



# Cherry alcove cabinet

**Andy Standing designed and built this slim cabinet to fit a narrow space**

This cabinet was designed to fit into an alcove about 3ft wide at the bottom of a flight of the stairs and, in discussion with the client, we decided on a slim dresser with a cupboard below for storage and shelving above to display books and decorative items. The timber used was English cherry, as it is beautifully figured, mellows naturally and is comparatively inexpensive.

## Design considerations

In terms of design, this was a fairly straightforward piece although, because it was tall and narrow, I had to be careful with the proportions. It needed a substantial base without any feet and all the shelves had to be adjustable to maximise flexibility. However, this also meant that they could not be used as part of the structure. The carcass was to be solid with panelled doors and the back of the shelving was to be made up from tongue and grooved boards. With such highly figured material it's important to let the beauty of the wood show through and not distract from it with excessive detailing. As with all fruitwoods, cherry is prone to splitting and twisting during seasoning so careful selection is therefore crucial, as is even planing and thickening to balance out the internal stresses as much as possible.

## Bottom unit

First, you need to joint the timber to make up the panels. Butt-joints are sufficient but I always use biscuits as they provide a much stronger joint and stop that annoying habit that boards have of slipping out of alignment when cramping pressure is applied.

**'The timber I suggested was English cherry, as it is beautifully figured, mellows naturally and is comparatively inexpensive.'**

You also need to decide on the interior shelving arrangement. I opted for adjustable shelves using recessed *Tonk* strips which were routed in before assembling the unit. If you want fixed shelves then cut the housings for them first. Cut rebates on the back edges of the sides to let the back in. Don't rebate the base as you can reduce its depth to match the rebate and lap the back over it.

Joint the base to the sides either with traditional lapped dovetails or biscuit joints. The same rule applies to the two top rails. Set the back rail in line with the bottom of the rebate (unless of course

you want to cut a rebate in it as well).

Between the two rails you will need a pair of battens slot-screwed to the sides for the top to be attached to. By now, you should be looking at a perfectly square carcass. Fit the back so that it stays that way.

## The plinth

The moulding was cut using a Victorian *Torus* cutter and, once the mitres were cut, the plinth was attached to the carcass using blocks. Mitre joints are one of the most tricky to make fit perfectly, so take your time. Always cut the front piece first, leaving the side pieces overlong so that you have extra material to



# Cutting list

All dimensions in mm

All components English cherry unless stated otherwise

Item	Quan	Length	Width	Thick
<b>Bottom unit</b>				
Sides	2	710	380	19
Top	1	640	400	19
Base	1	600	374	19
Shelves	2	560	320	19
Skirting	1	640	150	19
Skirting	2	400	150	19
Top Rails	2	600	100	19
Door Stiles	4	670	50	19
Door Rails	4	204	50	19
Door Panels	2	592	200	12
Back	1	709	588	6mm Ply
Door stops and fixing blocks to fit				
<b>Top unit</b>				
Sides	2	1307	265	19
Top	1	600	277	19
Columns	2	1288	60	12
Shelves	4	560	250	19
Cornice	1	725	91	25
Cornice	1	331	91	25
<b>Back</b>				
T&G	1	To suit	100	9

give room for adjustment. When you're happy with the mitres, cut the sides to length. It's also worth strengthening the joint with corner blocks, as it has to support the entire weight of the cabinet.

As a decorative feature, run a small bearing-guided corner bead cutter down the outside front edge of the sides to relieve the square edge.

Fit the top by screwing straight through the back rail, but cut slots in the front rail and the side battens to allow for movement. Mould the edge using a bearing-guided ogee mould cutter or whatever you think is appropriate.

## Fielded panels

The door frame was made using a profile scriber cutter set, and houses 12mm thick raised and fielded panels – choose pieces of well-figured timber for these. The cutting list measurements allow for a 12mm tenon on each end of the rails which is what my particular cutters expect, but adjust this if yours are different. The meeting stiles were rebated to a depth of 6mm, and the corner bead cutter was again used to mould the edge. Make the

doors a little oversize, plane to fit and then hang them. Finally, remove them and cut the rebates on the meeting stiles. This method allows you to compensate for any discrepancies in your carcass/doors by adjusting the rebate accordingly. Fit full width door stops, top and bottom, knobs and whatever type of catch you prefer. Remember to fit the knobs before the catches or you may have to break in to your beautifully made cabinet!

## Top section

The shelves in the top are also made adjustable, again using *Tonk* strips. Make the sides and rout in the strips and then cut 12mm rebates down the back to allow for fitting the T+G. Make the top overlap the sides by 12mm at the front (this is to allow space for the two side columns) and set in 12mm at the back to house in the T&G boards. I don't possess a dedicated T&G cutter set, but have always managed using a groover, rebate cutter and chamfer cutter. It may take a little longer, but the results are just as good.

On this particular cabinet, the back has two horizontal bars to give the sides



The rebates on the meeting stiles should be cut after the doors have been hung



Choose some figured stock for the door panels

extra protection from spreading as well as to add some visual interest. You can't see them when the shelves are full, but it's reassuring to know that they're there. You can set out the boards as you like. I chose to groove the bottom horizontal bar and the central horizontal bar so that all the vertical boards have tongues on three sides.

Joint the top to the sides and then fit the bottom horizontal bar ensuring that

the carcass is square. Fit the T&G boards from the bottom up, attach the central horizontal and then fit the top boards. Trim flush with top.

## Columns

The flutes are made using a router and a core box cutter. Work out the spacing on a piece of scrap timber and use this as a

template to set the router. Once routed the columns are glued to the front of the top side pieces. Cut a small chamfer down the outside back edge of the columns before gluing which will highlight the joint and, at the same time, disguise any discrepancies.

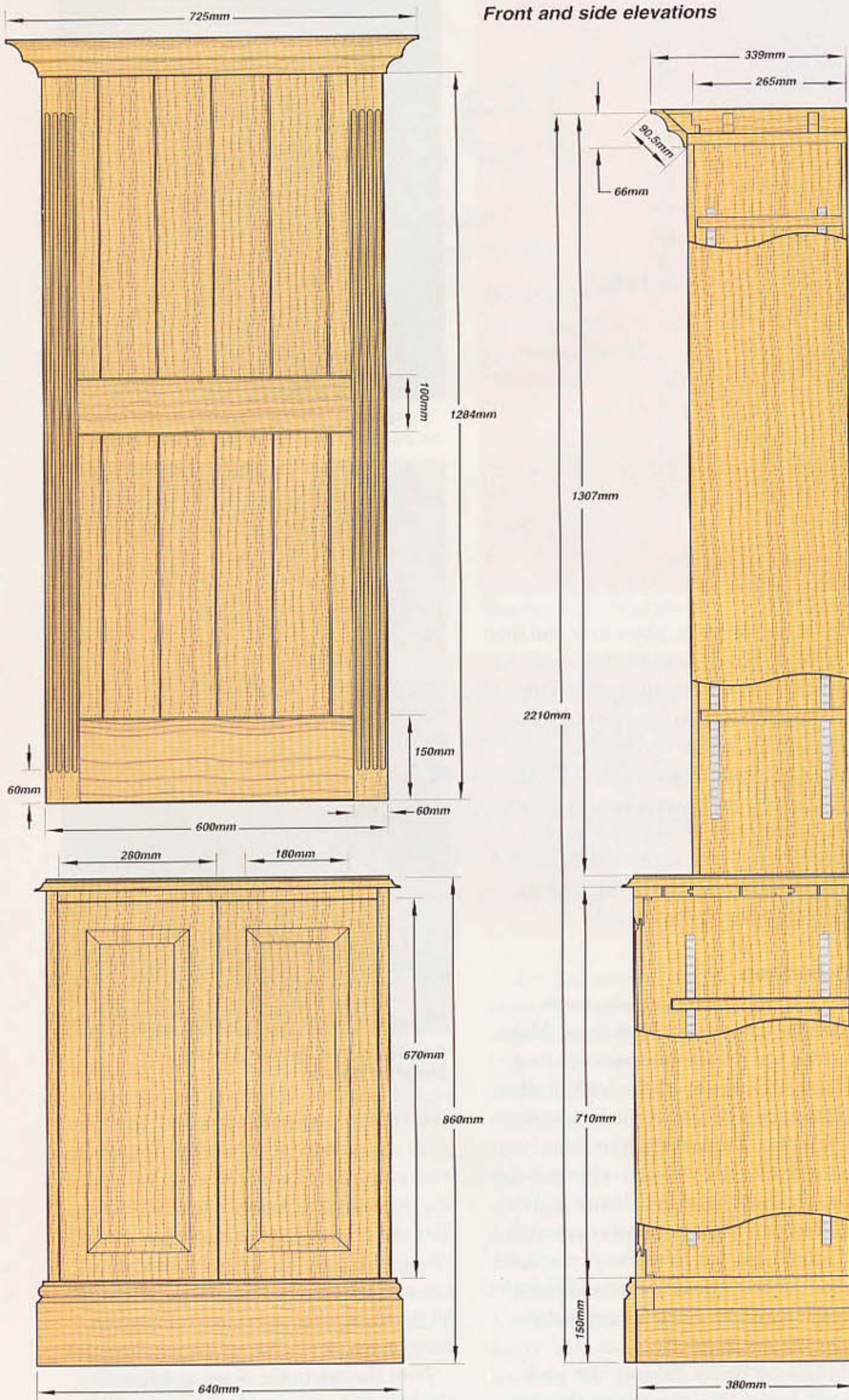
Before making the shelves, the cornice moulding needs to be fitted. So many people finish off their cabinets with a rather meagre piece of Scotia on the top, but I like to fit something worth looking up to. This moulding was made from 25mm stock and run at an angle across the top of the table saw to produce the radii shown. It's attached using angled blocks glued onto the back and slot-screwed to the carcass. Set it so that it just covers the joint where the top and the columns meet.

Lastly, cut the shelves to size and mould the front edges. The top will stand happily on the base but, for safety, it's worth fixing it in some way, either by screwing a plate across the joint at the back, or by screwing up into the sides from underneath. The former method has the advantage in that it doesn't damage the base, allowing it to be used separately if required.

## Finishing off

Thoroughly sand all the components, especially any end-grain, paying particular attention to the flutes in the columns. The piece was finished with Danish oil which gives it a beautiful sheen. Take time and trouble over this because, however good your joints are or beautifully your doors fit, it is always the finish which people notice first and a clumsily applied finish can ruin an otherwise first class piece.

## Front and side elevations



Detail of cornice moulding

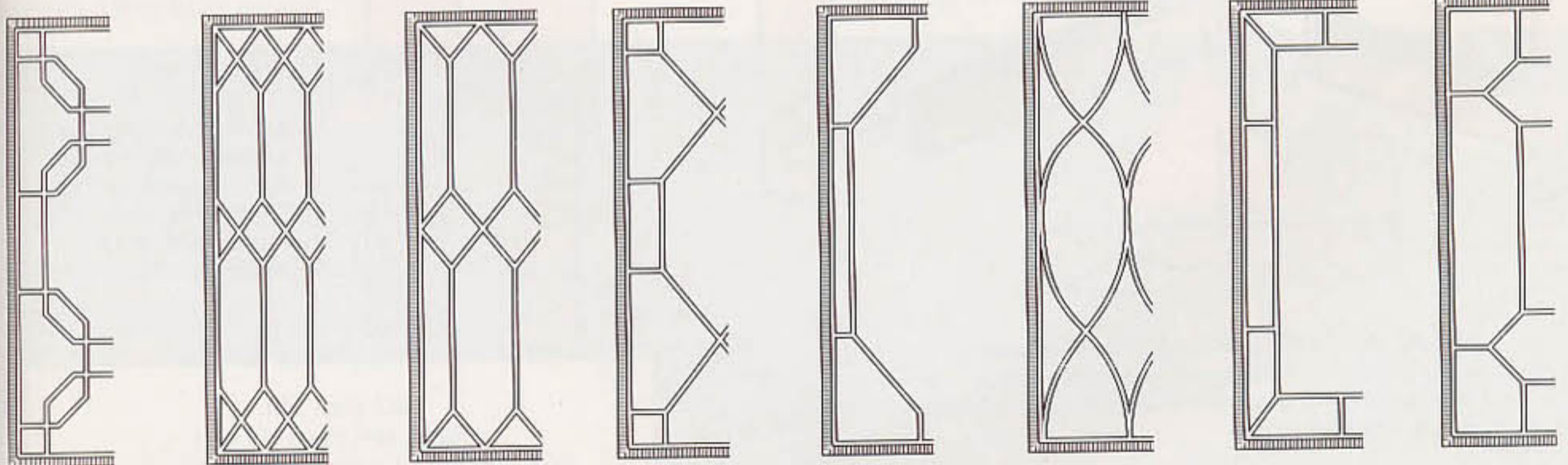
# Making cabinets

Transform your cabinets with attractive decorations and some expert advice from Mark Finney

The word 'cabinet' was originally an architectural term. It meant a small room in which precious articles were kept. With the passage of time, the expression altered to describe furniture that was used to protect manuscripts, drawings and other valuables. Usually made with doors, and often drawers, the cabinet became a distinctive piece of furniture, the most fanciful being, perhaps, the cocktail cabinets of the 1920s and 1930s. Cabinets are still used to store and display ornaments and treasured possessions with glazed doors to give a relatively dust-free environment. As a side cabinet they can be wall-mounted or stand on the floor, pushed up against a wall. Corner cabinets, on the other hand, can be positioned to give more space, becoming a main feature in a room.

**'The word "cabinet" was originally an architectural term. It meant a small room in which precious articles were kept.'**

*Fig 2: Some of the most popular designs for glazed doors. They make all the difference to a cabinet and, with patience, are not too difficult to achieve.*



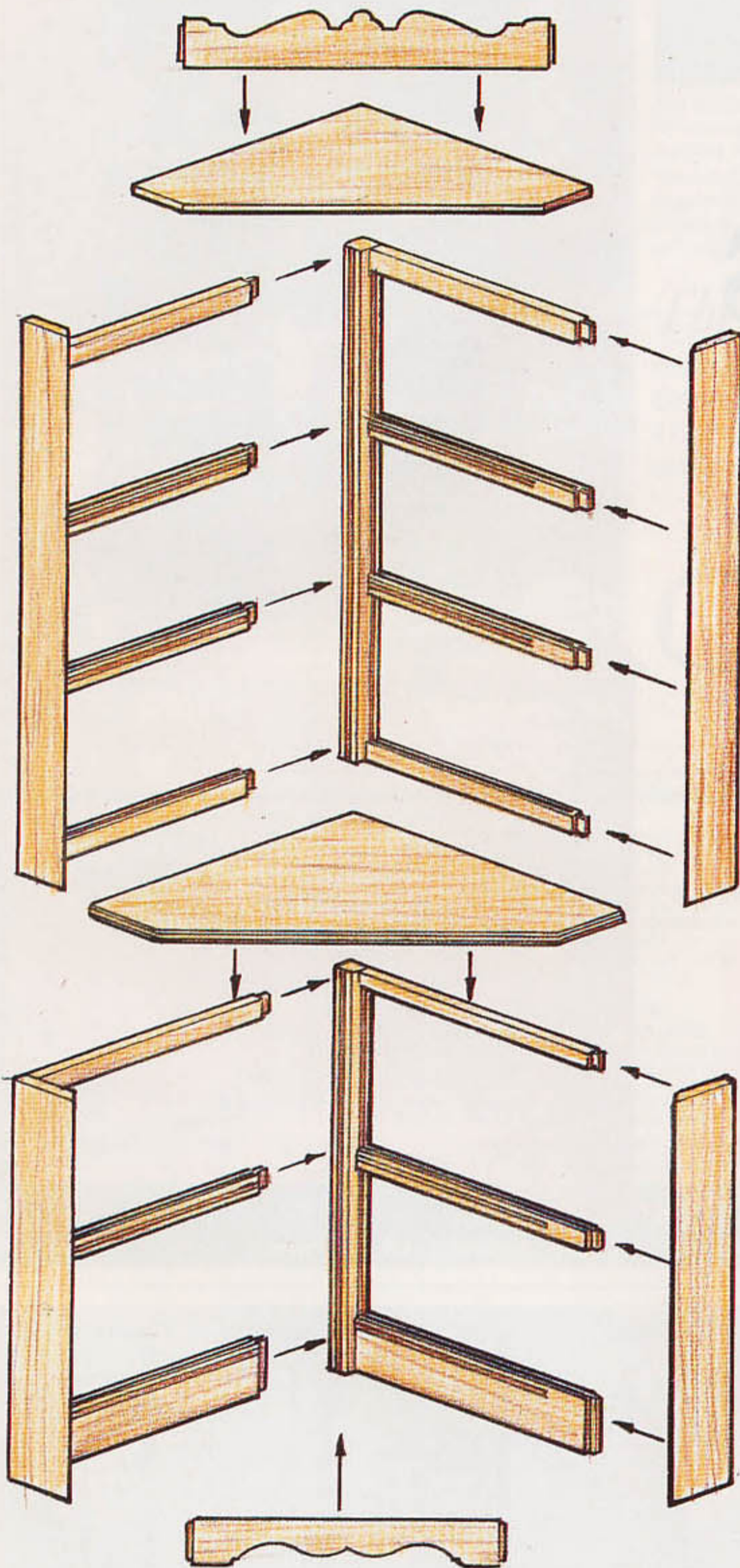


Fig 1: Exploded view of typical floor standing corner cabinet, showing mortise and tenon joints used for the main framework and housing joints for the shelves

