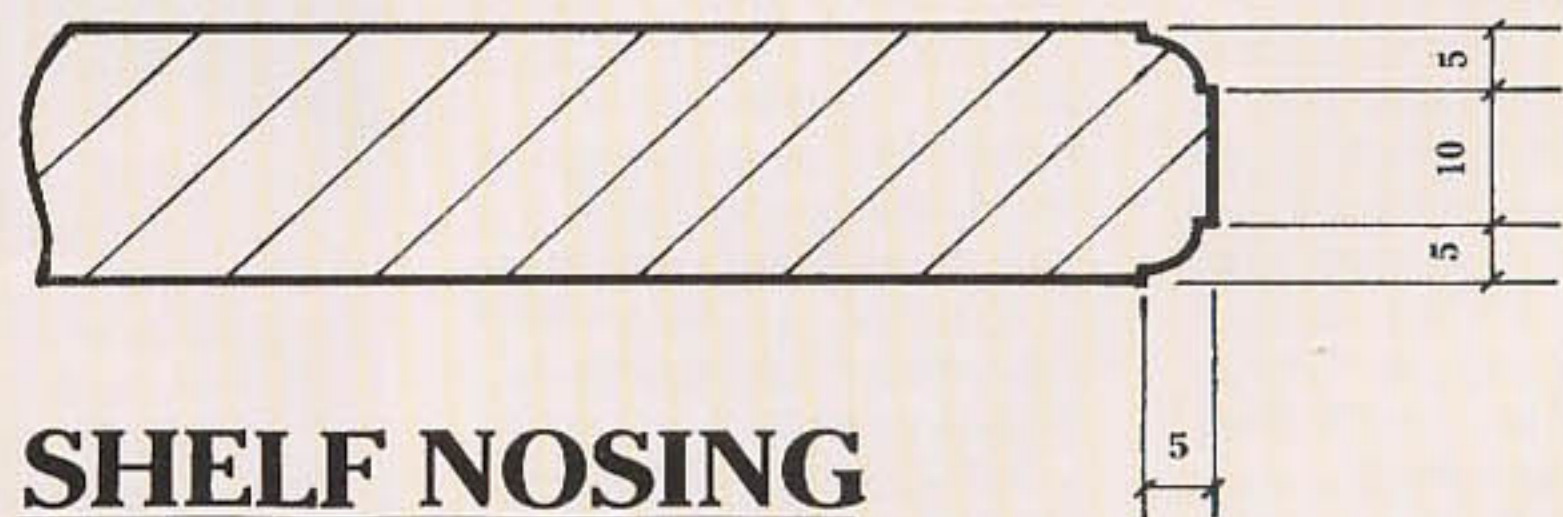
gauge to determine the width. This should be the same as the cutter used to cut the trench if you use an electric router. The bookcase sides should be marked out as a pair, back to back so that you don't make two left hand sides, or two right ones. On the sides, mark on the top position of each shelf with a sharp pencil, not forgetting to also mark the distance and position of the

stopped part of the joint.

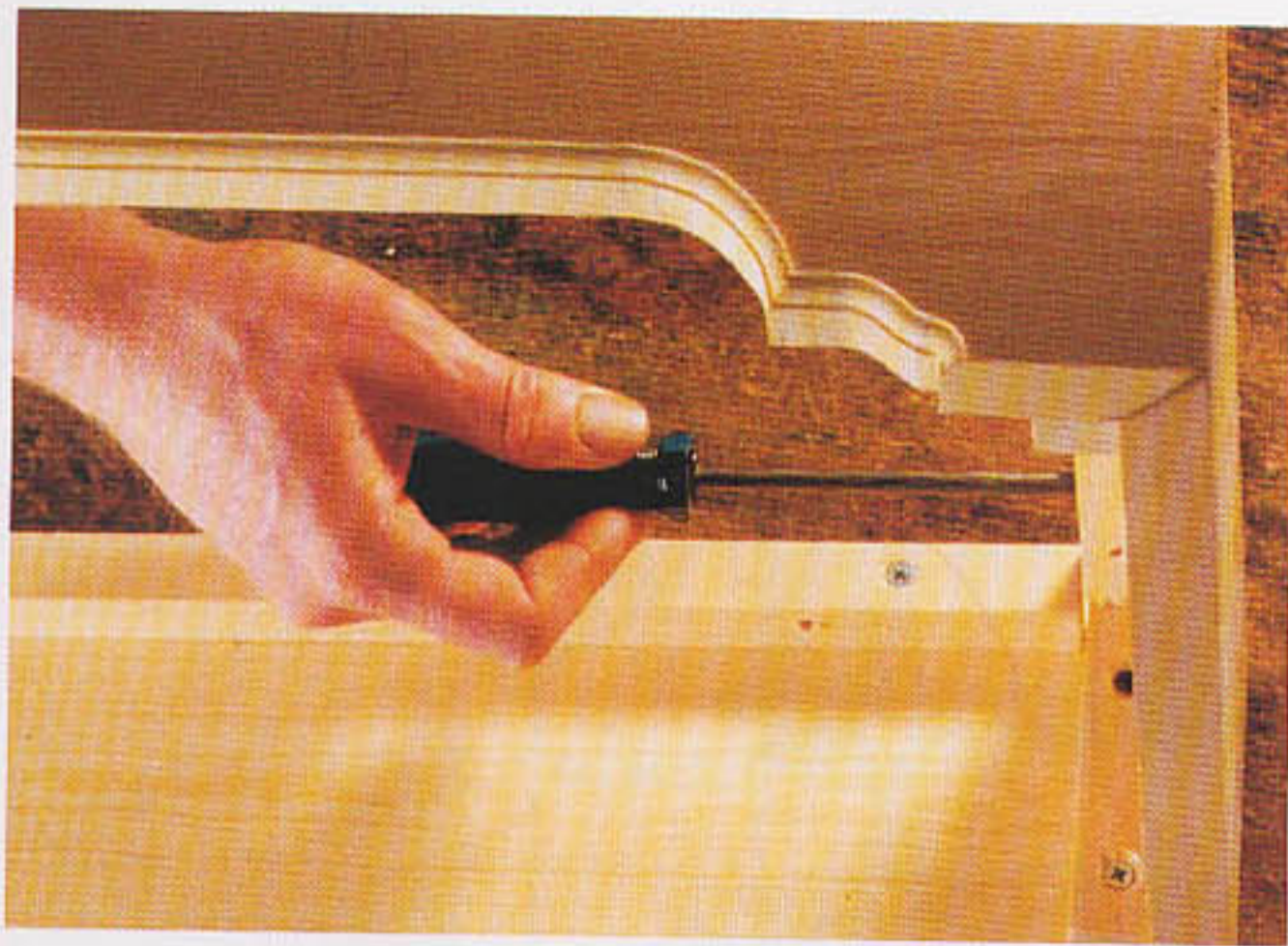
If you use an electric router to cut the trench, there is no need to mark on the position of the bottom of the joint. If you intend sawing the joint in the traditional way, however, with a tenon saw, cleaning up with a router plane later, both sides of the housing must be accurately marked out with a knife. This will stop the wood splashing out as you saw. You



SECTION SHOWING DETAIL AT BACK OF BOOKCASE



SHELF NOSING



Secure the plinth using glue blocks screwed into place and strengthened with PVA adhesive. The battens which hold the carcass are screwed and glued onto the top inside edges



It's a good idea to use a spacer to support the back whilst screwing on the plinth



The bead and butt boarding is pinned into the back of the shelves

can use the shelves themselves to determine the width of the housing. Once the housings have been cut you will need to carefully clean them up to achieve a perfect fit.

The next stage is to work a rebate on the back inside edge of the bookcase sides to hold the bead and butt boarding for the back.

Measure the boarding so that fitting starts from the centre line of the bookcase. This may mean you use an extra piece of boarding, each end piece being sliced along its length. This will look much better on the finished bookcase as the back will look 'centred'. The top and bottom rails are themselves rebated to hold the back in place.

Whilst marking on the shoulder lines for the back rails, it is a good idea to mark out the two stopped mortice and tenon joints on the front rail too. After cutting the joints for all three rails, it is possible to assemble the bookcase to give a better idea of its size and proportions.

As this piece of furniture is made of solid wood, it is too good an opportunity to miss not to decorate the edges of the shelves and sides, creating a much 'softer' and more professional look to the piece.

In this case the top front rail was cut out and moulded to match the plinth and the shelves were ovolo moulded on their top and bottom front edges.

Whilst creating these mouldings you can take the opportunity to trim a small amount from the back of the

shelves butt right up to the boarding. When the bookcase has been glued together, screw through the back of the boarding into the shelves at suitable centres to hold it firmly in place. Around its edges, small beadings cover the gap between the back and the sides/top and bottom rails.

Again, to create a little more interest, down both outside front edges of the sides and running along the top front edge of the base is a single quirk moulding. This is just visible on the photograph.

The final piece of the cabinet work involves the making

of the top. To save on materials and to eliminate having to create a very complicated cutter, this is built up from several pieces of wood. The main part of the top (ie the part that is fastened to the carcass) is made from solid wood moulded on its ends and front edge. The rest of the top coving is made of narrow moulded strips, glued and screwed in place. These are mitred at their corners.

As with the moulding on the solid part of the top, they run only along the front edge and ends of the bookcase top.

The best method of fasten-

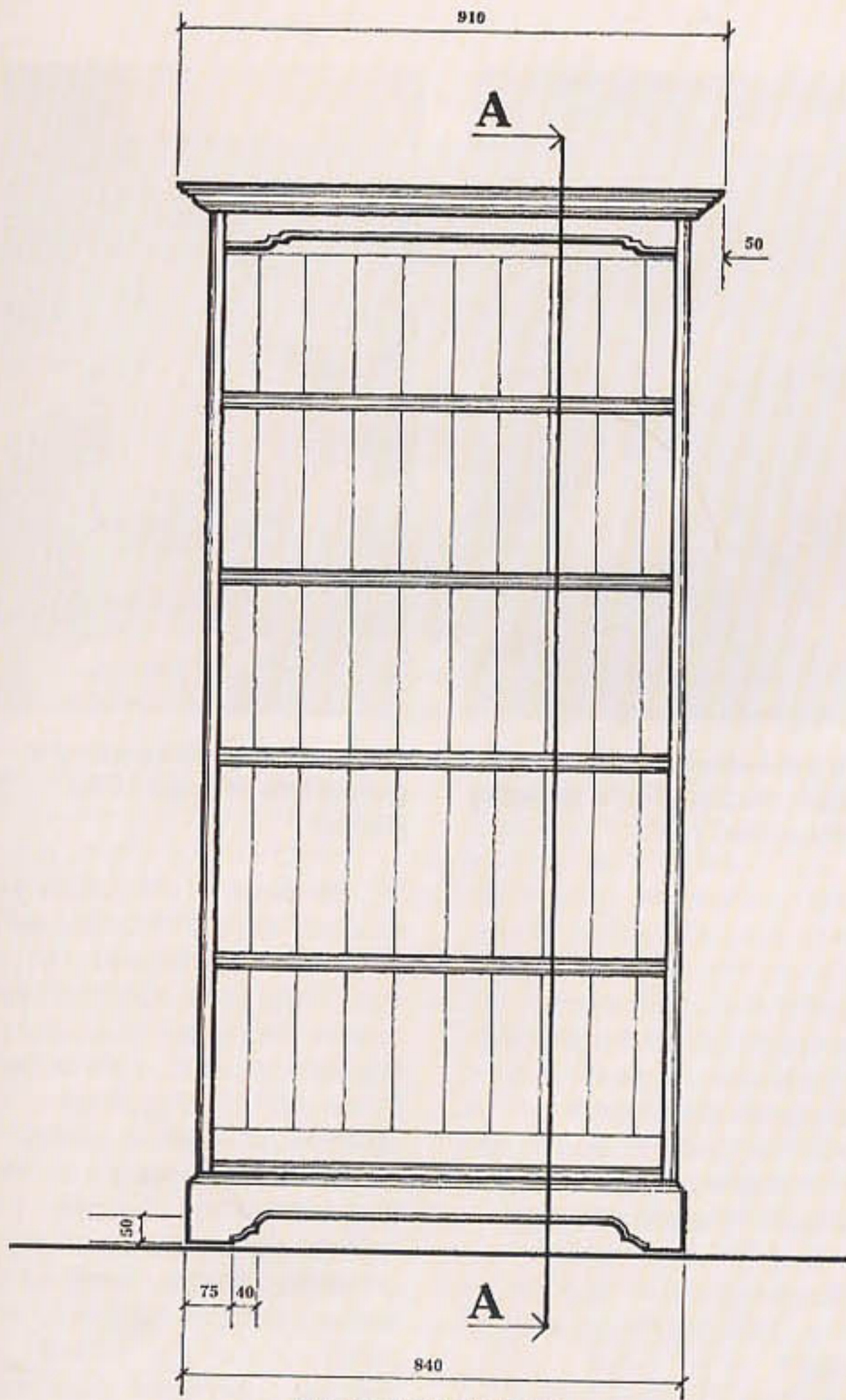
ing the plinth to the carcass is to screw through supporting blocks from underneath. The top, on the other hand, can be screwed from above into the top back rail, being held at the front with stretcher plates underneath. These should be tucked well out of sight so that they do not look obtrusive.