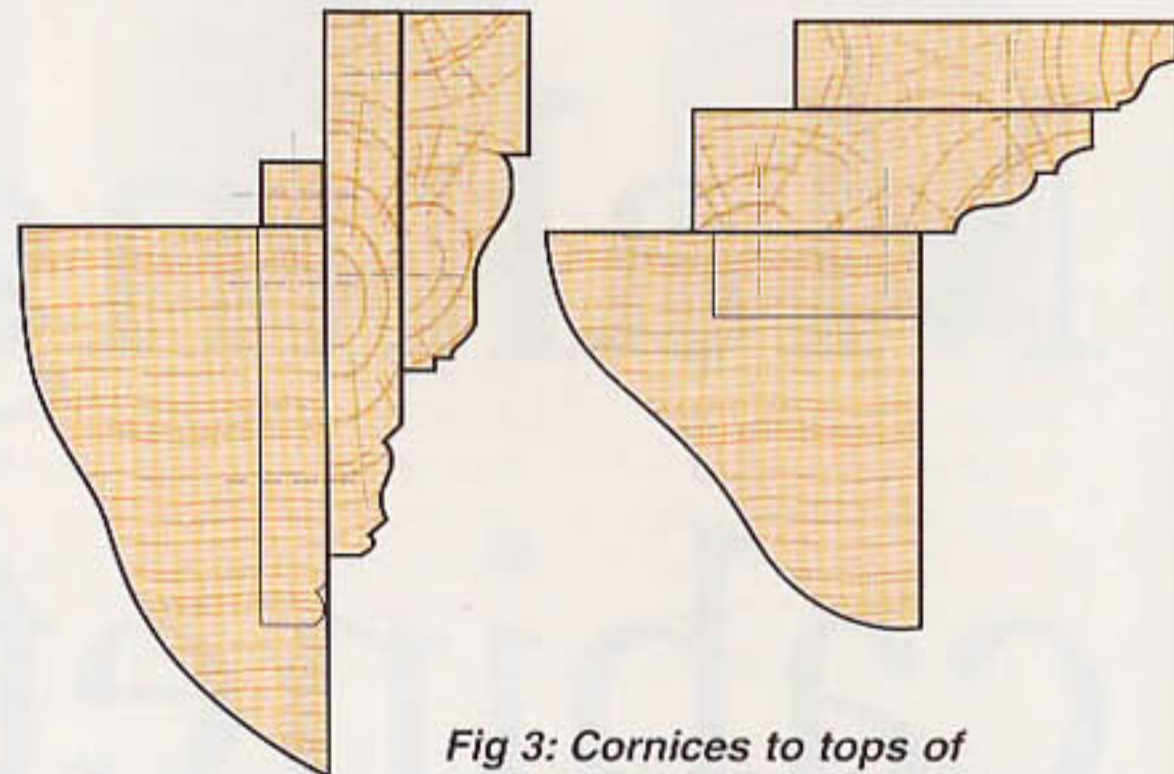


Fig 3: Cornices to tops of cabinets can be built up from different mouldings by jointing either vertically or horizontally

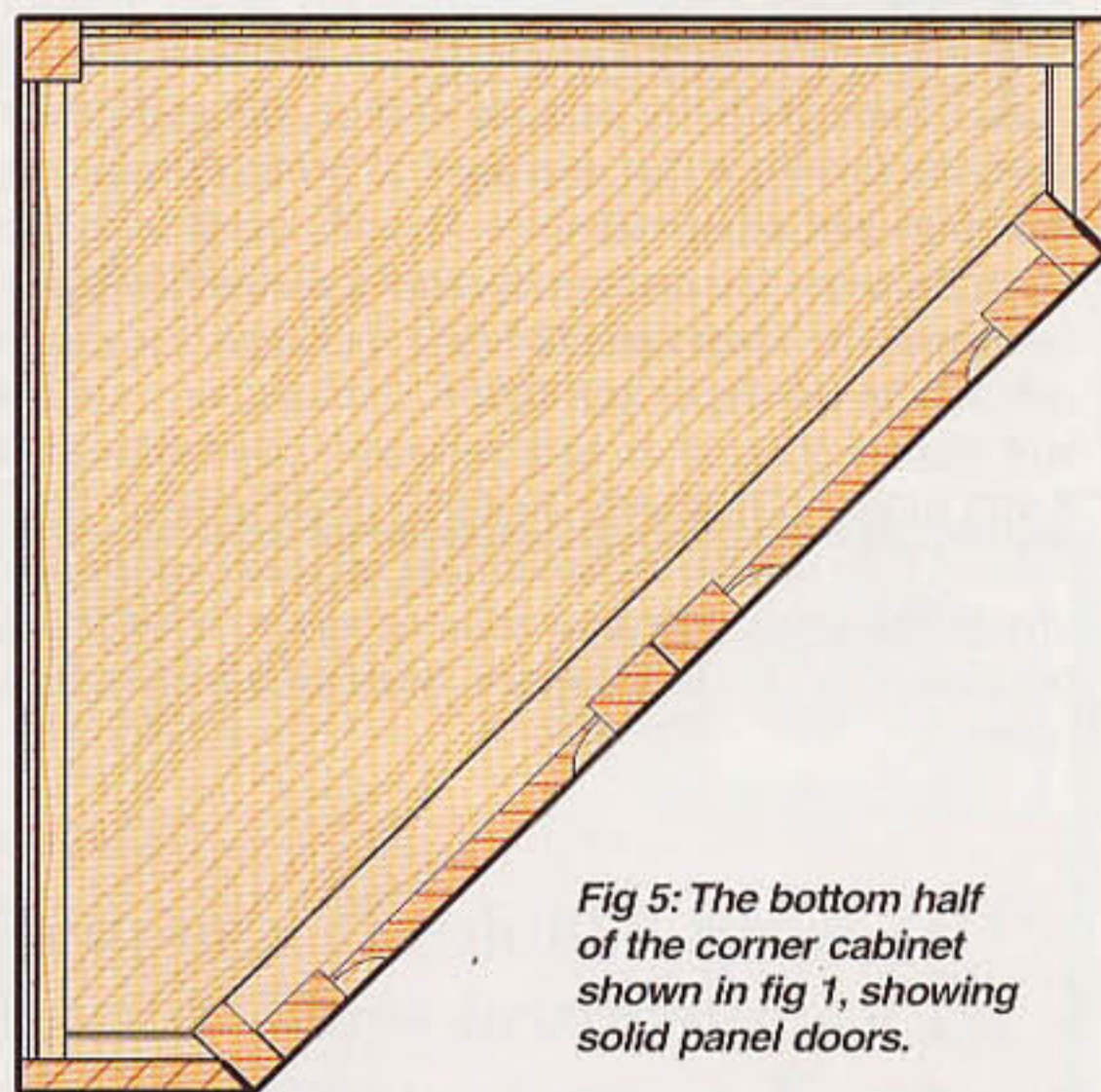


Fig 5: The bottom half of the corner cabinet shown in fig 1, showing solid panel doors.

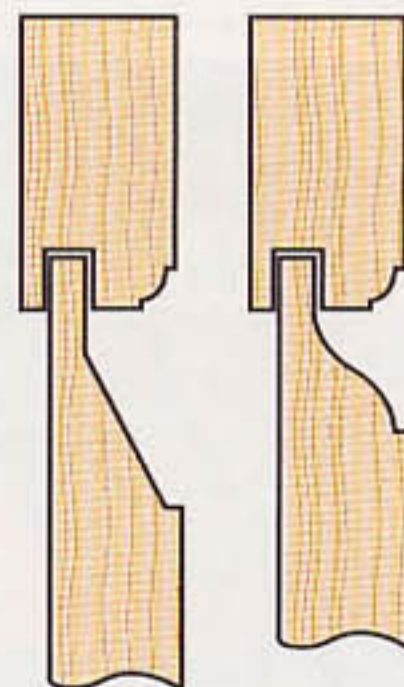
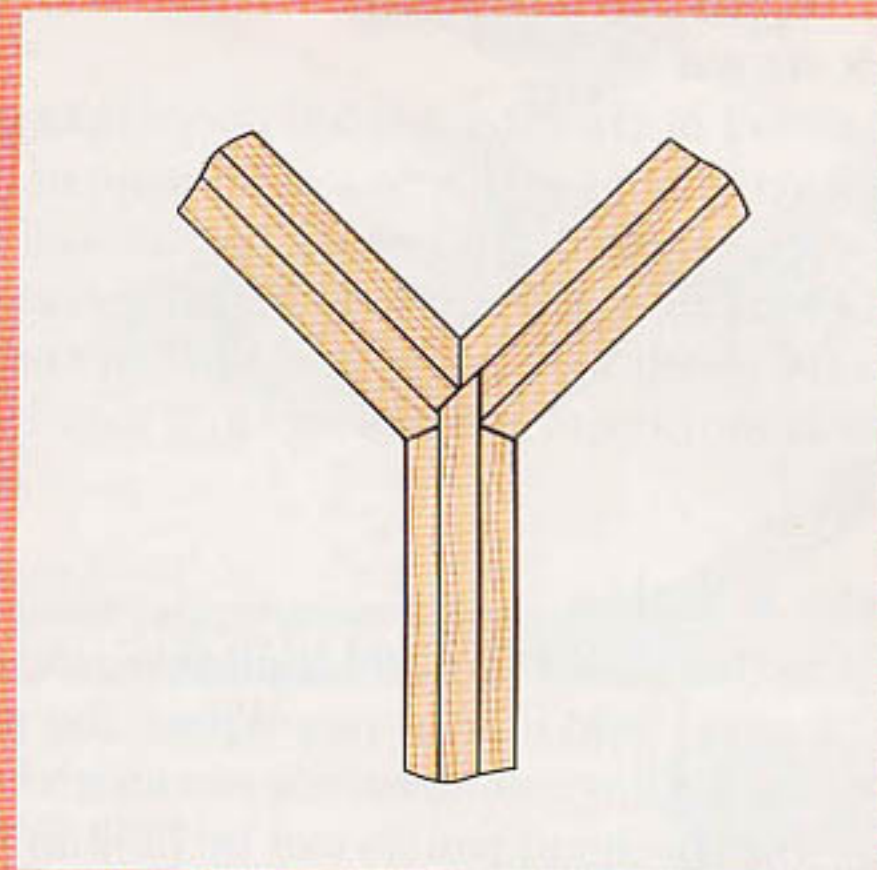


Fig 4: Moulding the edges of both solid panels and door stiles/rails gives more interest to cabinets.

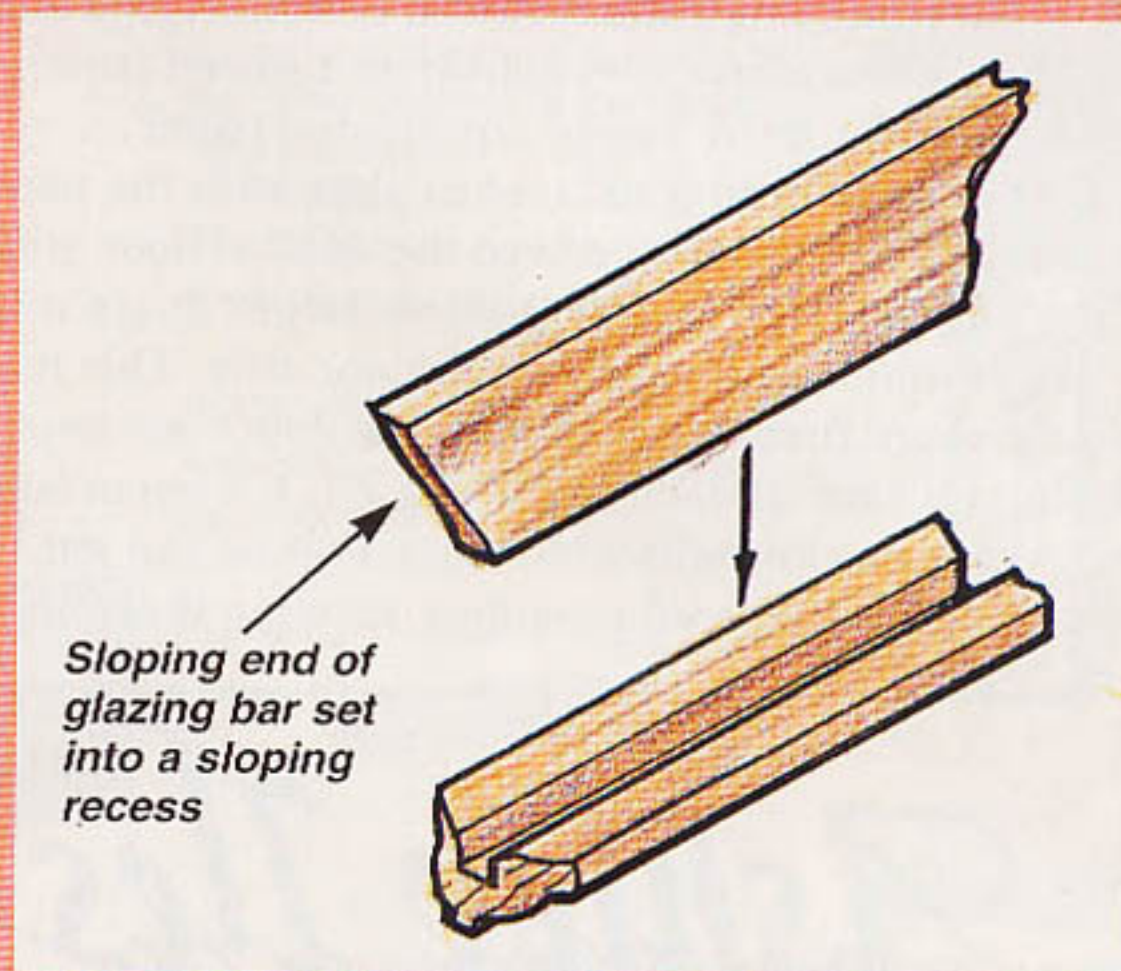
# Making beaded doors

- 1 Cut and joint the door stiles and rails. These are usually constructed using moulded frame mortice and tenon joints
- 2 Cut a piece of plywood to fit the door (inside the rebates) and mark where the glazing bars will go
- 3 Mould the glazing bars (which are made in two parts). Here the front has two ovolo moulds and a groove. The back is rectangular and fits into the groove
- 4 Carefully joint each of the front glazing bars into each other following the design marked onto the plywood
- 5 When complete, turn the door over and remove the plywood
- 6 Fit the back rectangular part of the glazing bars into position. These are held in the door stiles and rails using a 'sloping recess' to make it easier to cut
- 7 Remove the two part glazing bars and glue the door frame together
- 8 When dry, fit the glazing bars and glue. Hold with tape while drying if this helps
- 9 Having fitted the door to the carcass, remove it and glaze with putty. Where glazing bars or beads are arched or curved, this may present problems. One method of jointing is to laminate the curved parts. With glue applied, the laminates can be bent and held in a jig to until dry. The joints can then be cut

*Glazing bars can be made in two halves to help with jointing*



*Where glazing bars meet, carefully scribe and fit as shown above*



*Sloping end of glazing bar set into a sloping recess*

## Different types

**Fig 1** shows an exploded view of a typical floor-standing corner cabinet. The base unit will usually have solid panelled doors, while the top will have decorative glazed doors (**fig 2**). Such corner cabinets are often made up in two separate parts, like dressers, although small cabinets can be made as one single unit. Typical joints for both corner cabinets and side cabinets are tried and tested mortise and tenon joints for the main framework, and housing joints to secure the shelves. Backs can either be held in grooves or set into rebates and pinned through fillets from behind.

Top rails can be shaped and cornices built up to give complex patterns without requiring very expensive specialised cutters. **Fig 3** shows how built-up mouldings can be screwed together either vertically or horizontally, and it's often an interesting exercise trying to combine the different cutters you have to give the most attractive mouldings. A combination of both shaped top rails and built-up mouldings is also an option on some types of cabinet. The glazed doors shown in **fig 2** are complex pieces of cabinet work but following a system, are relatively easy, although time consuming to make.