Next comes the sanding and assembling, followed by staining and polishing. This piece was dark stained and then wax polished. If you make one though, you may prefer to leave it natural or even have an antique pine look. The choice is entirely yours!

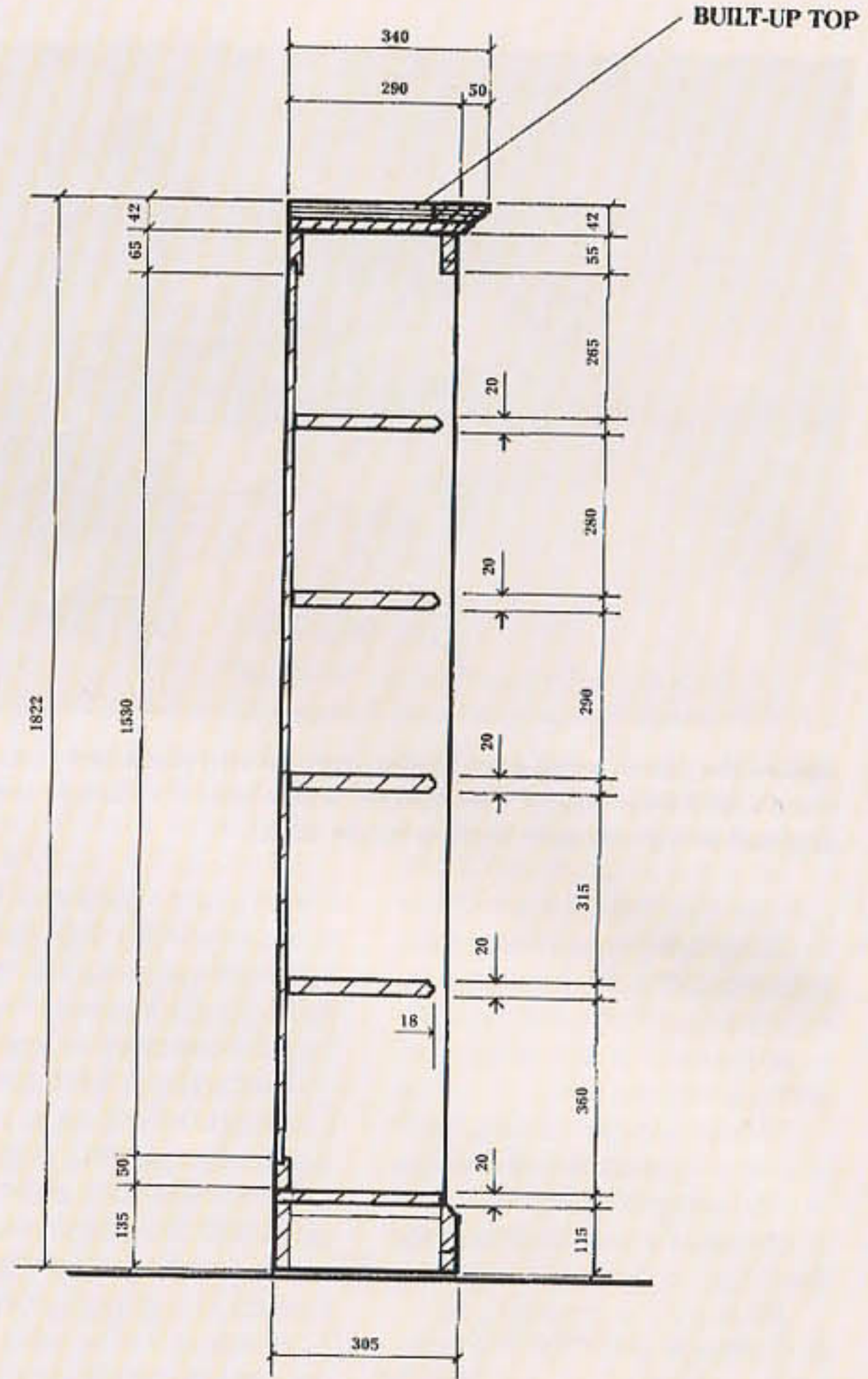
Cutting list

All dimensions in mm

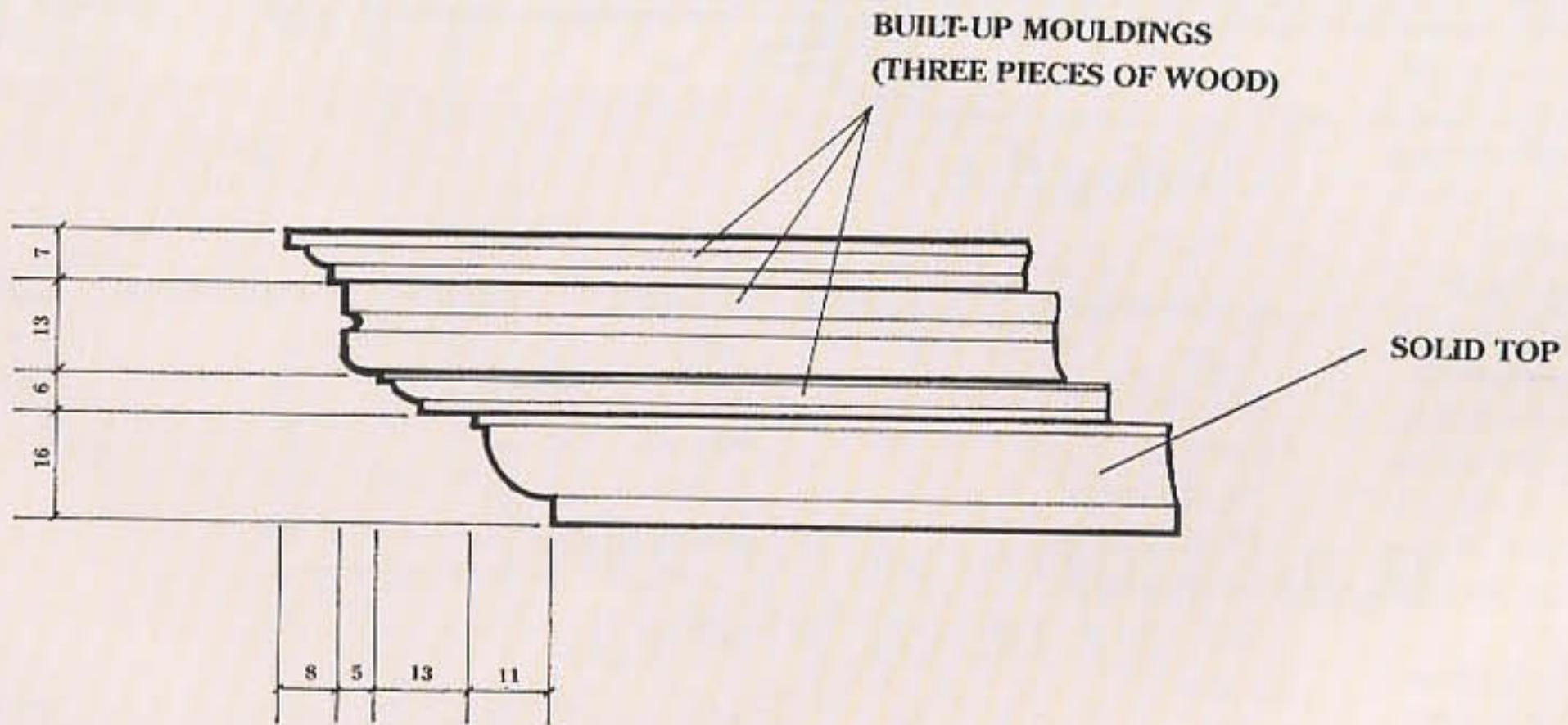
Component	Pieces	Length	Width	Thickness	Comments
Sides	2	1665	290	20	
Shelves	4	790	257	20	Including housings
Bottom	1	790	290	20	" "
Plinth (sides)	2	305	115	20	
Plinth (front)	2	840	115	20	
Plinth blocks			out of scrap		
Top	1	858	303	20	
Coving					
Top	2	340	60	7	Allow sufficient to cut mitres
Middle	1	910	60	7	
	2	340	60	13	
	1	910	60	6	
Bottom	2	740	60	6	
	1	910	60	6	
Back (bead & butt boarding)	Depends on width of boarding	1550	90	15	
Beadings	2	1570	22	3-4	
Top back rail	1	790	65	20	
Top front rail	1	790	55	20	Including mortise and tenons
Bottom back rail	1	790	50	20	



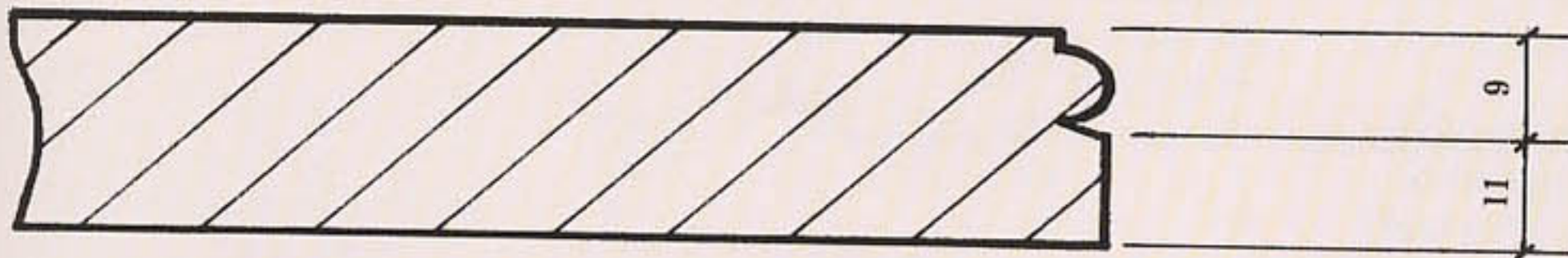
ELEVATION



SECTION A-A SIDE ELEVATION

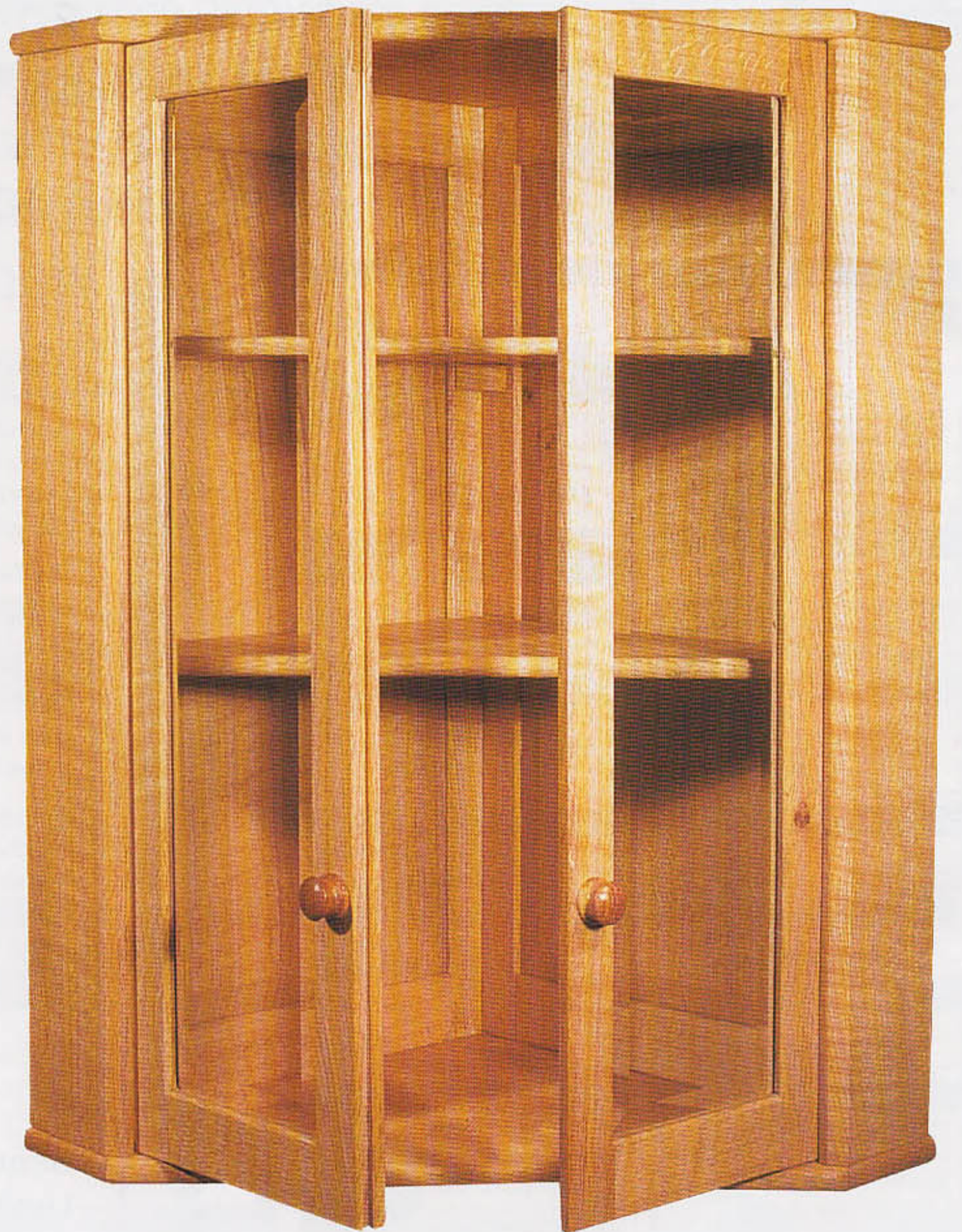


DETAIL SHOWING METHOD OF BUILDING UP COVING ON TOP



DETAIL OF SIDE AND BOTTOM MOULDING

Corner cabinet in English oak



Text & pictures: Tom Carver

Many people are fond of corner cabinets. They may not hold a great deal, being about half the volume of a rectangular cabinet the same height and width, but they make good use of awkward spaces. They also display their contents well and add character to a room.

I have been asked to make quite a few corner cabinets over the years, all different but variations on a theme. The little glazed wall cabinet I will describe in this article, together with its big brother standing on the floor below, were made from an attractive piece of rippled oak that came from a tree

felled in Tatton Park — the same estate that provided the oak to the 'One Tree' project. At the request of the new cabinet owners, I carved the date along with the words 'Tatton Oak' inside the cabinet.

Design factors

The front of the wall-mounted



cupboard had the shape of a golden rectangle with dimensions 700mm high by 432mm wide across the face. This matched the shape of the lower cabinet I had previously made.

The parts that dictate the size and shape of the cupboard are the top and base panels, like triangles with their corners cut off (actually they are irregular pentagons) and the vertical frames down each side.

Everything else has to fit between these pieces. The owners had three sizes of glassware they particularly wanted to fit in the cabinet so the shelf spacing was arranged to take this with some clearance.

The rear of the cabinet, which is visible with the doors open or closed, has solid oak frames and panels. I used dowels for all the joints between the frames, sides, top, and base.

The door frames are the same as the rear frames but narrower. The owners liked the idea of using bevel edged glass to echo the style of the fielded panels in the rear.

I wanted to create a simple, timeless style with this frame and panel furniture, but shiny new hinges around the doors can spoil it.

I don't like new hinges that pretend to be old, so having no visible hinges at all seems a good option.

A few years ago, when trying to disguise a video recorder door as a drawer in a chest — I came up with a simple system of invisible hinging.

I felt pleased with my 'new invention' — until I came upon

a 17th century dresser door using the same method. Oh well — at least I know it should outlast its maker!

Buying timber

It is not always easy to judge exactly how much wood you will need for a project when you are buying rough-sawn timber. This is especially true when it is waney edged — complete with sapwood and bark.

I had agreed with the owners to buy enough timber to make one large corner cabinet, and hopefully there would be enough for a smaller one to match. If not I would have made them something else. In the event, the quantities turned out right and I was able to make this little glazed cabinet.

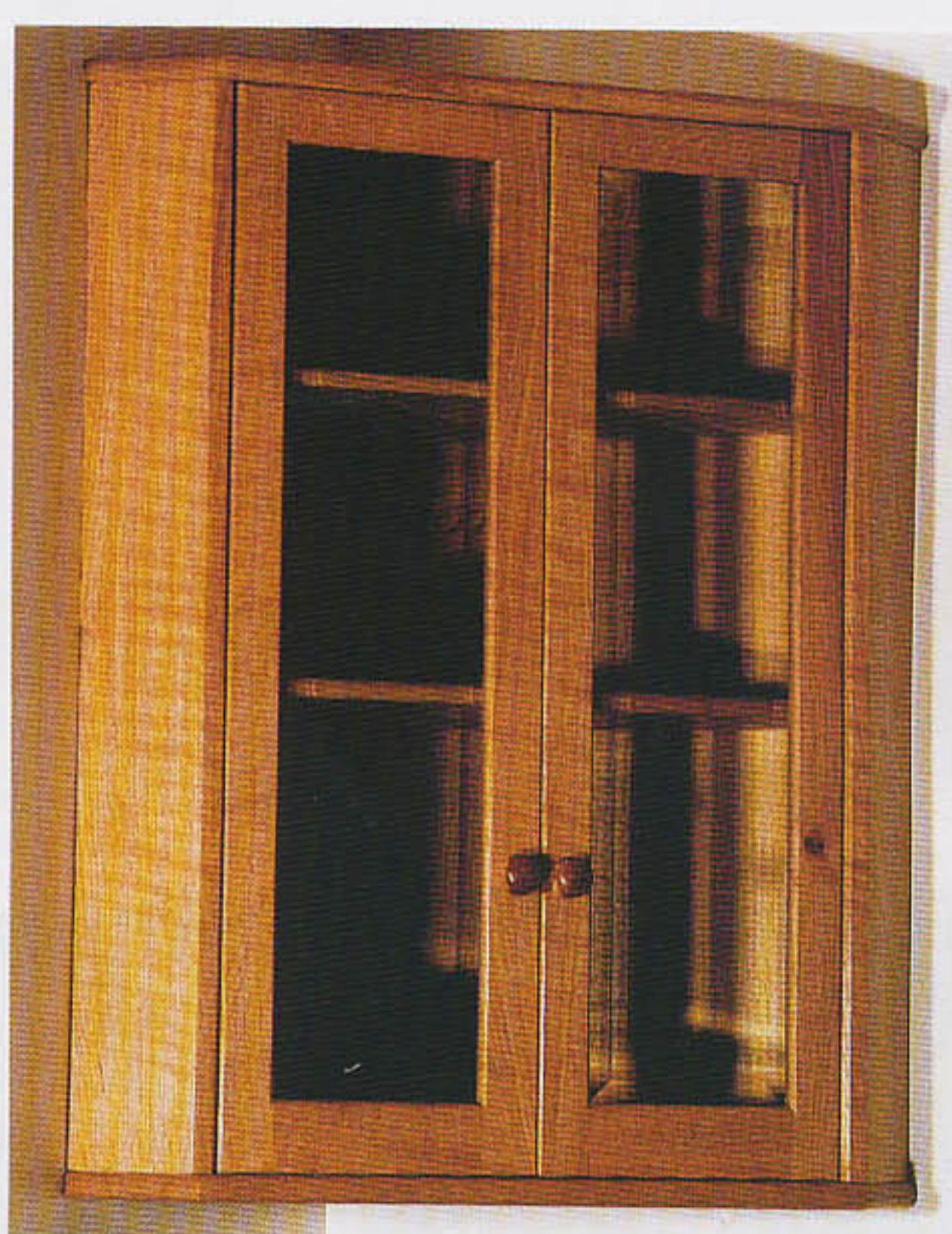
Quarter sawn oak is very stable with good figuring. It certainly is good material to work with, but sometimes when you attack it with a smoothing plane, shreds of medullary rays can peel off leaving a torn surface.

Apart from keeping a razor-keen blade and the plane-mouth set narrow, it is important to keep friction low so you can feel whether the blade is sizzling nicely through the fibres or stuttering as it tears them out.

Frequent wipes across the sole with a chunk of beeswax or the side of a candle give an improved feeling. It also saves you from wasting a lot of hard work heating the plane by friction.

Cutting time

Having decided on the dimen-



sions and bought your timber, marking out the components for cutting can be a worrying stage, especially if it is a particularly fine wood and you haven't any extra to spare.

I cut the pentagons for the top, bottom and the two loose shelves from a single quarter sawn plank of inch thick material.

To reduce waste I cut the pieces in alternate directions. The top and bottom pieces were arranged with heartwood to the front because it is harder and more durable.

The internal shelf-fronts were cut so their front edges came just short of the sapwood. It is best not to use the actual sapwood itself because it does not contain much tannin, the natural preservative that gives oak furniture its incredible lifespan.

After cutting and planing, I made barrel shaped edges on the top and bottom front and side edges using a traditional moulding plane. I keep a few basic shaped moulding planes in good condition because I enjoy the smooth finish they leave on fine wood.

In the past, cabinetmakers

often had dozens of them — they were the standard way of shaping edges before routers were available.

A separate plane was needed for each shape — there are thousands of these planes to be found in junk shops, often changing hands for about £5 each.

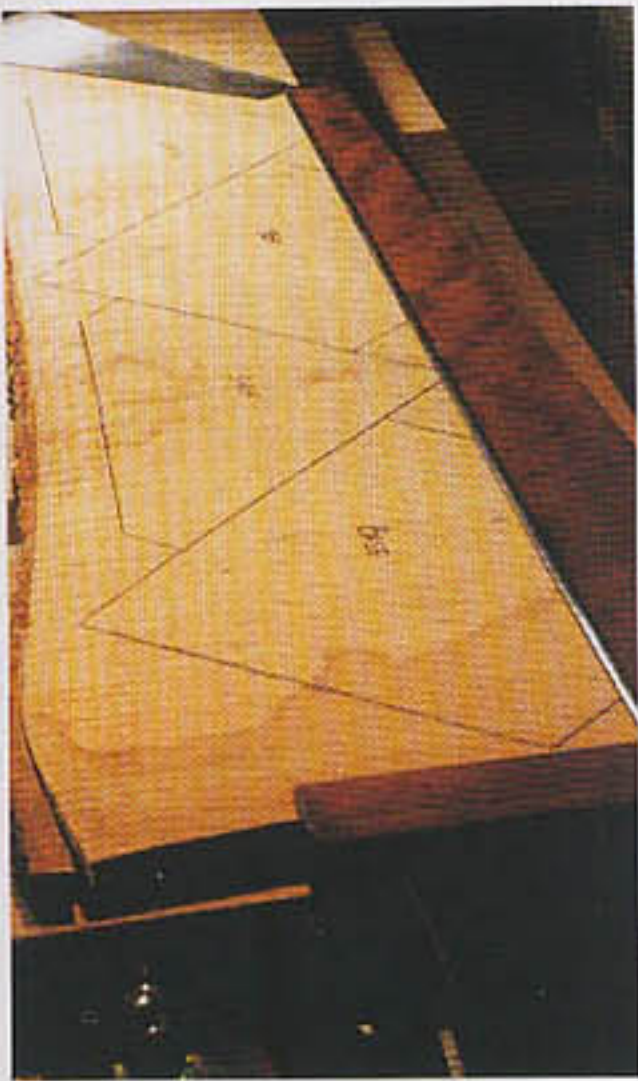
The internal shelves were thinned down by cutting a gradual bevel on the underside of the front edge to stop them looking chunky but to make sure they retain their strength. To mark out the lines of bevels I use a pencil in my gauge to avoid scoring the wood, and then I pared up to the lines with a tilted smoothing plane.