Jim Robinson is a keen woodworker and regular contributor working from his home in North Yorkshire



# Video cabinet and television stand



**Jim Robinson makes his own TV and video cabinet from American cherry**

turning because you have a longer length of straight wood for the fence to bear upon).

Round the leg corners with a self-guiding rounding-over cutter, or by hand with abrasive paper.

Now mark the centres on the legs in

**'It's essential to have good surface preparation as, unlike a surface finish, it's not so easy to hide defects in the surface of the wood.'**

preparation for turning, mount each on the lathe and turn a  $\frac{1}{2}$ in bead at the bottom and a tapered section to fit into the brass castors. After turning is complete, cut out the small  $\frac{3}{4}$ in wide,  $1\frac{1}{4}$ in deep sections at the top of each post for the top rail tenons and then cut the rail tenons to fit (see detail drawing).

## Side panels

Make up each panel from two 1in boards jointed together to give a width of  $14\frac{3}{4}$ in; you can use loose tongues and grooves or biscuit joints to help align the boards (even though they are structurally unnecessary).

When the end panels have been made, thickened to  $\frac{7}{8}$ in, sanded and dimensioned, rout out two  $\frac{3}{4}$ in wide,  $\frac{1}{2}$ in deep housings for the bottom and middle shelf. Next, rout a rebate to form the  $\frac{3}{8}$ in wide,  $\frac{5}{8}$ in deep bare-faced tenon at the top of each side panel and then rout the  $\frac{1}{2}$ in wide long side tenons.

## Assembling the carcass

The panels can now be fitted to the legs. This work is carried out in stages. Glue each side together (consisting of two legs and centre panel) and clamp. While the sides are cramped up, joint enough cherry together to form the bottom, the centre shelf and the top. These components were made from 1in thick boards and the top then thickened to  $\frac{7}{8}$ in. The bottom and centre shelf were thickened to  $\frac{3}{4}$ in to fit into the side housings.

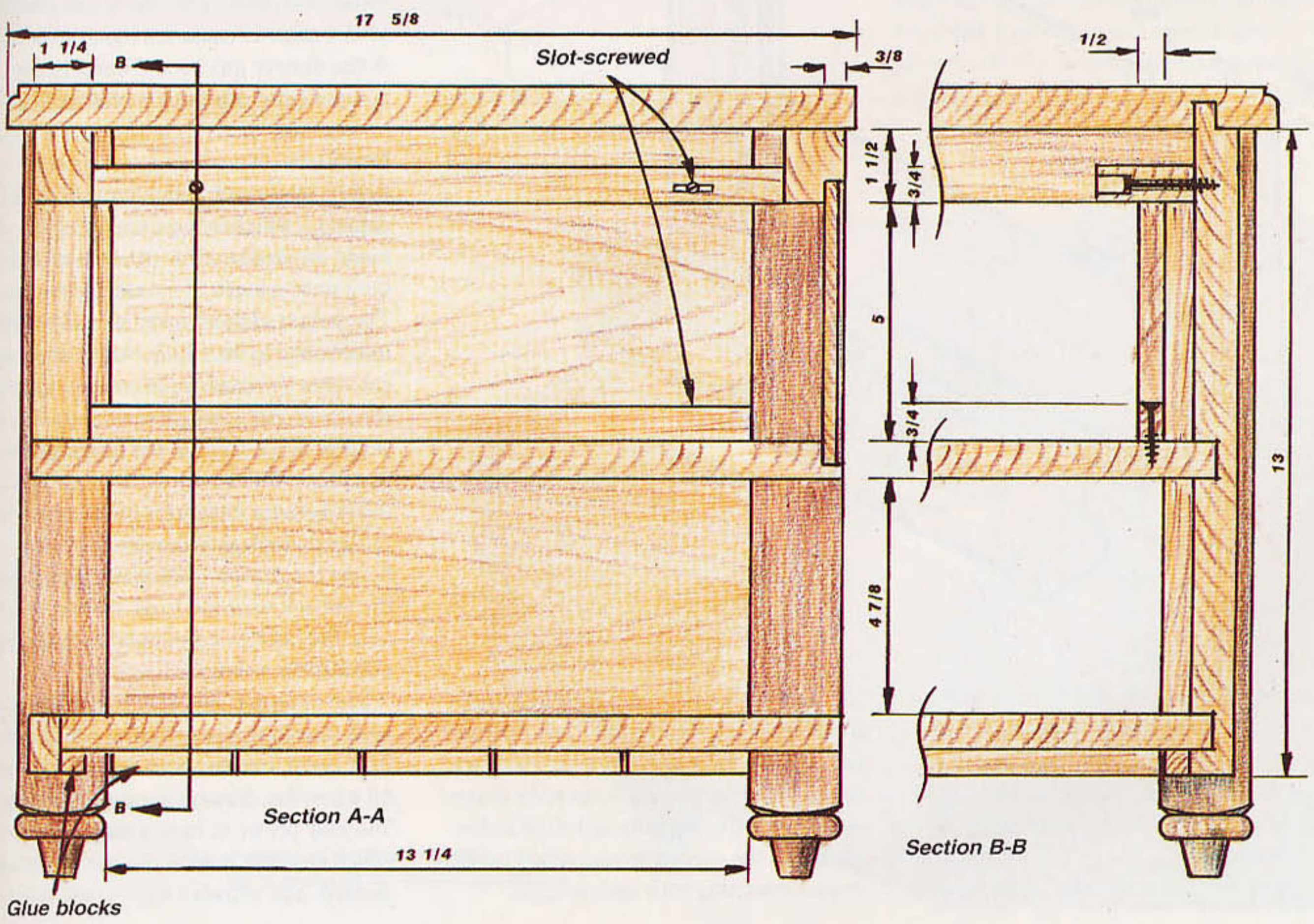
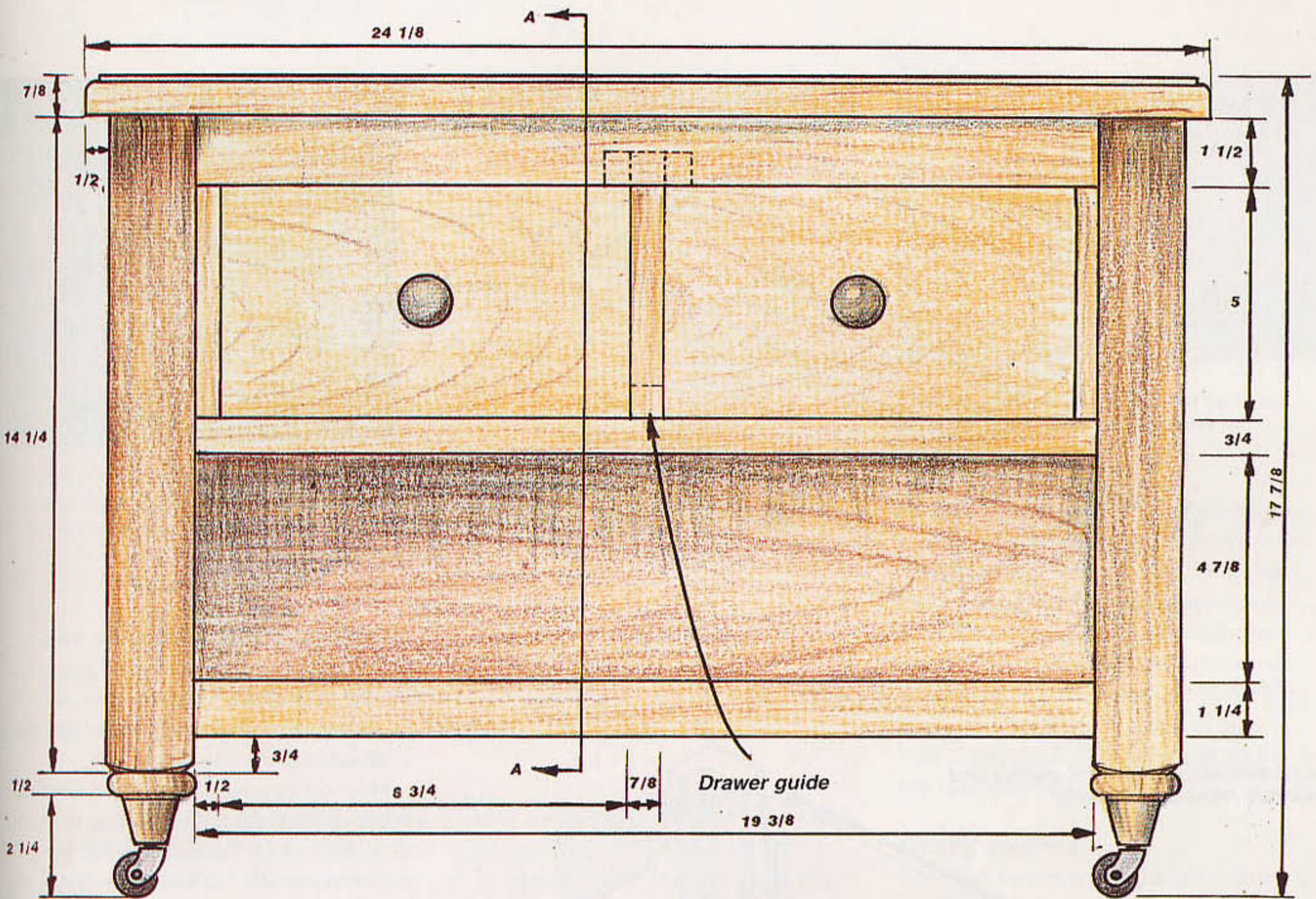
After dimensioning is completed,

**W**hen we bought our latest TV, the plastic stand that came with it left a lot to be desired in terms of practicality and attractiveness. Consequently, I decided to make a replacement out of American cherry with storage space for video cassettes. If you receive satellite television, a second shelf can take the place of the drawers to accommodate the decoder.

## The legs

Firstly, prepare four legs from 2in thick stock to finish at  $1\frac{7}{8}$ in square. Square the ends and, before starting the turning, rout  $\frac{1}{2}$ in grooves on one face of each leg to receive the long tenons on the side panels. Set the grooves in  $\frac{3}{4}$ in from the inside edge of each leg. I used a hand-held router guided with a fence bearing against the side of the post (it's easier to do the routing before

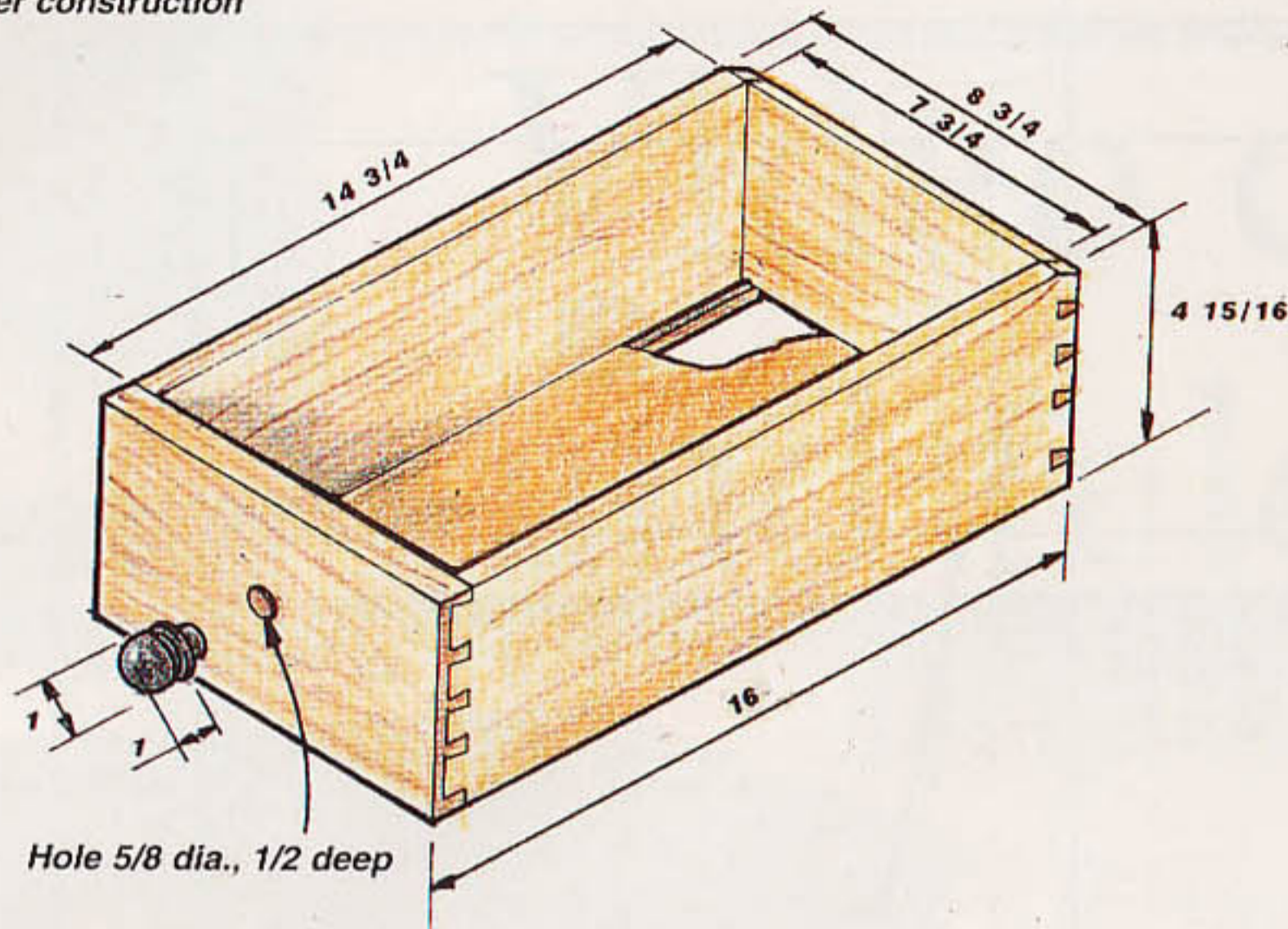
Fig 1: Front elevation and sections



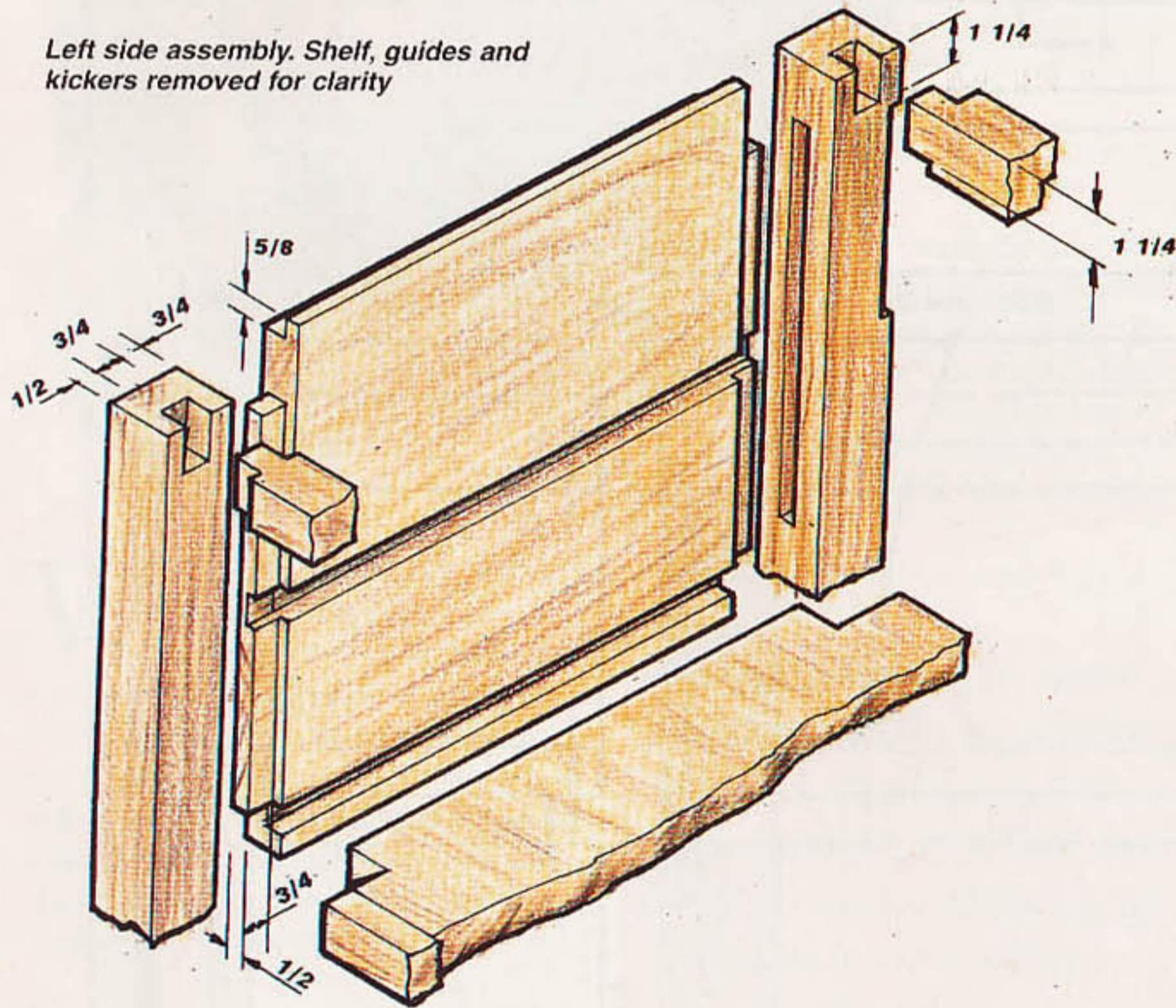


# PROJECT

Drawer construction



Left side assembly. Shelf, guides and kickers removed for clarity



square up the shelf and bottom and cut out the corners so that they fit around the corner posts and project into the housings. Now glue the  $1\frac{1}{4}$ in x  $\frac{3}{4}$ in lipping onto the front edge of the bottom.

Rebate the top back edge of the shelf,

the underside of the rear top rail and the top of the back legs for the  $\frac{1}{4}$ in plywood panel at the back of the drawer compartment. Finally, tenon the  $\frac{7}{8}$ in wide drawer divider into the top rails and shelf before gluing all the carcass components together and cramping with sash cramps.

## Cabinet changes



A pine variation of the cabinet can be made with a shelf in place of the drawers and turned feet instead of socket castors.

Strengthen the joint between the bottom and the sides with several short glue-blocks; their short length ensures that there are no problems with shrinkage due to different grain directions.

Place the assembled carcass upside down on the prepared top so that the  $\frac{5}{8}$ in deep grooves for the side panel tenons can be accurately marked before being routed out. Don't glue the top in position at this stage because it's much easier to fit the drawer guides and other inside components with the top removed.

### Drawers

Rather than making the drawers to fit the cabinet – which is the usual practice – I made the inside of the drawers so that they were a loose fit for video cassettes. The height of the drawer, of course, has to be made to fit, but the width is not critical. After the drawers have been made to the appropriate size, fit drawer guides and vertical strips fixed to the inside of the front legs. Thickness these to give you the necessary clearance for the drawers rather than planing the drawer sides. Screw the drawer guides and kickers to the cabinet near the front and slot screw near the back to accommodate any subsequent movement.

The drawer construction (see detail) is such that the sides are somewhat thicker than usual, but the extra strength is useful when the drawers are full of cassettes. You may prefer to have a single drawer in which case the central divider will not be needed. The drawers were constructed in

# Cutting List

All dimensions in inches

Item	Quan	Length	Width	Thick
Legs	4	17	17/8	17/8
End panels	2	14 <sup>3</sup> / <sub>4</sub>	13 <sup>5</sup> / <sub>8</sub>	7/8
Shelf	1	21 <sup>7</sup> / <sub>8</sub>	16 <sup>3</sup> / <sub>4</sub>	3/4
Bottom	1	21 <sup>7</sup> / <sub>8</sub>	16	3/4
Bottom front lipping	1	19 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub>	3/4
Top	1	24 <sup>1</sup> / <sub>8</sub>	17 <sup>5</sup> / <sub>8</sub>	7/8
Top rail (front)	1	20 <sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>
Top rail (back)	1	20 <sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>
Centre drawer dividers	2	6 <sup>1</sup> / <sub>2</sub>	5	7/8
Centre drawer guide	1	6 <sup>3</sup> / <sub>8</sub>	7/8	7/8
Centre drawer kickers	2	14 <sup>1</sup> / <sub>2</sub>	3/4	3/4
Side drawer kickers	2	14 <sup>1</sup> / <sub>2</sub>	2	3/4
Side drawer guides	2	14	3/4	1/2
Drawer side infill	2	5	1 <sup>1</sup> / <sub>2</sub>	1/2
Drawer front	2	8 <sup>3</sup> / <sub>4</sub>	4 <sup>5</sup> / <sub>16</sub>	3/4
Drawer back	2	8 <sup>3</sup> / <sub>4</sub>	4 <sup>5</sup> / <sub>16</sub>	1/2
Drawer sides	2	15 <sup>3</sup> / <sub>4</sub>	4 <sup>5</sup> / <sub>16</sub>	1/2

## Additional materials

Two small pieces of ebony or alternative hardwood for the drawer knobs; 1/4in plywood for the back and drawer bottoms and small pieces of wood for use as glue-blocks; 4 brass castors with a round socket of 1in internal top diameter. These are supplied either with white or brown china wheels.

the traditional manner. If you strap all four sides together with some tape then it's quite easy to cut all the dovetails out at once on the bandsaw. When cutting the pins on the drawer front, remove as much waste as possible by drilling before cleaning up with a chisel.

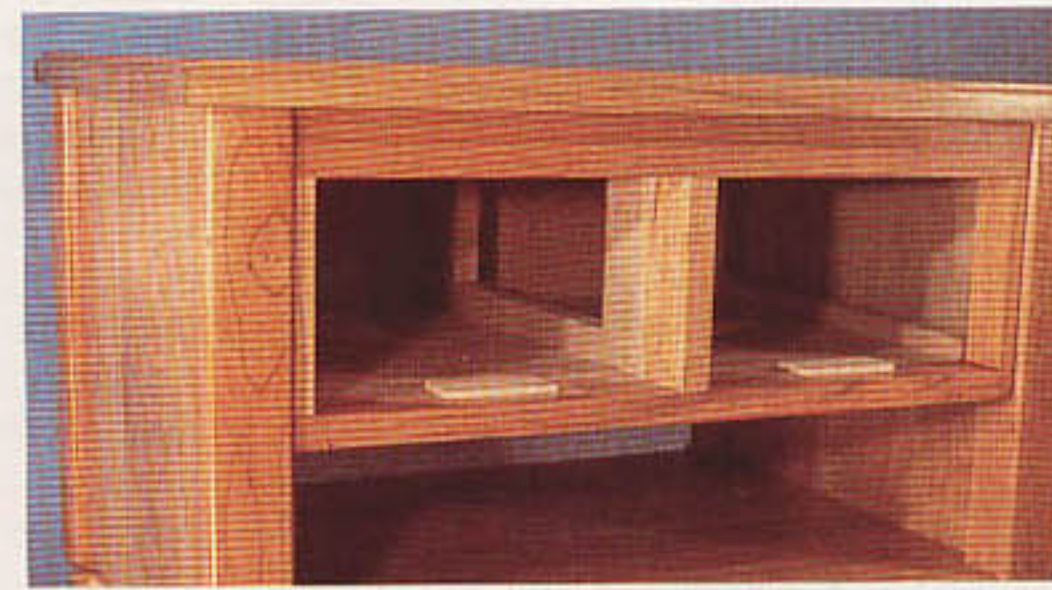
Turn two small drawer pulls out of ebony with a pin which can be glued into a hole drilled into each drawer front. When you are satisfied with the fit of the drawers, the top can be glued into position and a moulding then worked around the front and two sides with a self-guiding 1/4in diameter rounding-over cutter, or whatever you prefer.

## Finishing

I'm a great believer in the use of Danish oil as a finish; it's durable, easily repaired, does not chip and is simple to apply. However, it's essential to have good surface preparation as, unlike a

surface finish, it's not so easy to hide defects in the surface of the wood.

Give the cabinet three coats of oil, apply-



The drawer runners inside the carcass should be slot-screwed to allow for movement

ing it liberally and removing the surplus after a few minutes with a lint-free cloth. Allow to dry for 24 hours between coats, lightly sanding between each application. Remember that oil impregnated cloths should be disposed of safely, as oxidation can cause them to spontaneously combust. After allowing the final coat to harden for a couple of days, apply a wax polish with 0000 gauge wire wool and then buff to a deep shine.

## Fitting castors

The brass castors are held in place by three brass screws. As American cherry is fairly hard, drill a pilot hole and insert a steel screw to tap the hole for the brass ones; this helps to avoid the risk of breaking the brass screws which are relatively weak.



The drawers should be made so as to be a loose fit for video cassettes

# Disk storage



**Eric Taylor makes a capacious cabinet to hold a large collection of CDs**

This design was based around the plastic CD holders (Isaac Lord catalogue) which are sold in left and right pairs 224mm high, 119mm deep and are designed to fit a width of 133mm. They hold 13 disks (an insert is also available to hold 6 doubles) and are stackable. I decided on 3 racks wide and 4 high, with the middle bottom pair taking double CDs. If they were all single CDs, the cabinet would hold 177 disks in total – enough space for a modest collection.

## Carcase and plinth

The carcase sides, top, bottom, cabinet door and the top all required jointing unless you can source some wide material. After thicknessing, skim the timber with a sharp smoothing plane to remove the machine marks.

The main carcase was tackled first, with the timber cut roughly to length. After matching up the eight pieces, plane the edges and then glue and cramp them together in pairs. This gives four boards wide enough for the carcase which can then be cut accurately to length and square. I used lapped dovetails for these joints (an excuse to use my Woodrat) but there are many other jointing techniques which could be used, including biscuits and dowels. The vertical dividers were jointed with a sliding dovetail which holds everything together accurately.

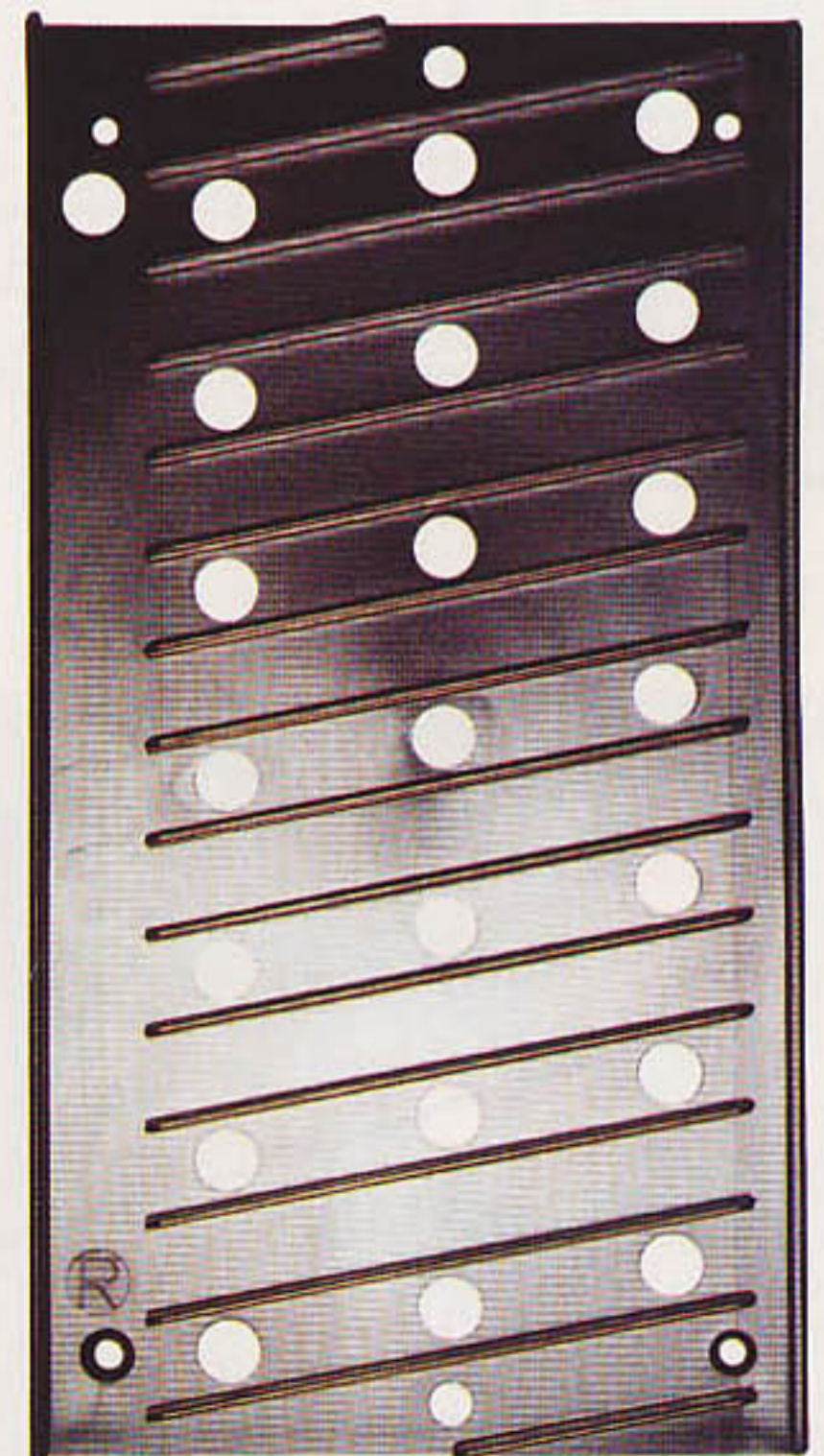
The plinth has a sub-frame glued inside which allows the carcase to sit neatly into it and be screwed from below.

The front corners were mitred and cut with a Nobex mitre saw. (The idea for the plinth construction was taken from Bob Wearing's book *The Essential Woodworker*.)

## Black stringing

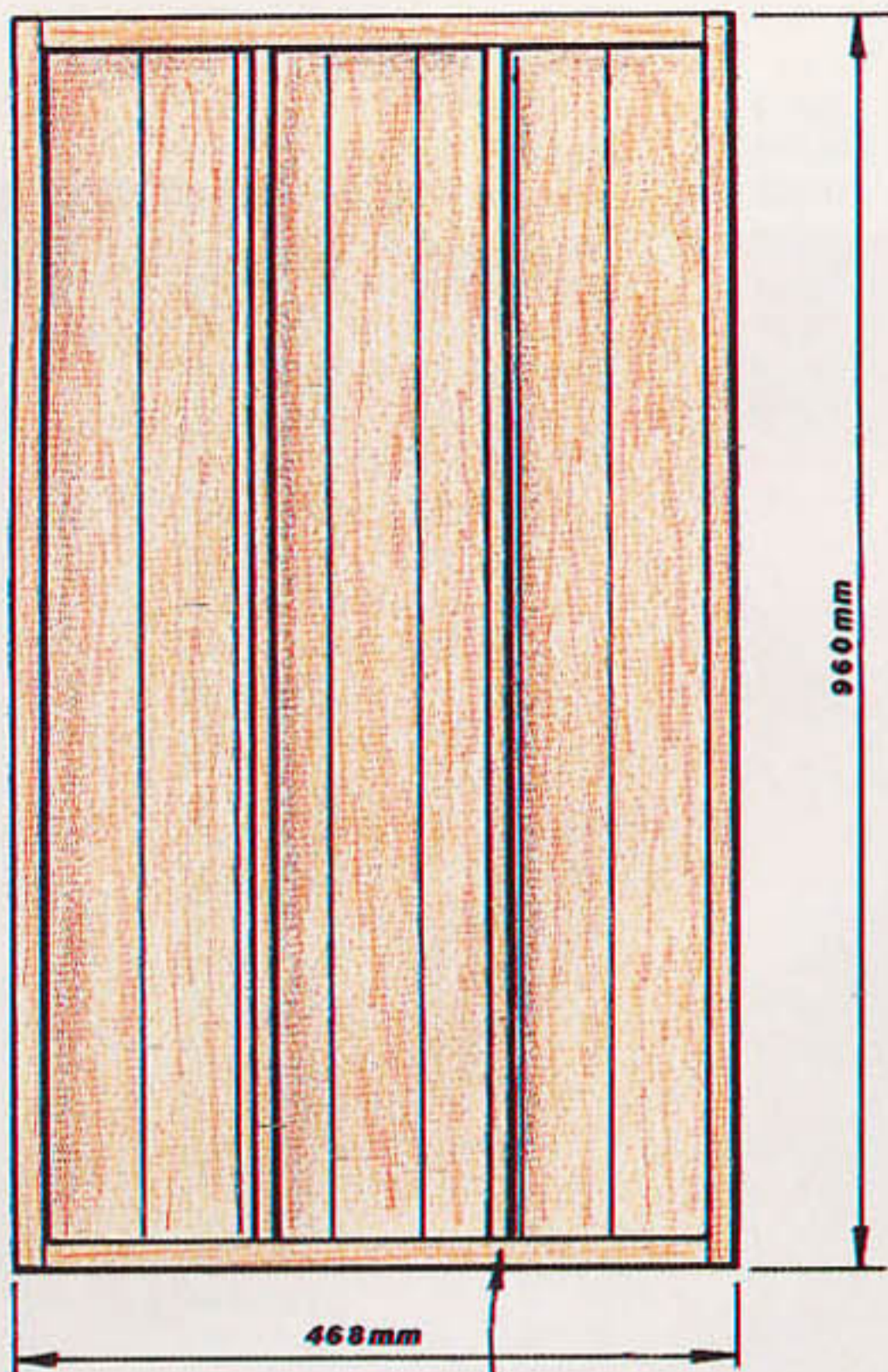
For the top, select two boards with a good grain match, glue them together and finish them to size to give a decorative overhang at the front and the sides. The top has 3.4mm wide, 0.7mm thick black stringing inlaid. I used a 1/4in Elu router with a 3.2mm single flute bit to cut the groove for the inlay in two passes using a side fence. Square the corners with a chisel and, after mitring with a sharp knife, glue the stringing in place. Once dry, cut back using a cabinet scraper to level the stringing with the surface of the top. An ogee moulding can now be routed on the front and sides and the sub-frame screwed underneath to give extra depth. I cut the dentil grooves with the Woodrat at 15mm centres using a very simple jig. The join between the top and sub-frame is concealed behind the dentil moulding.