It's best not to use the sapwood itself because it doesn't contain much tannin

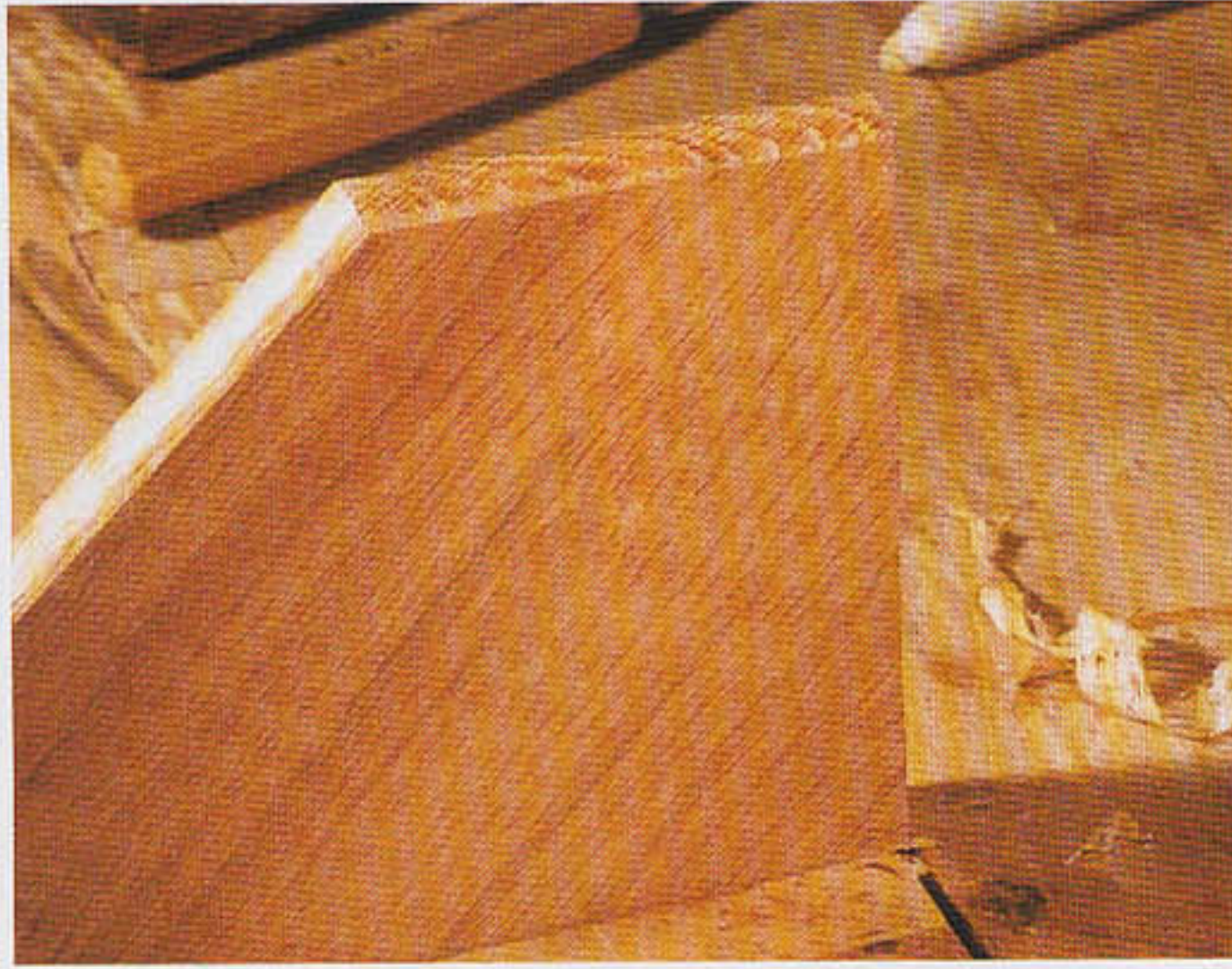
Corners

Surprisingly, room corners vary quite a bit. Something that did not occur to me, when I made my first corner cupboard many years ago, I found that the back edges needed to meet at an angle greater than a right angle.

This is because walls nearly always meet in corners at more than 90°. You may find the walls



Preparation: Top, base and two shelves come from one board



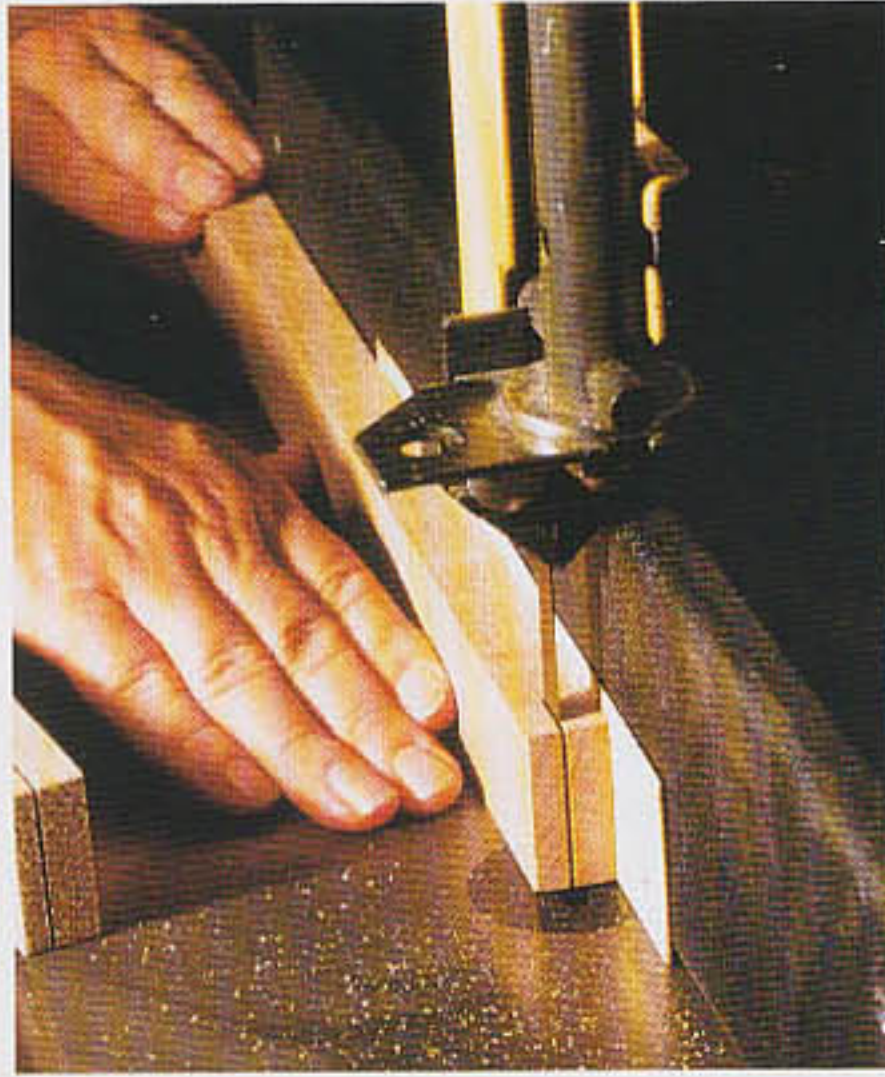
Preparation: Top and base are rounded with a moulding plane



Preparation: Shelves are chamfered with a smoothing plane



Bridle joints: Run the timber along the fence while cutting the outside of the tongue



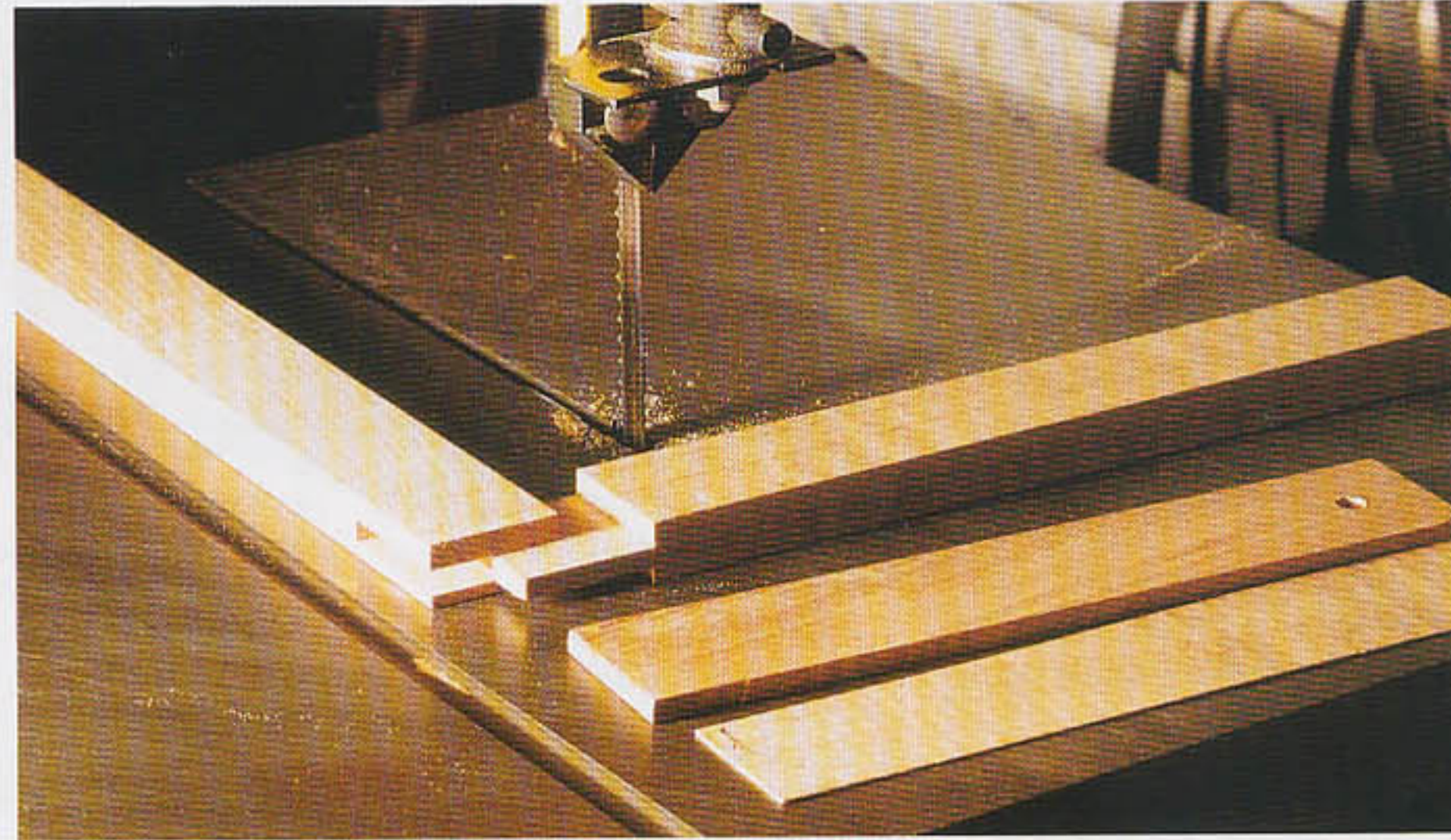
Bridle joints: Cut the outside of the slot with a shim of saw blade width