For contrast, I used maple for the back which was made up of half-lapped boards sitting in a rebated frame. The central horizontal rail allows screws to be driven through into the two vertical dividers to counteract any bowing which would



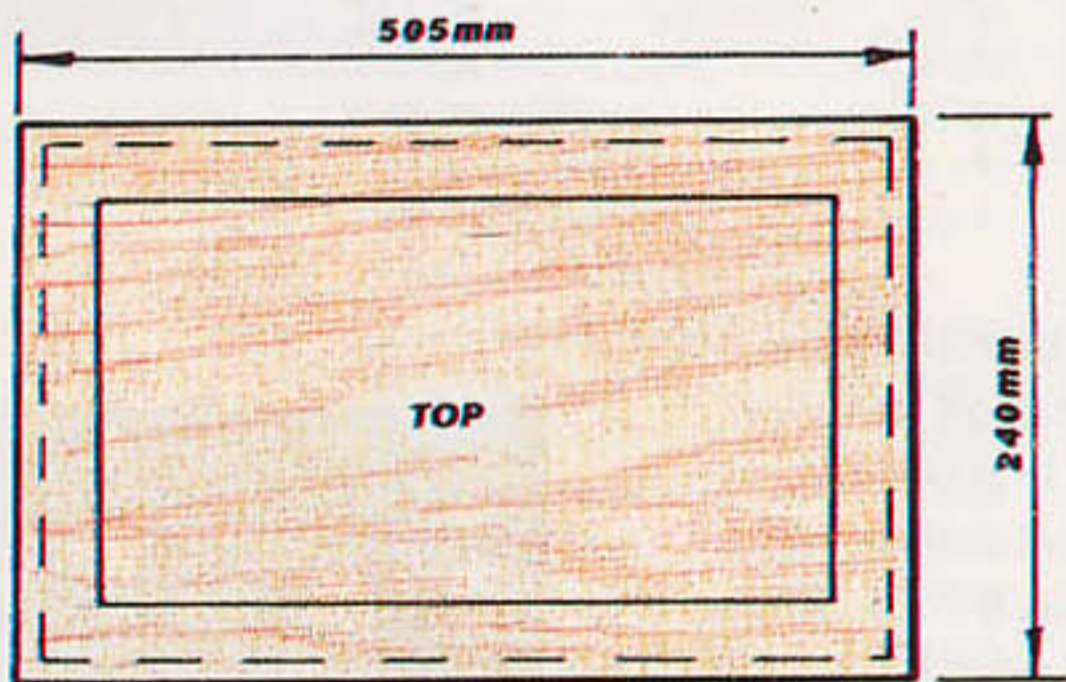
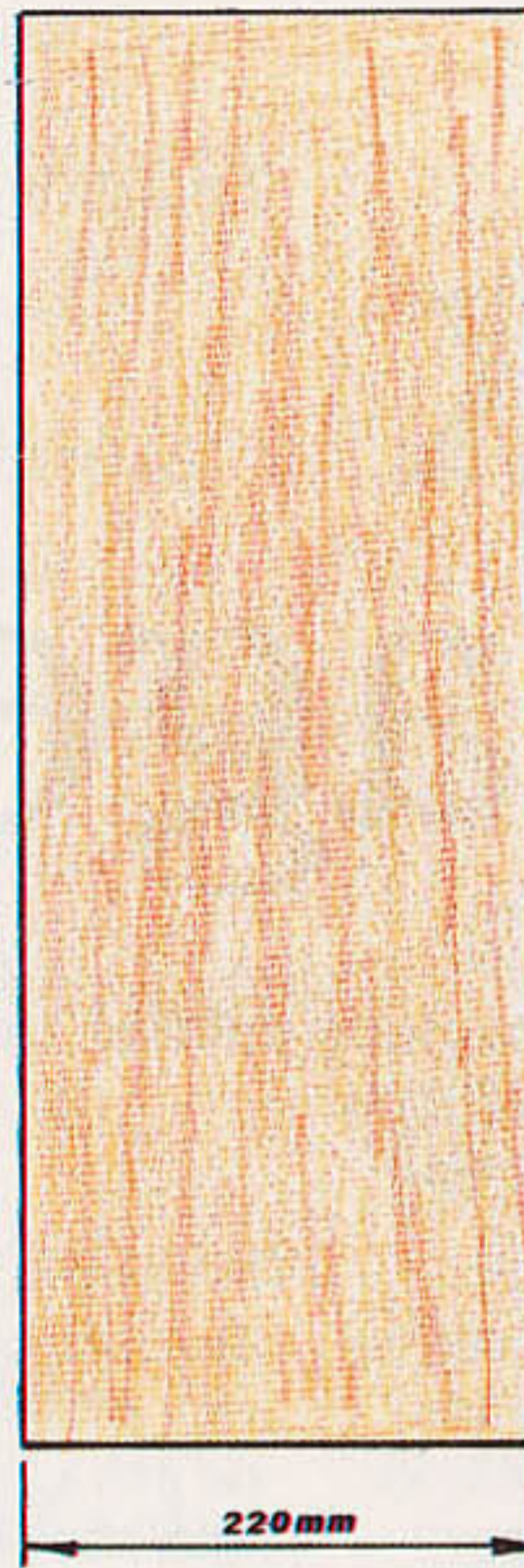
*The inserts can be bought to hold single or double CDs*

Front elevation



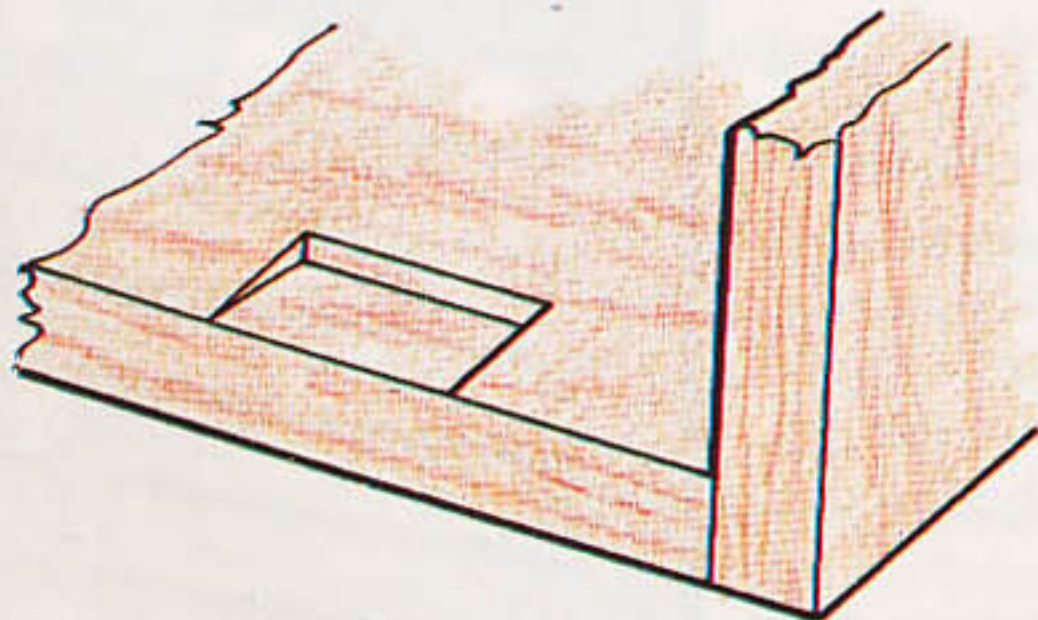
Vertical dividers, 16mm thick, 170mm wide

Side elevation

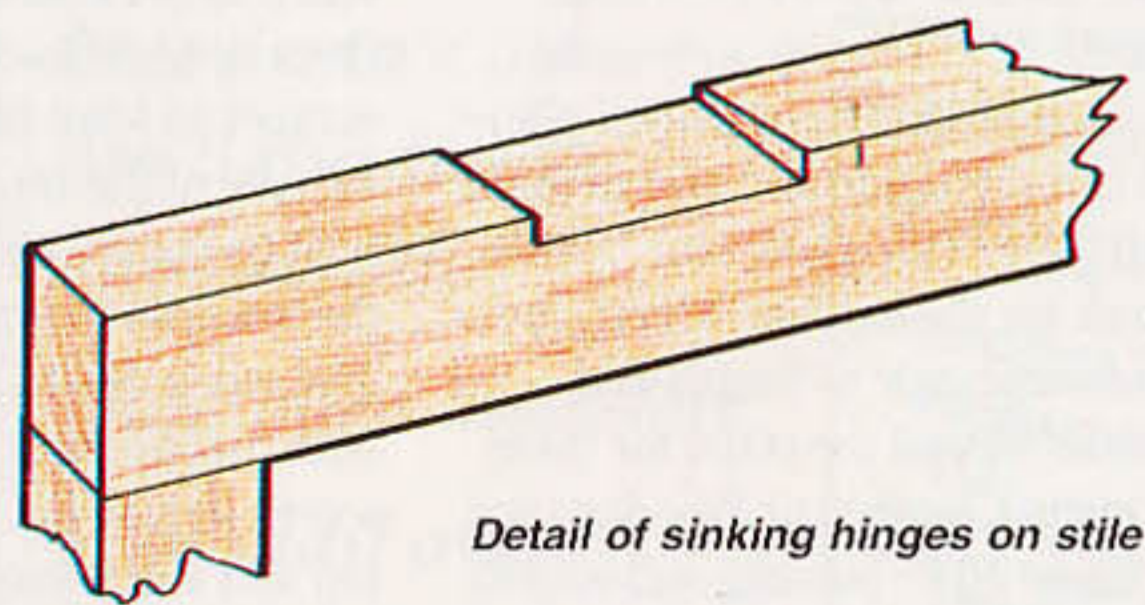


Plinth, 228mm deep

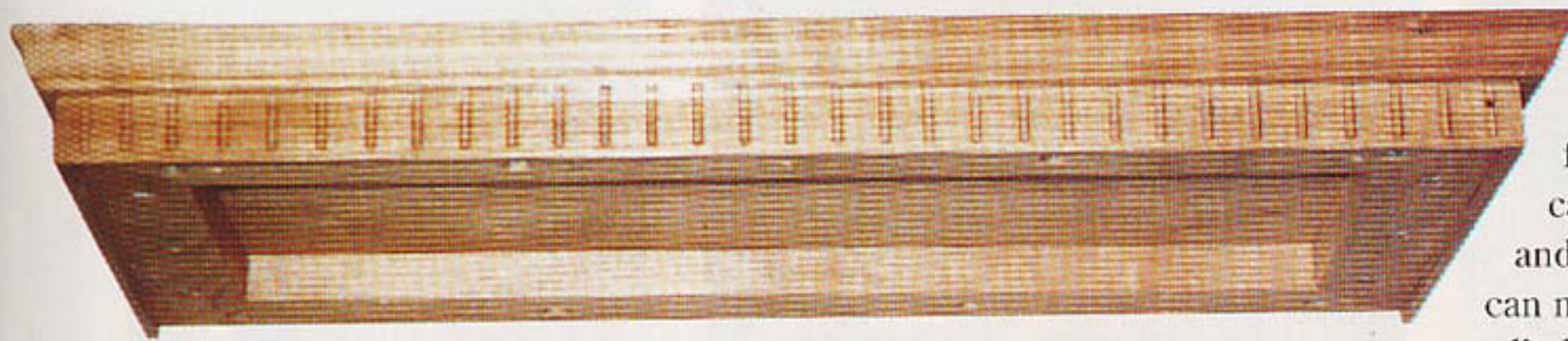
Main carcass, 18mm thick. Door 425mm x 926mm. Top & subframe both 18mm thick



Detail of sinking hinges on carcass



Detail of sinking hinges on stile



**Cornice showing dentil moulding glued in place**

affect the fit of the CDs. The sub-frame was glued to the carcass later.

### **Pre-finishing**

Clean up all components with a cabinet scraper and then sand down using 120, 180 and 240 grit papers. I used an orbital sander, finishing off with a hand block and then polished the carcass interior prior to gluing, carefully masking all the joints.

The finish I chose came about from a one day woodfinishing course I attended with Mark Finney of Sheffield. I used Finpol French polish thinned with 20% methylated spirits and applied with a polisher's mop. This was denibbed with flour paper and cleaned with a tack rag between coats.

I applied five coats to the inside surfaces and the final coat was denibbed with 0000 wire wool. The carcass was then glued together and sash cramped. When this was dry, the dividers were tapped in from the rear with just a dot or two of glue to hold them.

### **Frame & panel**

The door can then be made to fit the opening. Make the components up from

48x20mm stock and cut the profile joints on a spindle moulder. I used a cutter from the Le Ravageur range of door sets from Poolewood.

The front panel was made up from two matching boards. Next, I marked and cut a groove wide enough for two 0.7mm strings on edge which were glued in and cut back. I felt that the resulting 1.4mm inlay on the front balanced well with the 3.4mm inlay on the top.

The panel was then fielded using a Trend vertical panel cutter No. 18/93 mounted in the Woodrat. Several careful

passes were taken, resulting in a nice clean finish.

With the panel inlaid and fielded, the lettering can be carved onto the front; use a V-tool and small No. 3 chisel. The panel can now be sanded and polished (I applied seven coats of Finpol) and then assembled and cramped, checking for squareness and twist. Add a spot of glue centrally, top and bottom, to hold it in place.

When dry, fit the door to the opening and set the hinges in to allow the door to open fully.

This involves sinking the knuckle of the hinge fully in the door frame, but diminishing to the leaf end, to the depth of the leaf (*see drawings*) and vice versa on the carcass.

The hinges were fitted to the door first, and the positions were then transferred to the carcass using a card template.



**The top inlaid with 3.4mm black stringing**



*The plinth is made up from three mitred and moulded sides and a rail across the back. The sub-frame glued inside allows the carcass to be attached with screws from below*

### **Fittings**

I bought a brass lock, escutcheon plate and handle in antiqued brass from Boddy's. However, the escutcheon pins and hinges were bright brass so I used some Tourmaline Black and Jade oil to turn the bright brass fittings a colour which matched the other fittings.

Once the door was hung and all fittings attached and checked, they were all taken off and the cabinet was finished with Finpol. It takes less than 30 minutes to dry, so several coats can be built up quickly. The final coats were again denibbed with 0000 wire wool and then finished with two coats of Finney's Super Wax Polish creating a lovely smooth sheen.

With the components finished, the back-boards and frame can be screwed in place and a screw in each upright



*The back panel is made up from half-lapped boards sitting in a rebated frame. The central horizontal rail allows screws to be driven through into the two vertical dividers to counteract any bowing which would affect the fit of the CDs*

divider driven through from the horizontal rail to check any movement. Screw the top and plinth in place and then fit the door furniture. Now fasten the plastic inserts in place with  $\frac{3}{8}$ in No. 4 brass screws.



*The inserts are easy to install sitting one above the other*

The whole unit could have been narrower from front to back, but I thought the extra depth would add both to appearance and stability.