Bridle joints: Cut the inside of the slot with a shim of chisel width



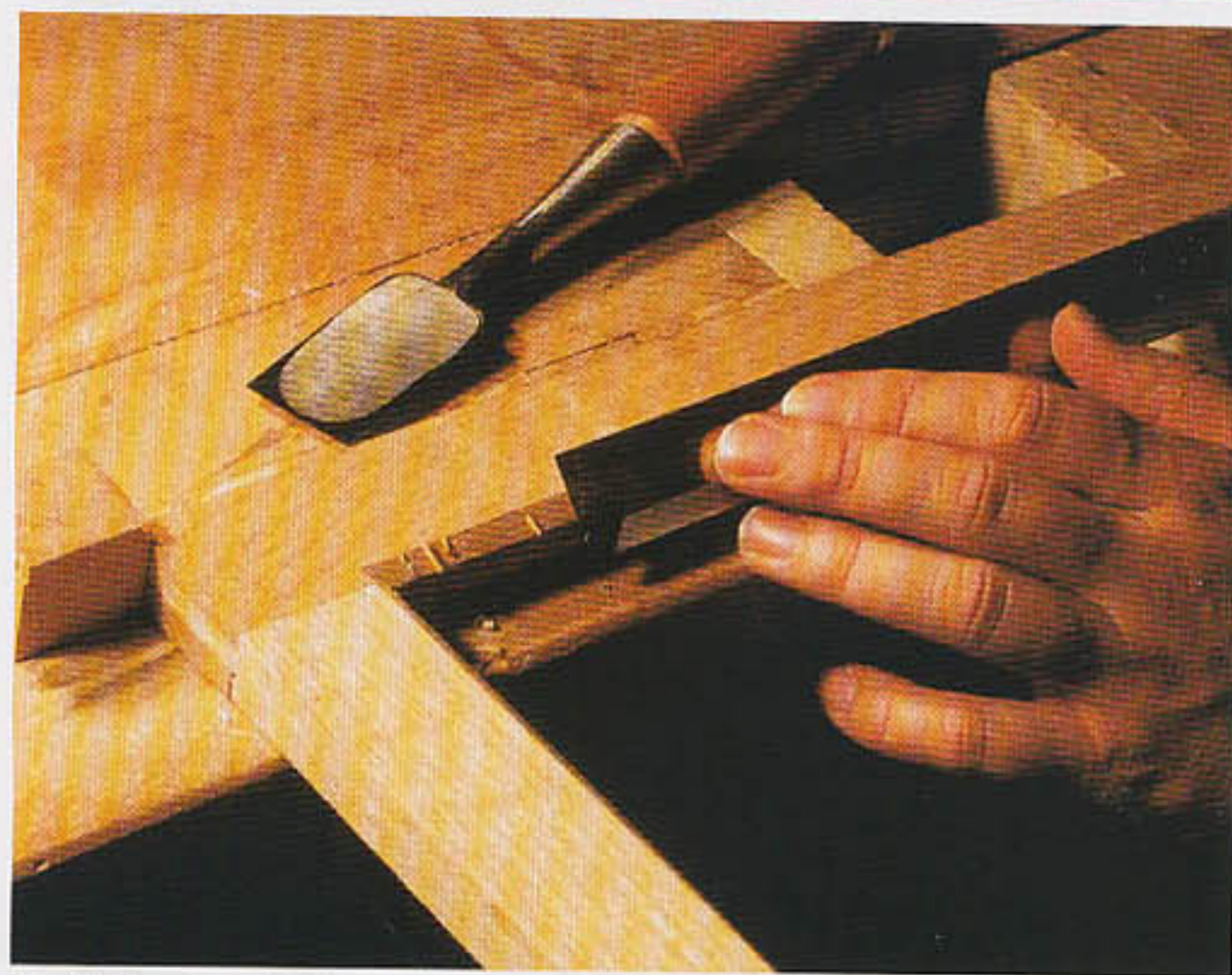
Bridle joints: Use both shims to cut the inside of the tongue



Bridle joints: The finished bridle joint — a foolproof fit every time



Finishing: Shaving inside chamfers



Finishing: Cranked chisel chamfers into the corner

actually curve in towards the corner — it must be something to do with the way plasterers work.

There are several ways to tackle this. One is to be generous with the angle so the cupboard will fit most corners. This has the advantage that the cupboard can be confidently moved to another room or house but the disadvantage that there is likely to be a gap at the rear.

This would need to be filled or covered afterwards with a matching strip of wood, or in the traditional way with a large cornice so the end panels are barely visible.

Alternatively, you can go for the made-to-measure approach.

The best way to do this is to use a large roofing square and a ruler to measure the divergence of the corner at several points, then draw out the shape on paper or card and offer it into the corner to check it fits.

The rear frames themselves are positioned a little way forward of the back edge so they can meet at a right angle without risk of fouling the wall.

Cutting frame joints

For all 16 corners on the rear frames and doorframes, I cut bridle joints. These are simple open-sided mortice slots with full width tenons made by an accurate and foolproof bandsaw technique.

To make the joint you need

a bandsaw with a decent side fence and a pair of shims to place between the fence and the wood. These shims will set the accurate positions of all the ripping cuts that form the mortice and tenon walls cheeks.

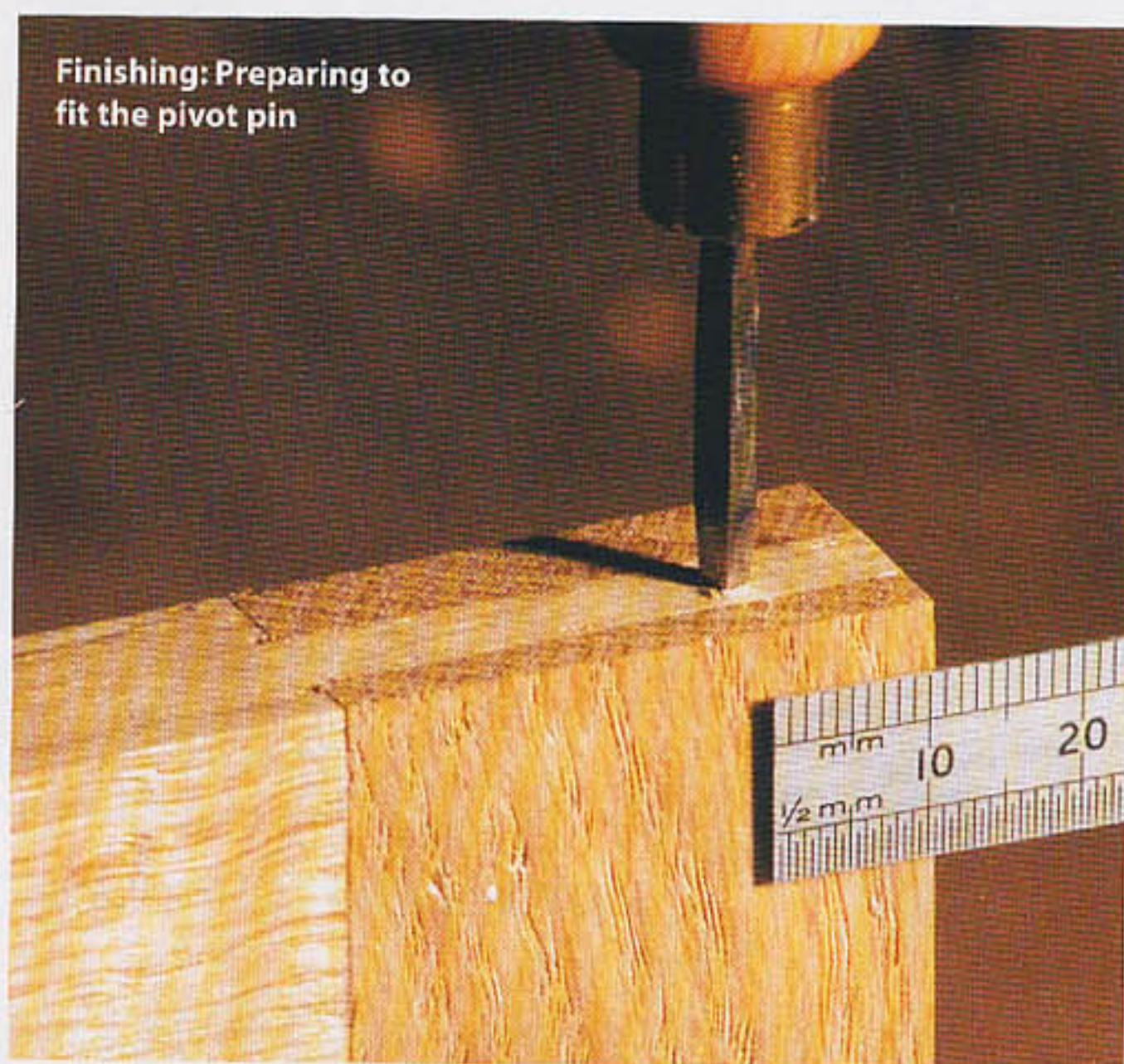
One shim is the thickness of the bandsaw kerf, the other is the width of the mortice. To find the blade's kerf-width, I carefully cut a short, straight slot, then tested it with mechanic's feeler-gauges (the blade I used was 1.5mm).

I set the mortice width to 9mm to match my most suitable chisel. I cut my shims out of ash but you could use any stable, resilient material. After cutting the shims on the bandsaw check the thickness at several places and adjust as necessary with a fine set block plane.

The bandsaw fence must be locked in a position that will cut the outer cheek of the tenons. Position the tenon centrally as it will then be possible to fit the hinge pivot pin in its centre.

Decide which side of each frame part will be the front face and always cut with these pressed against the fence. Cut the mortice inner shoulder using the blade-width shim and the outer shoulder using the tenon-width shim. Cut the tenon inner shoulder without a shim. The outer shoulder is cut using both shims together.

Use the sliding fence to bandsaw off the tenon cheeks. Remove the mortice centre with a drill and chisel. Test that the two parts fit snugly together with hand-tight friction with-



Finishing: Preparing to fit the pivot pin



Finishing: The pivot pin and hinge plate

out any tendency to force the mortice slot apart. When you glue them, use 'G' cramps across the outside of the mortice to improve the pressure.

Fitting panels

The inside edges of the rear frames were slotted to accept the fielded rear panels which were trapped in place when the frame was glued up. This work is easiest done on a router table, alternatively a bearing-guided hand-held router could be used.

The glass in the door panels was fitted to a rebate, cut inside the back of the frame. It was held in place with fine oak batons fixed with small brass screws.

The doors were made with a half-inch overlap in width so they can be rebated down the meeting edges to form a dust seal.

This involves making one of the stiles half an inch wider than the other. When it is rebated at the front and the doors are closed, the extra width is tucked into the rebate behind the second door and you see two stile fronts of the same width.

The inside bevels on the door rails can easily be planed before they are glued up. I cut the bevels inside the stiles after gluing, using a spokeshave and a block plane, and then finishing up to the corners with a cranked chisel. A router with a 45° bush guider cutter could do the job after the frame joints are cut and fitted.

The rear frames would need to be dry-fitted and clamped together so the panel could be fitted in its slot later. Using a router, you would need to finish the inside corners with a chisel to avoid the rounded effects they leave.

Do not cut the outside door bevels until you come to hang the doors.

Hinging the doors

The door hinge-pins are simply dome-headed, brass screws pivoted through small brass plates recessed into the cabinet. Brass washers maintain the clearance.

The positions of these are critical to the movement and fit of the doors. I positioned the pivot 10mm from the frame

edge and 8mm from the outer face to give a 2mm clearance with the door swung open.

The brass plate was cut from 3mm thick stock, carefully filed, and drilled. The recesses in the cabinet top and bottom were cut with carving gouges to accept the hinge plates.

The chamfers on the outside of the doors need to be planed deep enough to clear the frame as the door swings, with a small extra margin.

Finishing touches

The bevel edged glass had to be made to order — there was the normal cost of the glass plus a charge per inch for bev-

elling. I ordered 6mm glass, which is heavier than you would normally use in a cupboard but allows for the depth of the bevel. For safety, have the glass toughened.

The doorknobs were turned from brown oak on a small lathe using a basic gouge and skew chisel.