## **Further information**

Black stringing and brassware from:  
John Boddy's Fine Wood and Tool  
Store, Riverside Sawmills,  
Boroughbridge, North Yorkshire, YO5  
9LJ  
Tel: 01423 322370

For CD plastic insert racks contact:  
Isaac Lord, 185 Desborough Road,  
High Wycombe, Bucks, HP11 2QN  
Tel: 01494 459191/462121

With so many different construction techniques, this project was likely to prove a very challenging - not least because some of these techniques were new to me. I decided to use some mahogany which I had rescued from a rubbish skip; the main problem with using this reclaimed timber, however, was matching the consistency of both the grain and the colour. However, as the intention was to use a wood dye to darken the timber, this last point was easy to overcome.

### Machining the parts

With the timber selected, the next stage was to saw out and then thickness the components. The upright spacers were made in about 2ft lengths for convenience and all the uprights, top spacers, side rails and handle were machined at the same time to ensure they were all exactly the same thickness. When planing the stock for the legs it is essential that they are all exactly square so that, when assembled, the carcass is true. This also assists in the assembly of all 38 small mortise and tenon joints, particularly the top and side rails.

### The deck board

This was made of two pieces of edge-jointed timber, roughly cut to thickness before jointing. When the joint was dry, the board had to be planed by hand, as it was too wide for the planer. Planing large surfaces by hand is no easy task but with a combination of a bench stop and odd scraps of thin timber clamped to the bench, the task was accomplished. After thicknessing, all edges were rounded and then, to remove any planing marks it was sanded on both sides using an orbital sander and finished with a cabinet scraper.

### The legs

Having finished sizing the widths and thicknesses, the next job was to turn the four legs. I find that turning spindles such as these is very satisfying because of the swift progress that can be made. Getting the lengths of the shoulders on each leg the same is more important than sticking rigidly to the drawing dimensions. Of course, any large deviation from drawing



# Regency Canterbury

Using some reclaimed timber, John Cole embarked on the making of a Regency style Canterbury

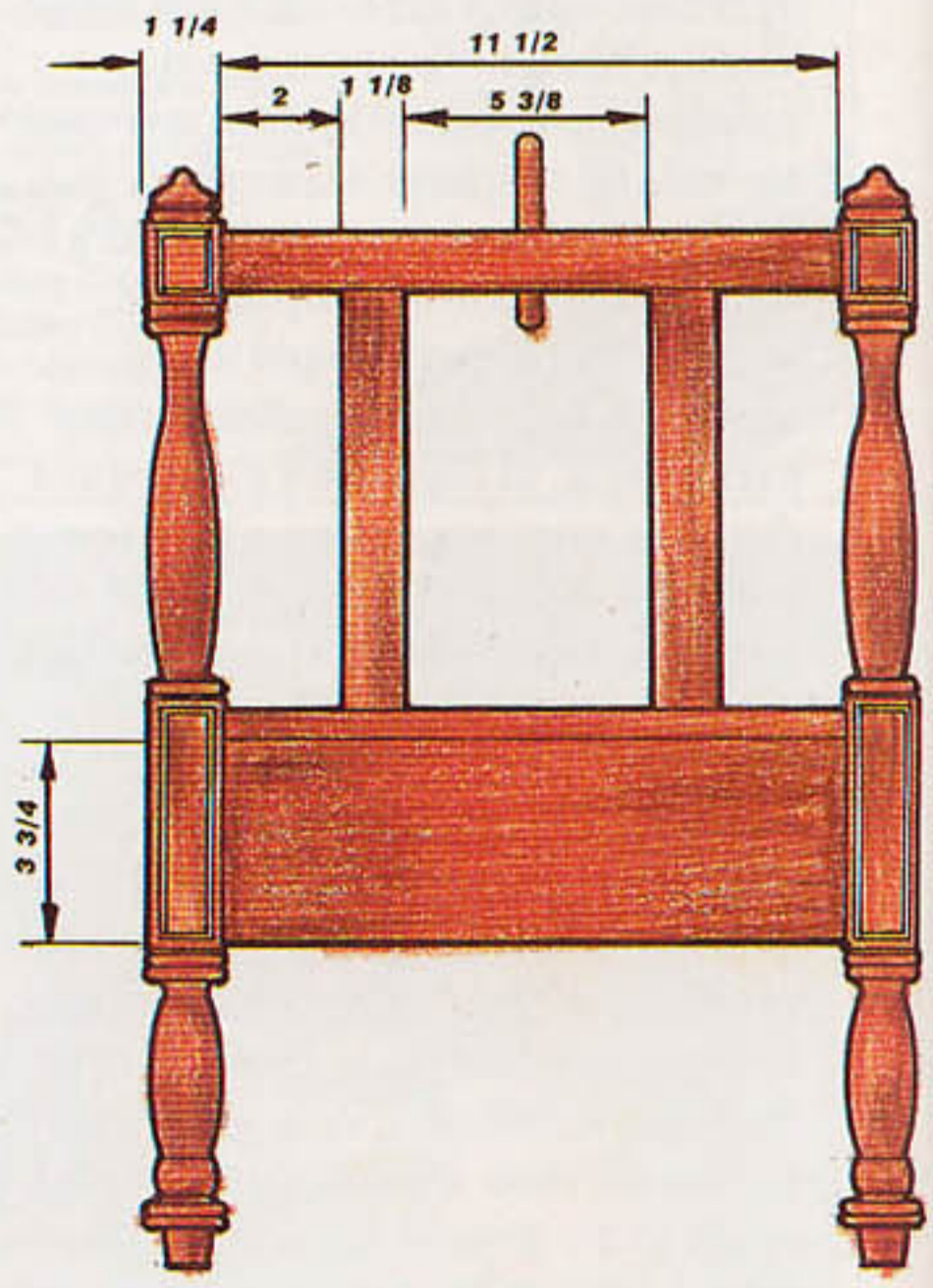
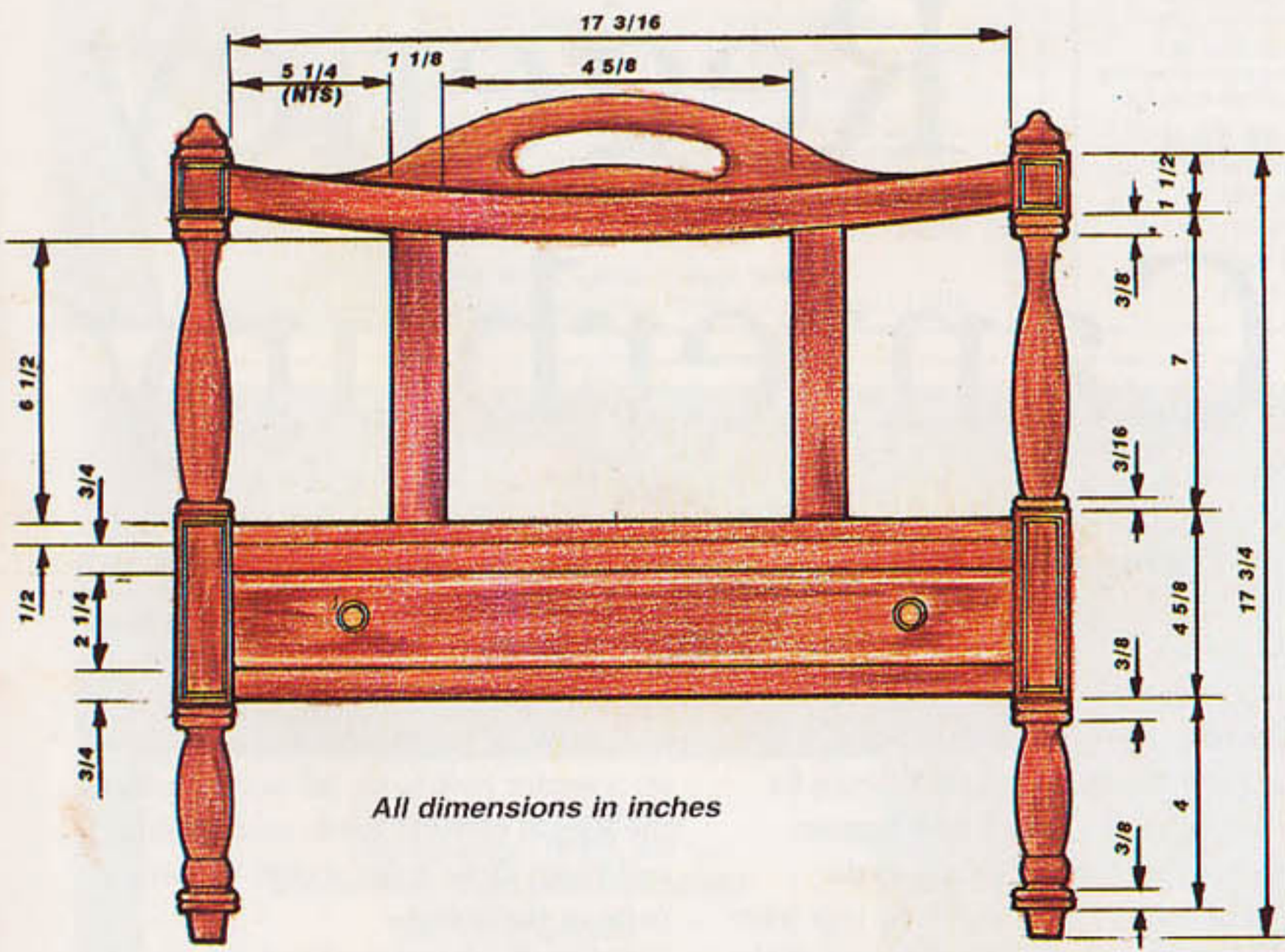
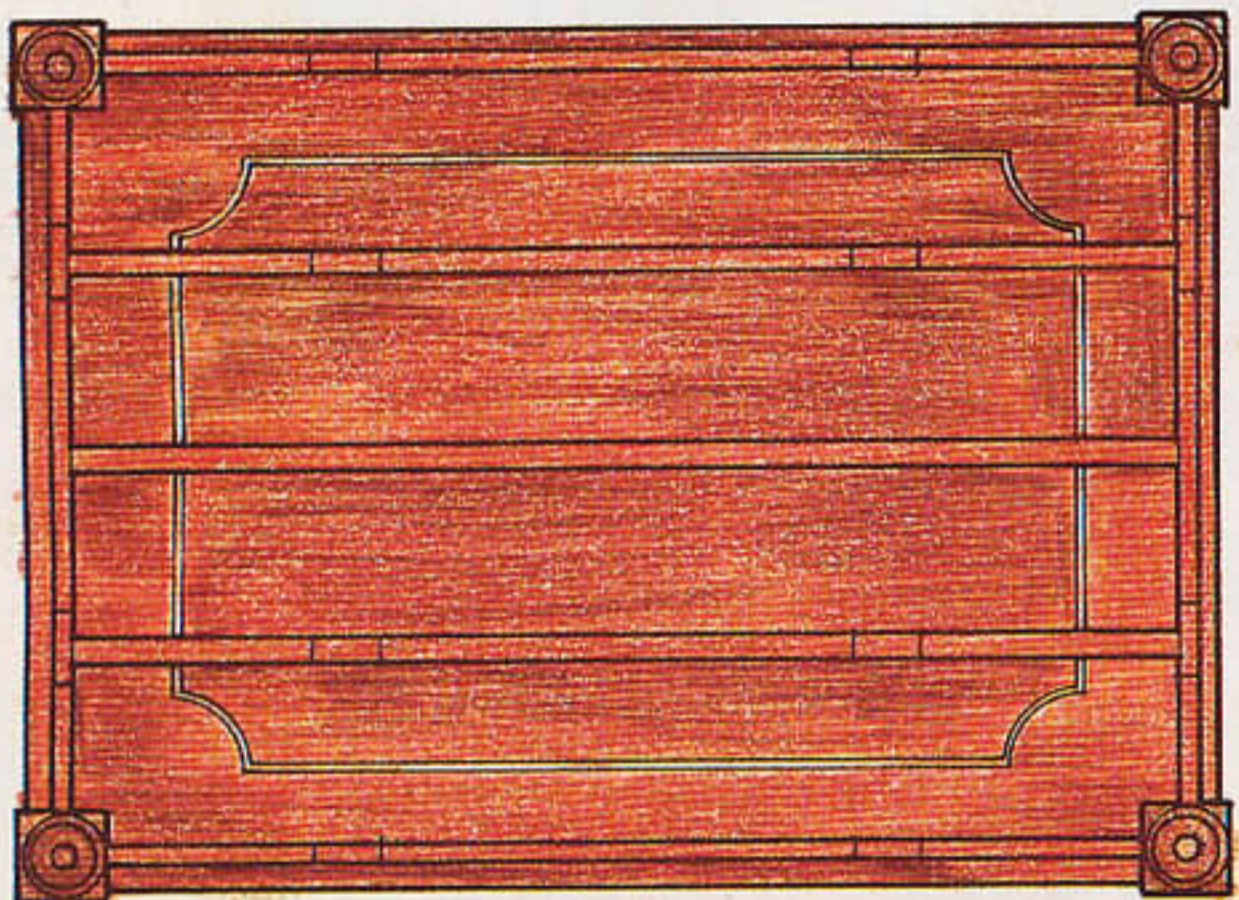
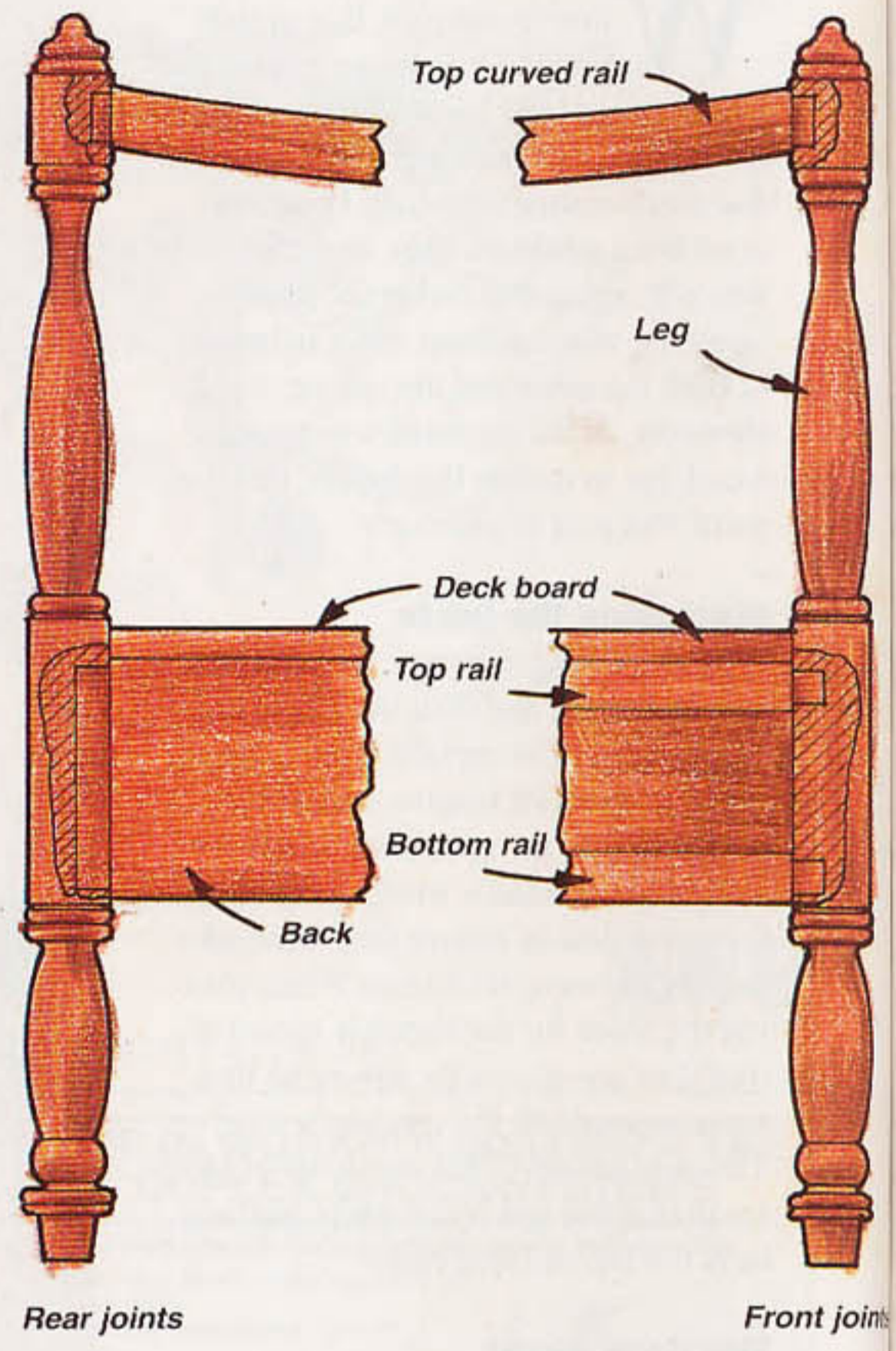
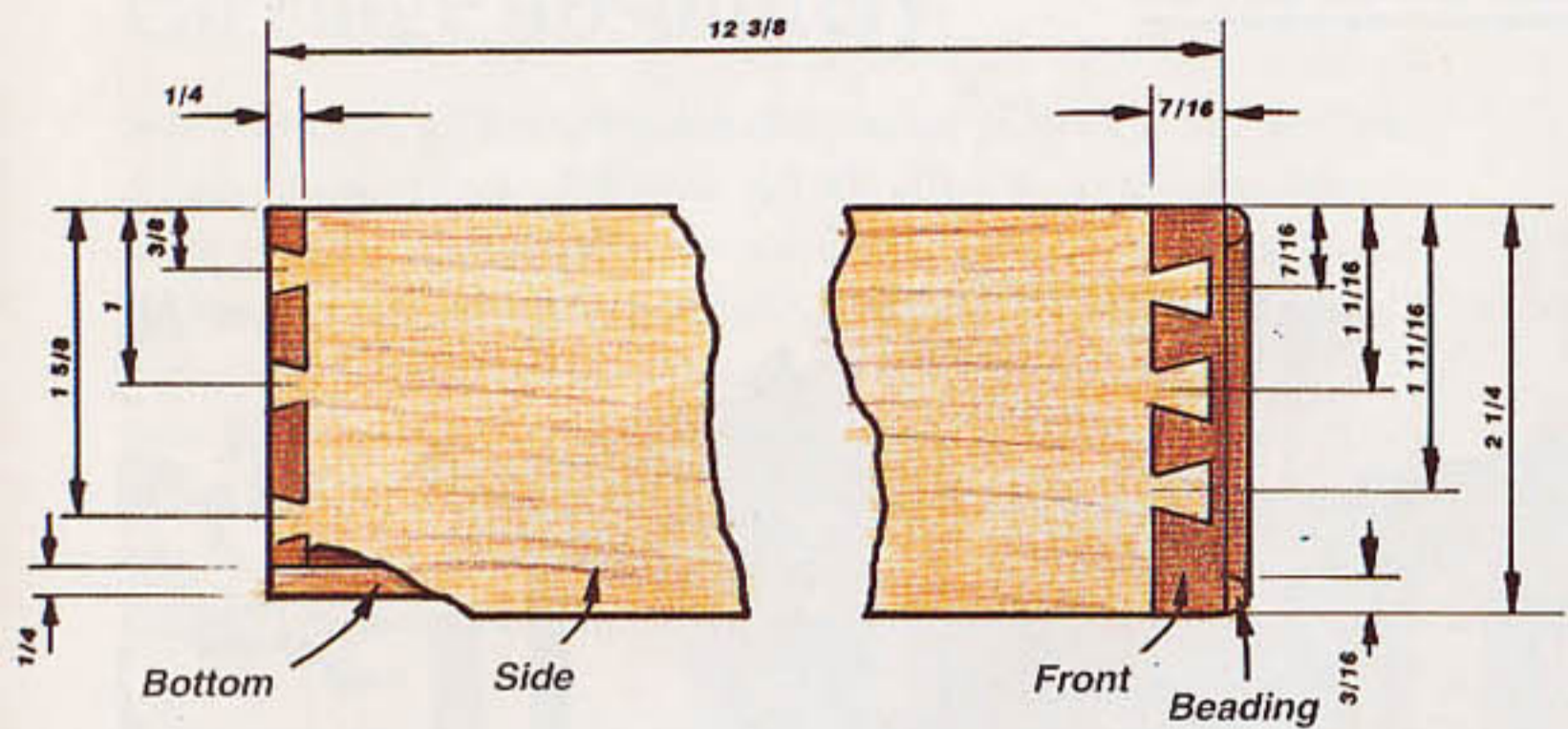
dimensions can put the whole thing out of true, but I still find that I am looking for the last 'few thou.', as no doubt many other enthusiastic woodworkers do.