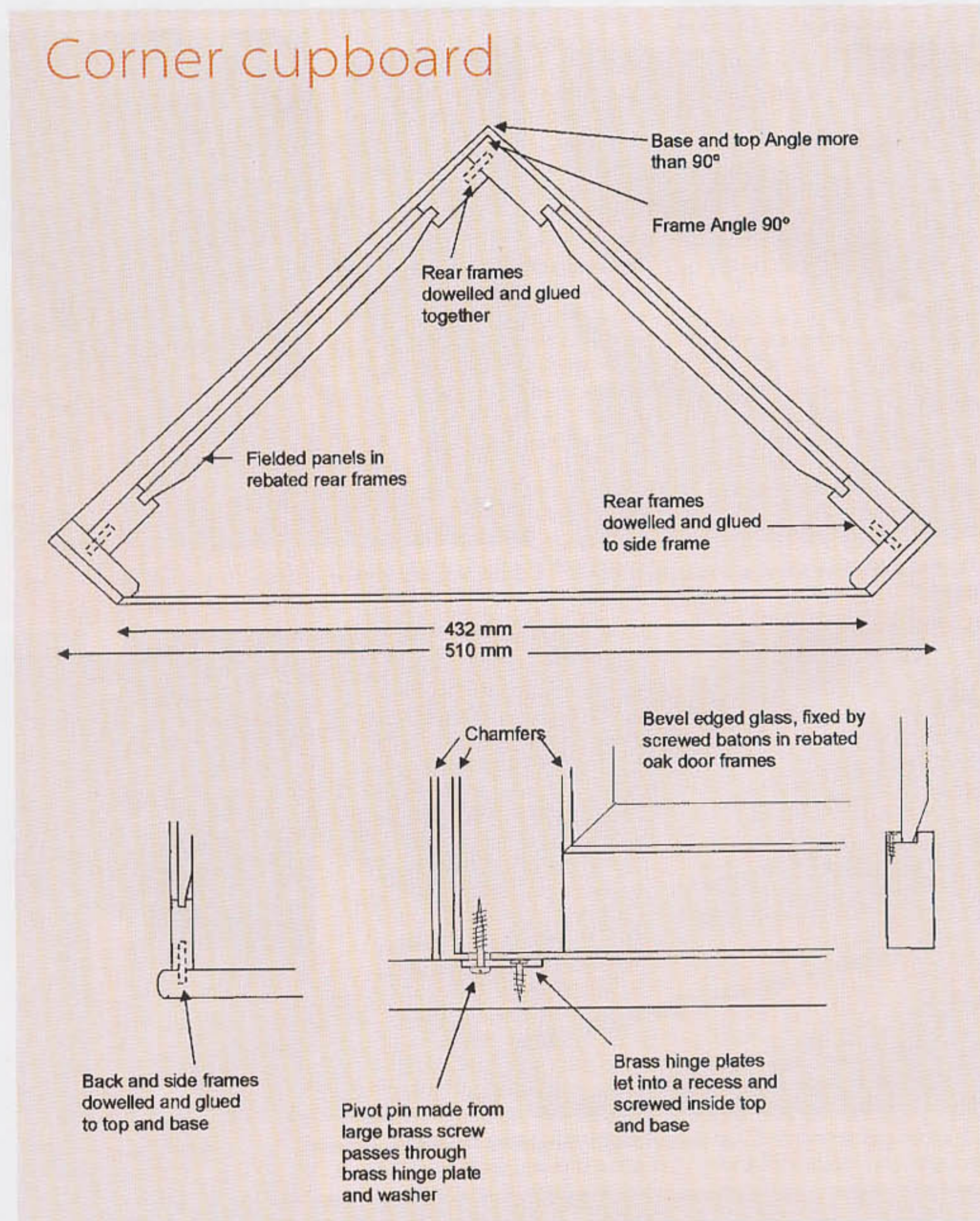
Because I was lucky with the quality of the oak I bought, and I cut all the outside surfaces and edges with sharp hand plane blades, this brought them to a crisp finish. There was very little surface preparation needed — just a light application of fine silicon carbide sandpaper.

If you do need to apply

heavier sanding to obtain the required smoothness, make sure to use a flat block applied evenly across the wood so it cannot make dips or round over the edges, making them look soggy.

The finish I applied was a beeswax paste.

This keeps the oak looking fresh, but takes a lot of coats and needs replenishing quite often. A more durable traditional finish would be thinned down Danish oil soaked into the wood and wiped off again before it sets as a skin on the surface. If this is repeated several times, it gives oak a rich warm colour.



Tripod mug tree

Text and pictures: Chris Child



The mug trees you can buy in high street shops are usually very simple affairs.

Here is a tree for nine medium sized mugs that has a bit more weight and style and is sure

to catch the eye in anyone's kitchen.

It is made in figured beech using traditional turned shapes, but you can be adventurous as you like with your own design.

To work out positions of

the mug supports I suspended a mug by its handle, and marked them off on the side of a suitable length of timber.

I then sketched the design, roughly drawing the four pear drop shapes which made up the central section of the



Woodturning project sponsored by HENRY TAYLOR TOOLS



step, and the finial at the top which seconded as a carrying handle.

The tripod legs provide the tree with a stable base, even on an uneven tiled surface.

They also prevent it from coming into contact with any possibly wet or damp work top.

Fit your block of wood securely on the lathe between centres, set the lathe to about 1000rpm and turn the block down to a taper that corresponds to the overall dimensions of the stem. Divide the circumference into six.

You can do this with a pair of dividers, but the simplest way is to cut a strip of card, which is a convenient length for dividing, into six, and rap this round at a point along the taper where the tape meets end to tail.

Mark clearly where the holes for the branches and legs need to be drilled, and remember to stage the positions along the length of the column.

Drilling

You will need a simple drilling jig to drill the holes. I use a block of wood held in the toolrest support through which the drill is fed.

First, one hole is drilled and then the workpiece is rotated until the point of the drill lines up with the next hole position.

The holes for the tripod legs are drilled using the same jig but with a larger drill size.

With the functional side of the project out of the way you can settle down to the real turning.

I used just one tool, the 1/2" spindle gouge which was ground with a long "ladies finger nail" point to turn this entire project.

Before embarking on the main shapes of the column, the areas around the holes need to be flattened so that the mug supports can be squarely seated.

Use your freshly sharpened

gouge on its side and line the bevel with the intended cut, and slice across the mouth of the holes.

By placing the drill into the holes, you can check that the angle of the cut is square with the line of the hole.

Then use the gouge to form the hollow radius below the peg hole.

I used an improvised vertical tool rest, made out of a masonry nail which is fixed into the top of the tool rest.

By resting the back of the gouge against this support, I can avoid the tendency of the tool to slip backwards at the beginning of the cut.

Once the cut has been established, a freshly sharpened gouge will almost feed itself, slicing a path cleanly through the end fibres of the wood, with its bevel gliding over the surface that it has already cut.

Once the concave radius of the pear shape has been formed the task of making the bulbous base shape can begin.

You can use the gouge to form round shapes as well and with its sharp point it will get into the right angle corners, where the round intersects the step or fillet.

Sand the mug tree smooth and wipe it over with a water resistant finish such as Chestnut Products Food Safe Finish and then part it off, holding the gouge in one hand and cradling the work in the other.

Legs

First turn the spindle to a cylinder.

Part down at each end of the work and then cut the dowel, using the parting tool. I use a vernier gauge set to the width of the drill to check the diameter of the dowel.

Getting the diameter right contributes greatly to a trouble free assembly of the tree later on.

Leave a section at the foot of the leg and form the rest into taper using the roughing down gouge.

Use the spindle gouge to

shape the drum stick foot and part off the leg after sanding and polishing.

To make the nine mug supports follow the same methods as for the tripod legs by reducing the blocks to cylinders and then forming dowels at the ends.

I use the parting tool to form the bead at the end of the peg. When it comes to making the copies, a pair of odd leg calipers is a quick and accurate way of transferring the lateral positions.

Use a strong epoxy glue to secure the legs and pegs into the tree. This is when you find out how accurate your dowel turning has been.

Information

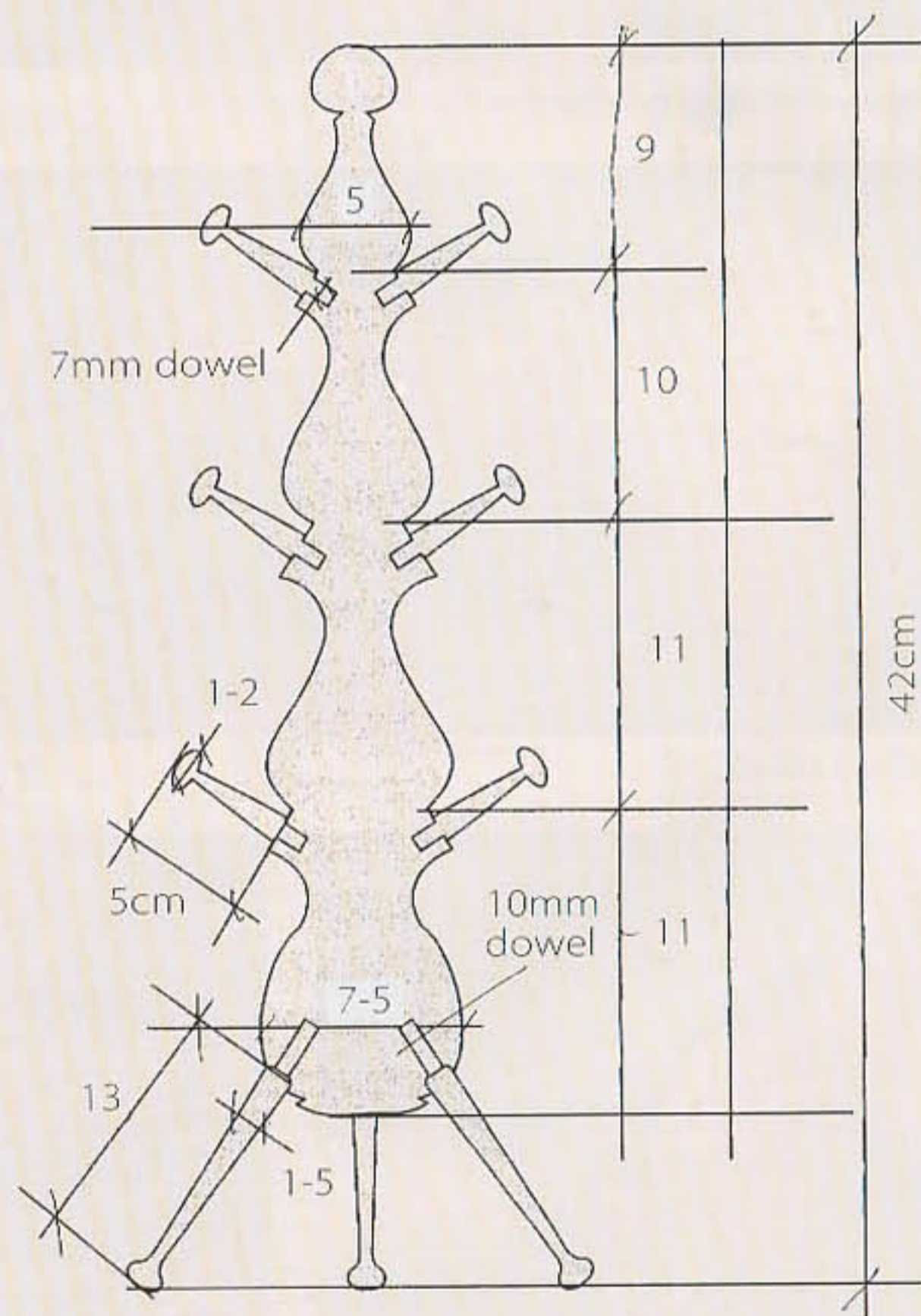
Henry Taylor Tools Ltd
The Forge
Peacock Estate
Livery Street
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Model numbers:
1/2" spindle gouge - HS7
1/4" spindle gouge - HS5

Mug tree



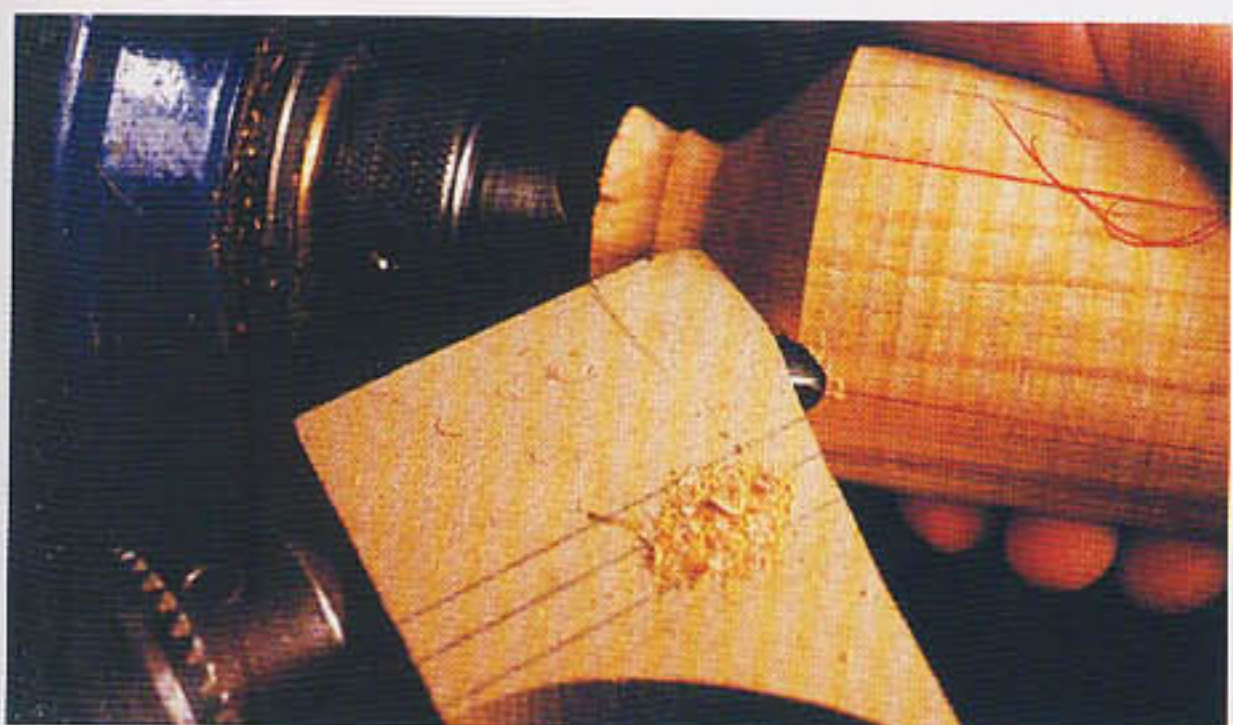
Transferring the lateral positions. (29)
Use a strong epoxy glue to secure the leg and pegs into the tree. This is when you find out how accurate your dowel turning has been.