The finials on the tops of the legs were turned separately and fitted as one of the

last stages of the assembly. This allowed for a centre hole to be left in the ends of the legs to assist in finish sanding and polishing; these holes accept the turned pegs on the finials.

Before finish-turning the bottom ends

# PROJECT





# Cutting list

All sizes in inches. all sizes nominal

\* see text

Item	Quan	Length	Width	Thick
Legs	4	20	1 1/4	1 1/4
Side	2	13	3 3/4	3/4
Back	1	18	3 3/4	3/4
Top rail front	1	18	1	3/4
Bottom rail front	1	18	1	3/4
Deck board	1	20	1 1/4	1/2
Runner	2	12	1 1/4	3/4
Guide	2	12	1 1/4	3/4
Spacer	12	8	1 1/8	5/16
Curved rail	4	18	2 1/2	5/16
Handle	1	18	3 1/2	5/16
Top side rail	2	13	1 1/8	5/16
<b>Drawer</b>				
Front	1	17 1/2	2 1/4	1/2
Side	2	12 1/2	2 1/4	1/4
Back	1	17 1/2	1 7/8	1/4
Bottom	1	17 1/4	12	1/4
Beading	2	17 1/2	1/4	1/8
Beading	2	2 1/4	1/4	1/8
<b>Miscellaneous</b>				
Inlay	90 approx.	boxwood		
Castors	4			
Knobs	2			

of the legs, buy the castors so that the size and shape of the peg on the leg is turned to fit. At this stage, the grain was raised and the legs sanded.

## Cutting the joints

Cut the mortises for the back, sides and the top and bottom drawer rails. I used a 3/8in square drill in a mortise attachment on a bench drill. I'm sure that purists would frown on this and would use a traditional mortise chisel and mallet, but I try to use power tools whenever practica-

ble. They not only save time but, as far as my skills are concerned, they are far more accurate. The mortise attachment was also used to cut the mortises in the top of the legs to take the rail, this time with a 1/4in mortise drill.

## Accurate shoulders

To ensure accuracy of assembly of the large number of small mortises used in this project, it was necessary make certain that the distances between shoulders for all the tenons was as accurate as

possible. To achieve this, the circular saw was set up and all the tenon lengths were cut at the same setting.

The tenons on the curved top rails and handle were cut before shaping so that the shoulders were parallel. After sawing the tenons, the curved rails and the handle were cut on a band saw and finished with a spoke shave. The positions of the 12 mortises in the base board were then marked out and cut with the mortise drill. The joints in the legs for the sides, back, front top and bottom rails were hand finished and the main carcass was then assembled and lightly clamped so that the accuracy could be checked.

Having proved that everything assembled correctly, the four corners of the base board were cut out and it was dropped into position. It was then possible to establish the finished length between the tenon shoulders of all the upright spacers. Although the top tenons of the spacers were initially cut on the circular saw, hand finishing of the lengths was necessary to make sure that the shoulders accurately followed the contours of the curved cross rails.

## Drawer construction

Now that the canterbury had been temporarily assembled, the aperture for the drawer could be accurately measured and the drawer made to suit. Incidentally, I was told by my mentor years ago that, on a well made piece of furniture, it should be possible to close a drawer smoothly by gently pushing on one corner.

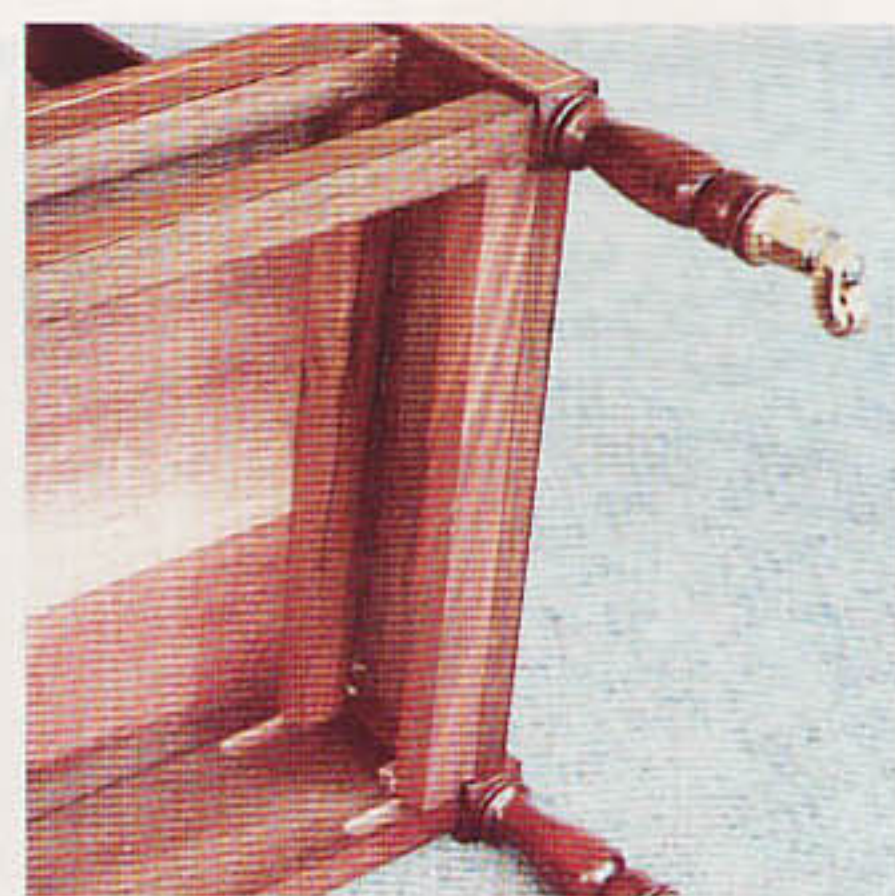
The material for the front obviously had to match the 'near mahogany' of the rest of



*The inlaid detail below the turned finials is boxwood*



*The drawers are of traditional lapped-dovetail construction with oak sides, back and bottom*



*The drawer runners were glued in last with tenons fitted into routed grooves in the back rail*

the piece, but the back, sides and bottom were to be of oak as in the original. This was obtained from an old office desk which was not worth restoring. The back and sides were planed on the thicknesser to  $\frac{1}{4}$ in x  $2\frac{1}{4}$ in and the back to  $\frac{1}{4}$ in x  $1\frac{7}{8}$ in. The bottom had to be planned by hand.

The sides were joined to the front and back by dovetails while the bottom edges of the front and sides were rebated on the circular saw to take the bottom. This was loose fitted and retained by two screws through slots in the back. In theory, this should prevent splitting of the bottom through shrinkage but, as the wood was so old and well seasoned, it was unlikely to do so anyway. The drawer parts were dry assembled and, after testing for fit in the aperture, were glued up.

### **Boxwood inlays**

Having now finished the major construction work, the grooves for the boxwood inlays needed to be cut. As this was something entirely new to me, I had been thinking of the best way to approach the task. I set up the router table on the Triton saw bench and clamped stops accurately to the table. After carefully practising on scrap pieces of timber, the first proper cut was made. After this the rest of the grooves were machined with no trouble.

In fact, the legs were fairly straight-forward, as the inlays were set in rectangular shapes, so the only hand work needed

**‘On a well made piece of furniture, it should be possible to close a drawer smoothly by pushing one corner.’**

was to square off the rounded ends of the cuts. The deck board was a different matter. The straight cuts were easy enough, as these were routed, but each corner had a 1in radius. To cut these grooves I sharpened one leg of a pair of small engineer’s dividers to a knife point and to protect the surface from the divider point, a thin scrap of wood was stuck to the surface with double sided tape. The inner and outer radii were then scribed to depth. To remove the waste from the groove, I used a very narrow chisel made from an instrument screwdriver. This stayed sharp for a surprisingly long time and proved to be very successful.

### **Staining and polishing**

Due to the nature of the piece, with its many small parts, I decided that all staining and polishing should be done before assembly. The boxwood inlay was fitted after polishing in order to keep the contrast between the light and dark woods as great as possible. I used proprietary wood dye, brown mahogany, then grain filler followed by about four coats of well thinned satin varnish (sanded between each coat) until a good finish was obtained. I opted

for varnish in preference to French polish because of its ease of application, its durability and resistance to wear.

The inlay was then glued into the grooves which were machined slightly shallow to allow for finishing. This was done using a very sharp chisel laid flat on the finished surfaces, and very carefully paring the inlay down. To ensure that the polished surfaces were not damaged, final sanding was done using 1200 grit wet and dry paper used dry.

### **Final assembly**

The sides and legs were then glued together and clamped. When these sub-assemblies were dry, the back, top and bottom rails were glued and loosely assembled to the ends. The base board was dropped in and the handle, upright spacers etc., were fitted. The whole assembly was then clamped together.

One of the last operations was to sand the sides of the drawer as necessary, to ensure that it was a nice easy fit. Round-edged stock, which had also previously been finished, was then glued to the drawer front edges.

The last part of the construction was to glue in drawer runners which were then waxed, as were the drawer sides, to ensure a good sliding fit.

The finials were glued into the tops of the legs, castors screwed into place and the brass knobs fitted to the front of the drawer. A final coat of satin varnish was applied and then a light coating of wax when the varnish was fully dry.

# Georgian wine table

**Arthur Cross shows how to make a classic tripod wine table in mahogany with carved detail**

**T**ripod tables of various shapes and sizes have been around since furniture was first made. My favourites are the delicate tea and wine tables of the latter half of the eighteenth century which, when not in use, would have been placed between larger pieces of furniture to give some visual balance in the room.

It was usual in our workshop to make these from offcuts during slack periods; this task was usually the responsibility of myself and the other cabinetmaking apprentice Len Ward. Our senior craftsmen, I believe, regarded these small items as a bit beneath them! However, we didn't complain; they were more interesting to make than the utility furniture which was our main product at the time.

There was also a restoration side to

our business and, over a long period of time, we collected a considerable amount of old timber. Some pieces of Jamaican mahogany caught my eye; this was the first mahogany to be imported into this country in the first part of the eighteenth century. Being hard and stable, it was ideal for table tops and carving, as its rather plain grain has none of the flamboyance of Cuban and some Honduras mahogany. It is also relatively heavy, an important factor in tall, slim tables. A light-weight timber could be used but the feet would have to protrude further out, making the table more vulnerable to passing feet. One problem I did have was that there was nothing suitable for the spindle but was able to get hold of some Brazilian mahogany instead.