Mark out the peg holes



Drill the holes for the mug supports using the drill jig



Using the drilling jig to drill the holes for the legs



Forming a hollow



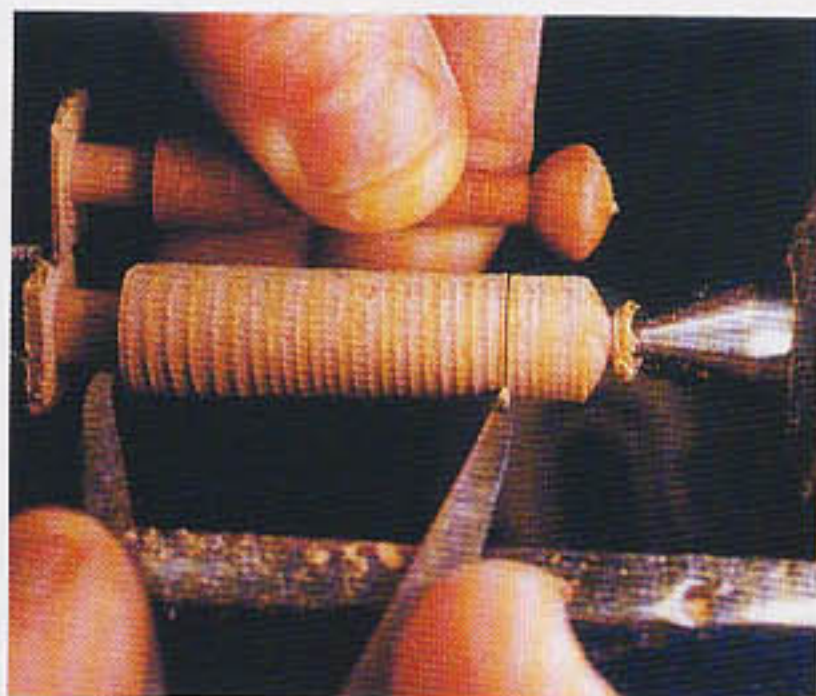
Forming a round



Forming the waist of the pear drop shape



Parting off with the spindle gouge



Using the odd leg calipers



Shaping the toe of the leg



Wall unit

I've called this a 'Delft' style wall unit because some smaller plate display racks go under this general heading.

The only reason for my wording is the shape. In actual fact this unit has been designed to go into a study and act as a wall mounted book/file shelving unit. Fancy words for something really simple!

The timber is southern yellow pine, a pitch pine in other words. This is used a lot for joinery and some furniture and has a very distinctive banded, open grain. This unit was actually commissioned to go with a desk made out of the same material for a recent client. Although simple

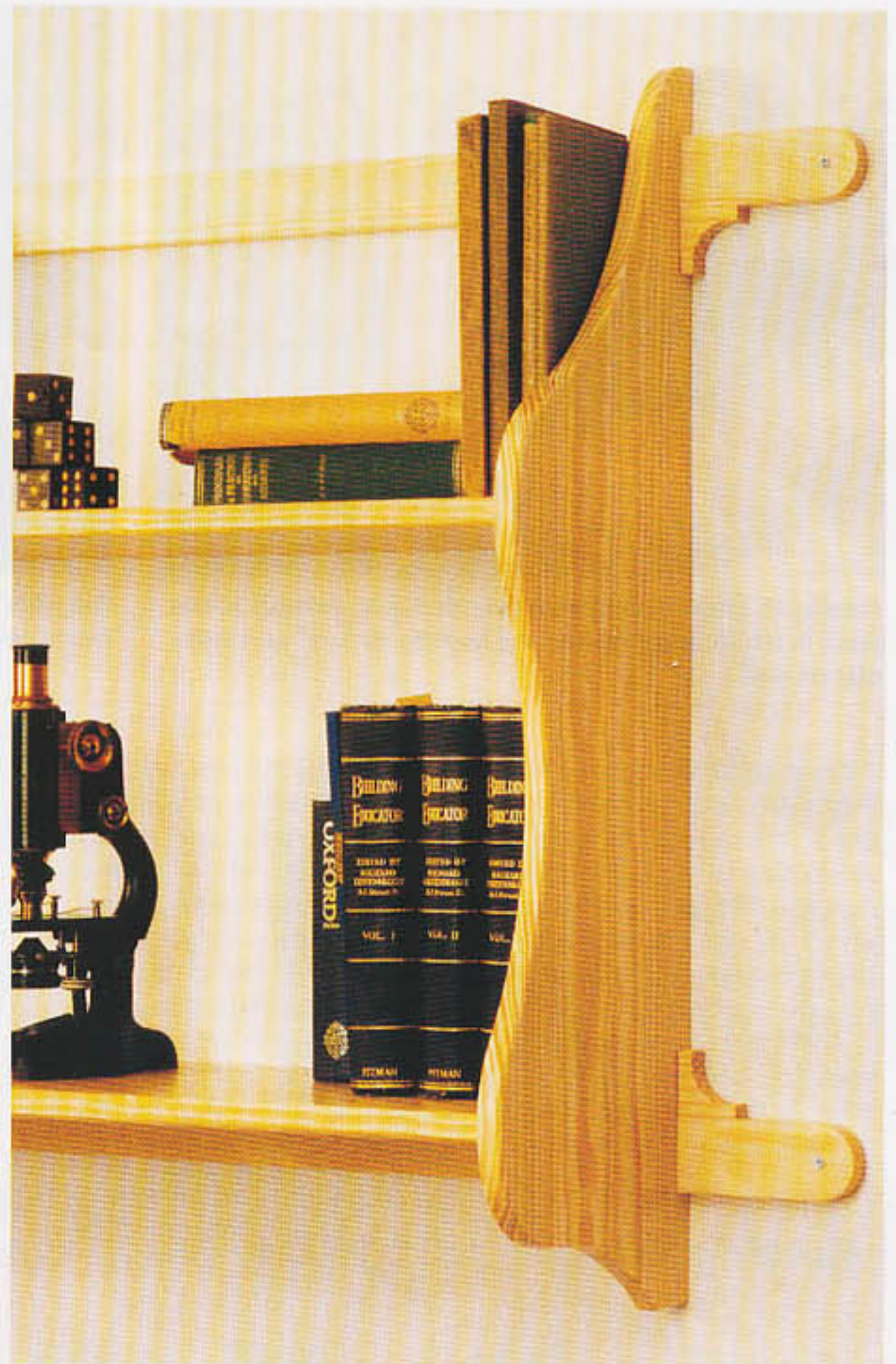
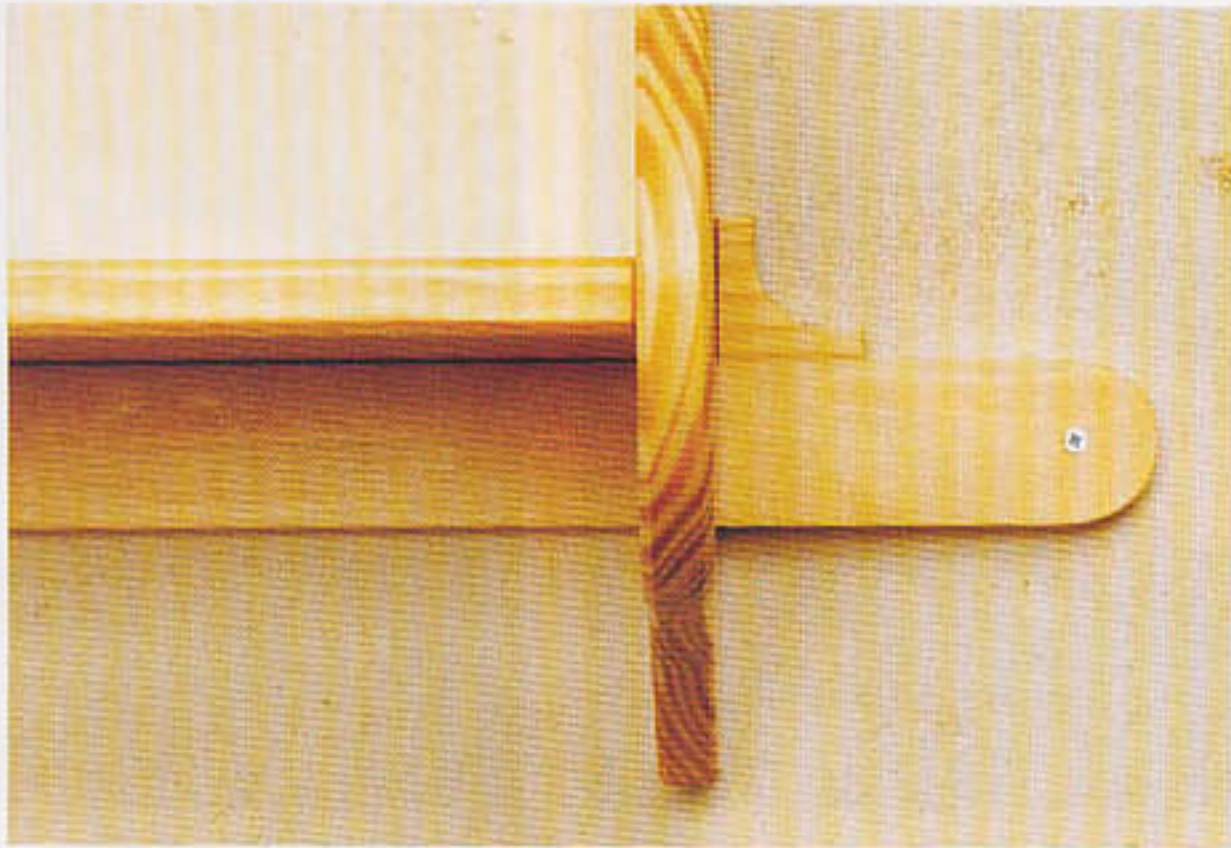
it's an interesting project that can be varied in both size and style to suit a whole range of uses.

One problem with yellow

pine is that it can "move" a lot after construction. Therefore it is vitally important that the wood is really dry before starting. As usual I chopped out the

One problem with yellow pine is that it can move a lot after construction





nominal sizes, sealed the ends and stored the boards in my office for a good few weeks before work started. As another precaution it's a good idea to move the components back into the house as manufacturing goes along.

Leaving stuff in the workshop overnight or for a couple of days will possibly result in some movement due to moisture being picked up. These boards, in the interim, had "cupped" quite badly and this had to be taken out when planing them.

Face first and then thickness followed by one edge. They were too wide to use the planer to bring into parallel so this was done on the rip saw.

Having planed the stuff up, each component was marked out. I selected the best sides for the faces. There were a few tiny splits that needed filling and these faces went on the inside.

I had given the client a choice of three different side profiles (see drawings). He had chosen the curviest one. With the shelves marked out I could draw this profile to suit the layout and balance.

Using some hi-tech kit, (old paint pots and even a lamp shade!), the curves were marked and linked. With this done the biscuit joints could be cut in both the sides and the two shelves.

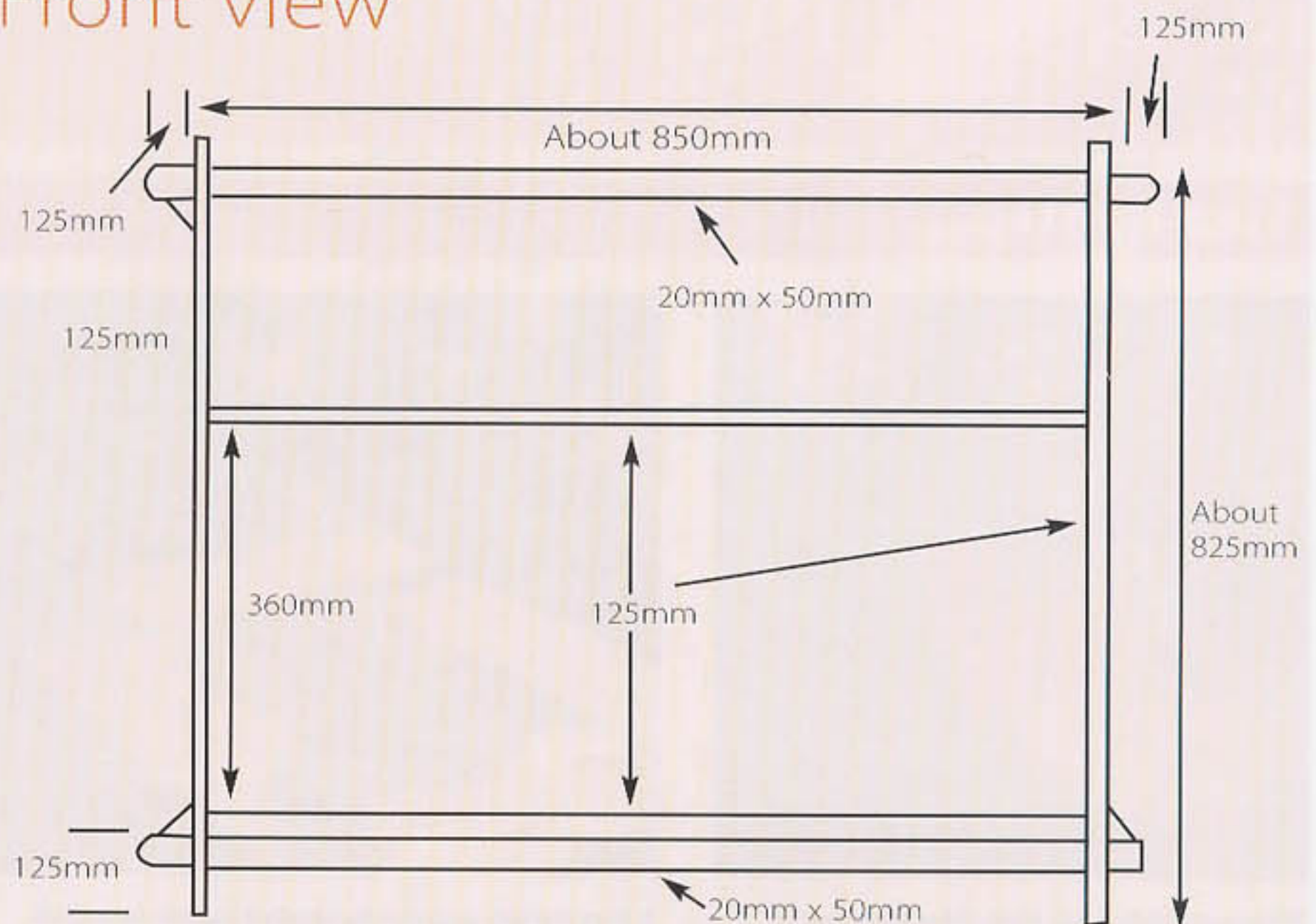
Moving on, the outlines of the side profiles were cut on my bandsaw. Too lazy to change the 1" blade I had to nibble some of the bits off. With this done I cramped the two sides together to finish the profiles — I wanted both to match exactly. The final shaping can be done by hand with

a spokeshave. I used my disc and bobbin sander to give a virtually finished edge.

Next job before clean up and assembly was to rout a double bevel on all outside edges. I did this on the small router table with a bearing guided cutter. The four components were then cleaned up with various grades of abrasive paper down to around 180 grit. At this stage I decided that I wanted to give everything its first sealer coat before I assembled it.

I guessed the grain would lift slightly and it's easier to cut this back when in bits rather than joined up. I needed to protect the integrity of the

Front view



Step-by-step... Step-by-step... Step-by-step...



Planing to thickness the wide boards. Look carefully at the stack in the foreground and see how much "cup" had to be planed out!



Too wide to be planed to width they are cut accurately on the rip saw bench



A range of highly technical equipment on each side! Stand the legs up together. Mark the tops with a circle to show the

jointing surfaces to make sure they were not sealed with the rest. To make sure I did they were covered over with masking tape. All four were sealed, left to dry and cut back with 240 grit to finish off after the tape was removed.

The main unit was now ready for assembly. Using Xtramite, to give a rigid joint, the joints were liberally cov-

ered with the prepared adhesive. Clamping up was fairly easy, care was taken not to damage any of the surfaces. The sealed surfaces allowed me to wipe off any excess glue with a fairly damp rag. This made cleaning up later nearly non-existent. Once I was sure it was square I left it to go off overnight. The second and final coat of sealer was applied with

the shelf unit fully assembled all bar the fixing battens.

Two notches in each side had been prepared to take the fixing battens. These were planed to fit and chopped off to length. I had decided that a bit of fancy moulding might look nice on each end of the battens.

Four blocks were squared off from the off cuts and glued

in place. Their location means that the battens are positioned correctly each time. The mouldings and ends were rough cut on the bandsaw and finished on the sanders.

The fixing holes were then drilled and countersunk. Each of the battens were sealed, avoiding the faces that were to be glued to the main carcass.

Once these were cut back and second coated they could be attached to the rest of the shelf unit.

The bottom batten was screwed and glued in place from the back and up into the lower shelf. The top one was not fixed at this stage. I used it loose to mark out the position on the wall. I then drilled a couple of holes for the plugs and fixed the batten in place. Making sure it was level I then

Cutting list

All dimensions in mm

Component	Pieces	Length	Width	Thickness
Sides	2	1000	290	20
Top shelf	1	1000	255	20
Bottom shelf	1	1000	275	20
Battens	2	1100	50	20
Mouldings	4	50	50	20

Step-by-step... Step-by-step... Step-by-step...



Where possible work both sides together to ensure they match



A first sealing coat can be applied before assembly



Jointing up with plenty of glue



is used to draw the shapes
er to select the best grain.
e inner faces



Cutting the joints before shaping takes place



Although a wide blade the profiles can be cut with care

mounted the unit onto it, not fixed, and marked the other fixing holes through the lower bracket. Removing the unit these were then drilled out and plugged.

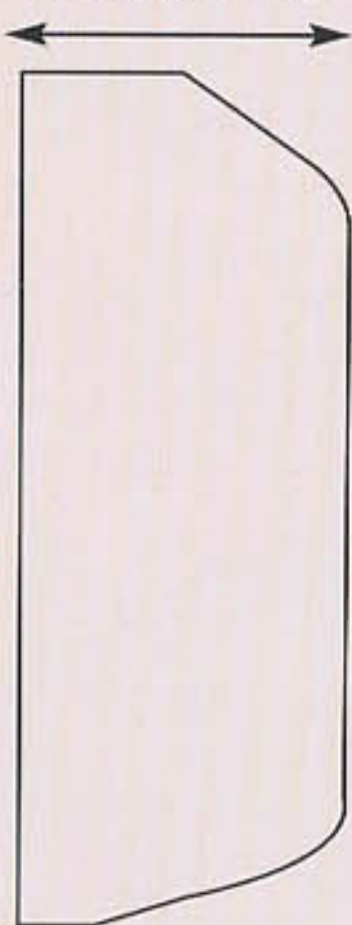
I removed the top batten from the wall and attached it to the unit and, with a little help, the completed shelf was re-mounted simply using all the pre-located holes and plugs.

Information

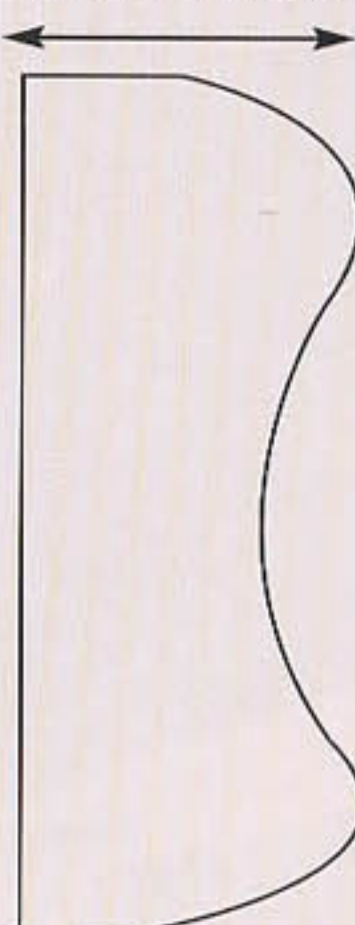
Please note that although many of these images show machines unguarded for clarity you should always ensure that when operating equipment the appropriate guards are in place

Side view

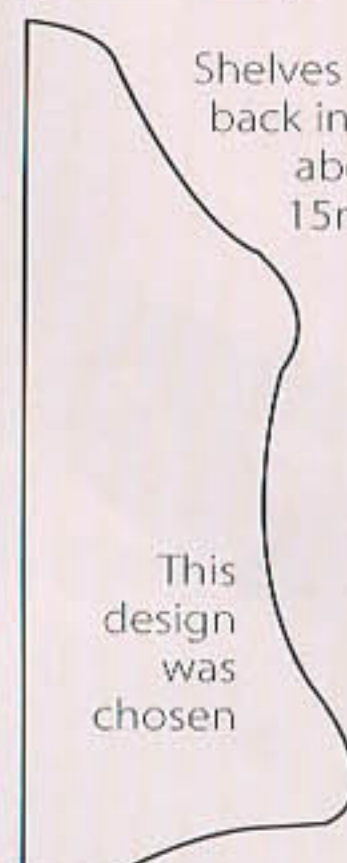
About 280mm/290mm



About 280mm/290mm



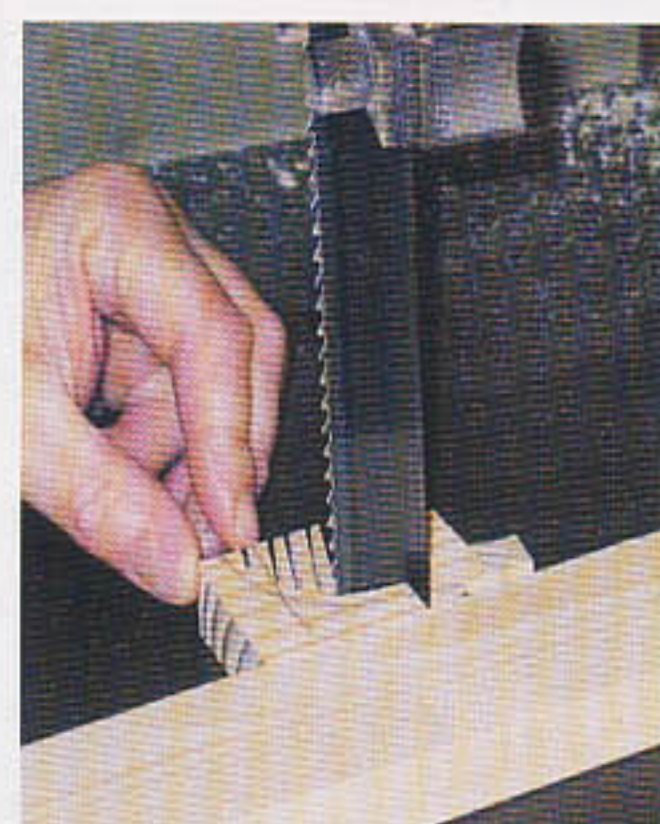
About 280mm/290mm



The unit is cramped up and checked for square



The assembled unit has a second sealing coat



Initial shaping the bits of nonsense