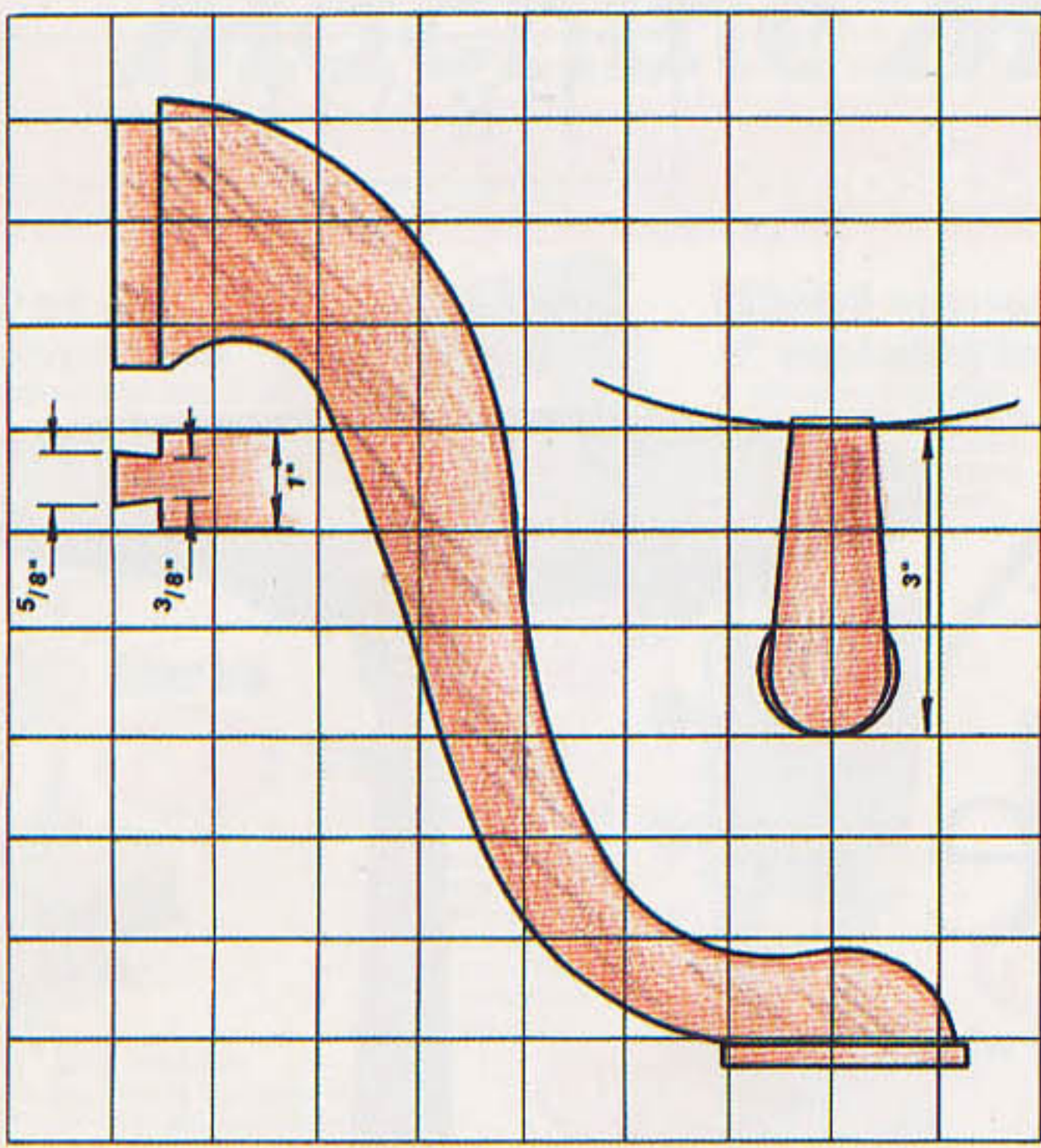


## The top

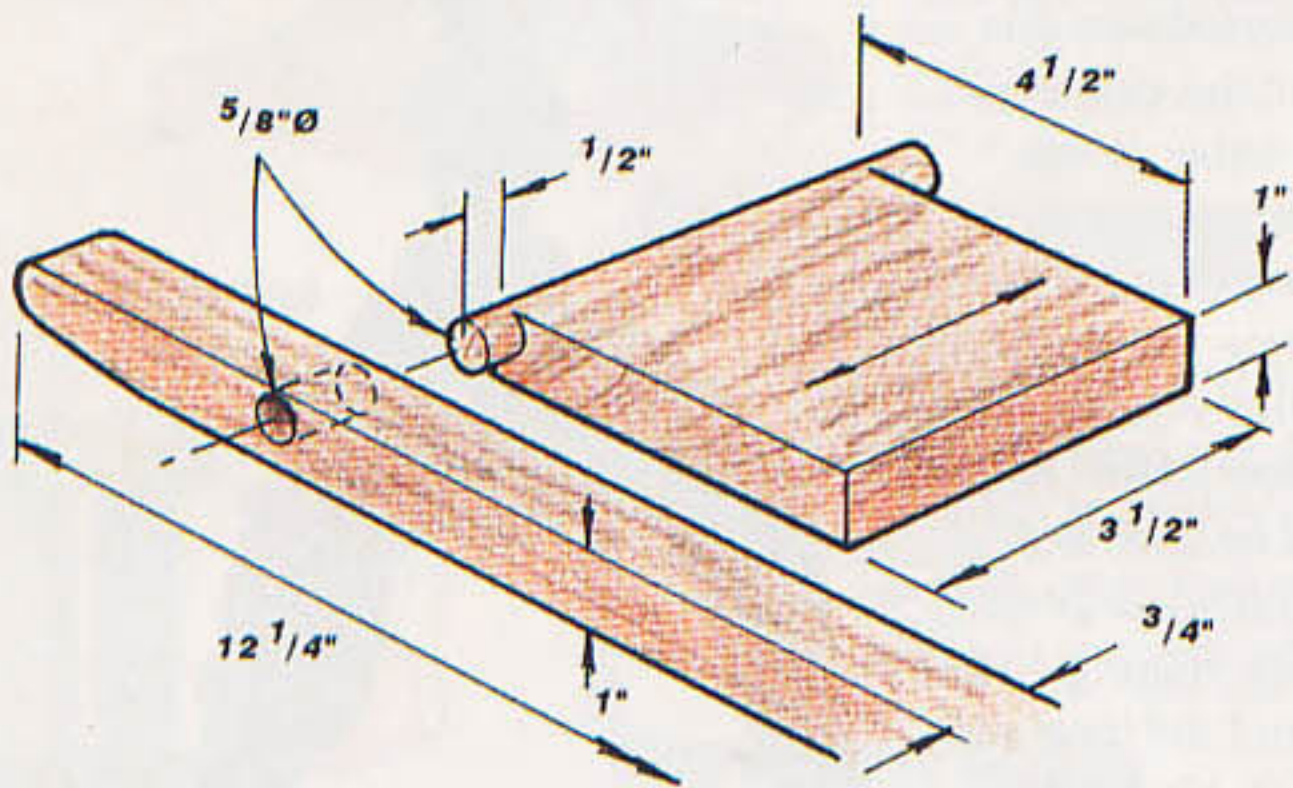
Unless you are fortunate to have a piece of mahogany 14in square, you will need to glue two pieces (14x7x $\frac{3}{4}$ in) together to make up the width. Draw on the inner and outer circles and use a template to draw on the carved detail. Now use a router with flat-bottomed cutter and skis (see issue 6) to reduce the level inside the inner circle by  $\frac{1}{8}$ in. If you don't have a router, drill  $\frac{1}{8}$ in deep holes across the top to remove most of the waste (within  $\frac{3}{8}$ in of the inner ring) and then flatten out with a sharp chisel; working across



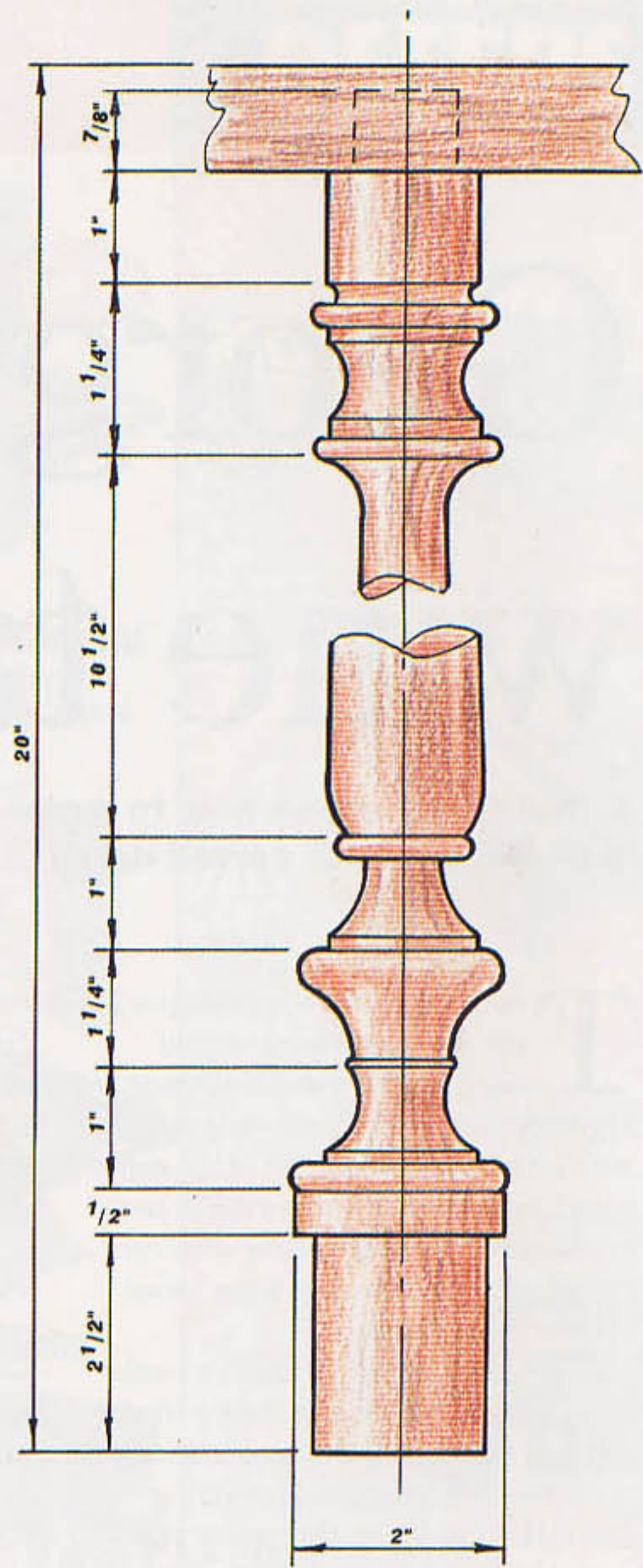
*The top has four 'C' scroll carvings, but could alternatively have three*



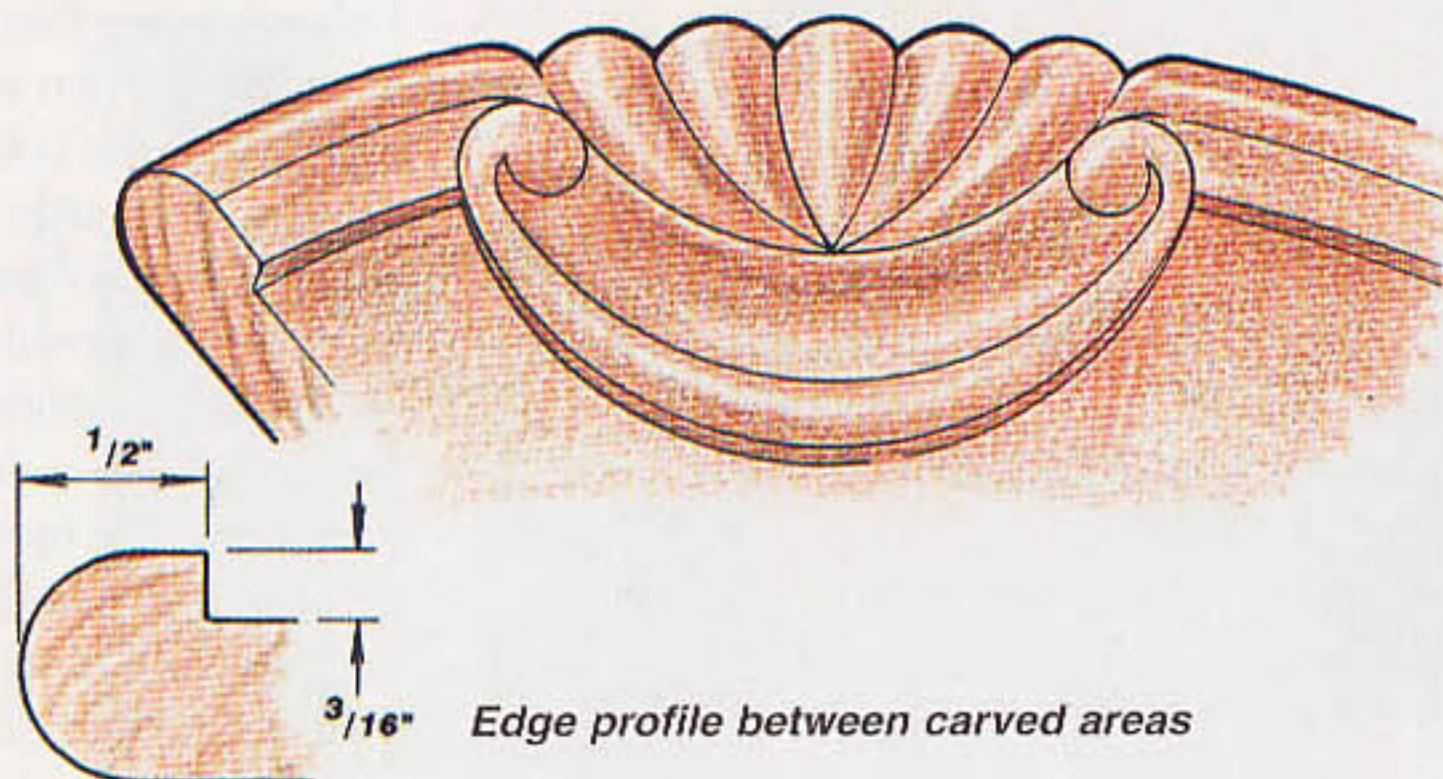
1 in squares



Shape pegs at one end of the block which will pivot in 5/8 in holes drilled into the bearers



Before starting on the turning of the spindle, cut the dovetail housings for the legs



Carve the 'C' scroll first followed by the gadrooning using a 1/4 in straight chisel and a fine file.



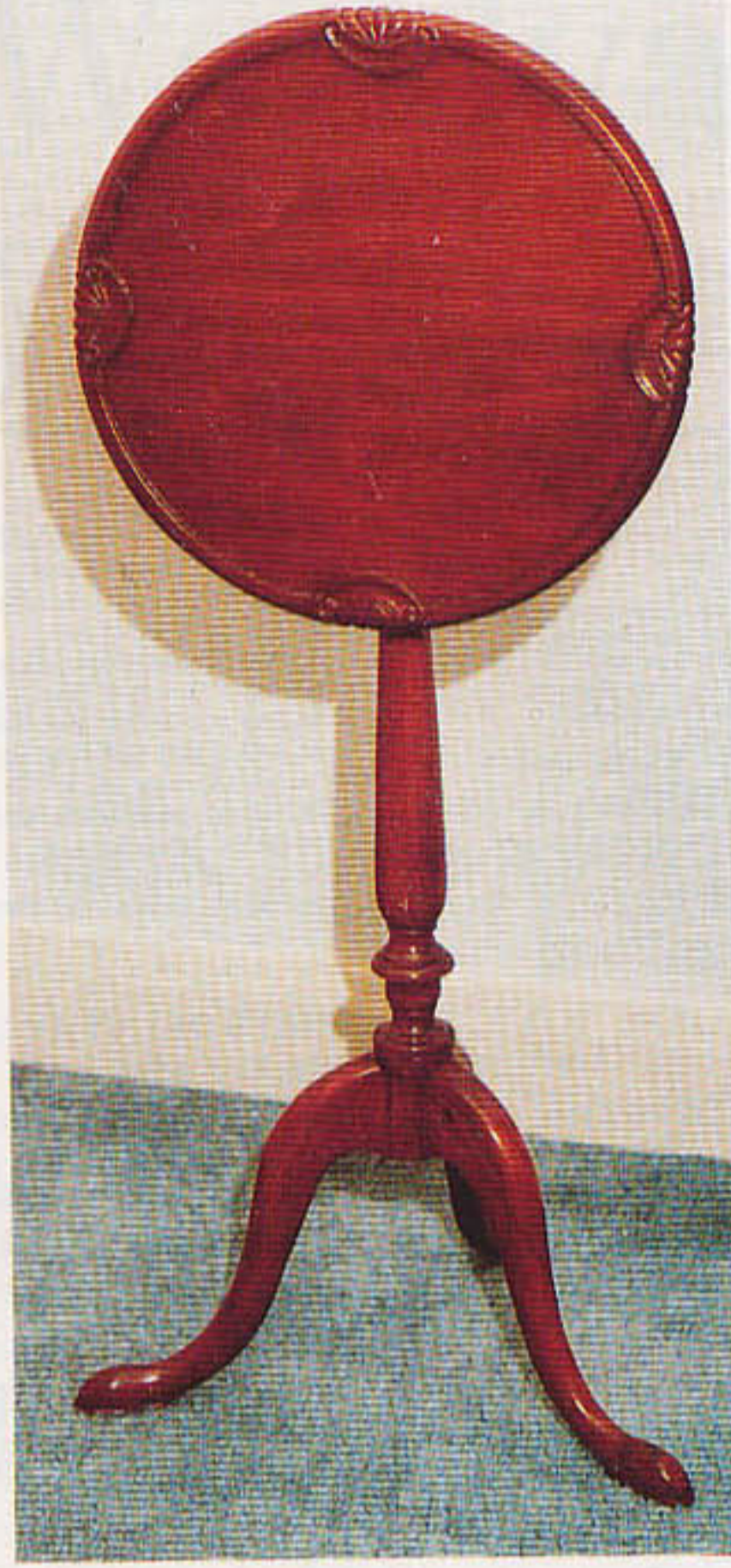
*The bearers are attached across the grain to counteract any tendency for warping*

the grain is best, but resist the temptation to remove it in one go as you could suffer break-out. I found that a plane iron was ideal for final levelling off.

Use a carving gouge to remove the remaining waste up to the edge of the inner ring. It's best to pare this away a little at a time rather than use a mallet. Carve the shallow 'C' scroll followed by the gadrooning using a 1/4in straight chisel and a fine file. Chamfer the outside of the top edge using a spokeshave.

### **Bearers and block**

It's a good idea to make bearers and a block to combat any tendency for warping. Shape the joints and fit the two bearers under the top across the grain with slotted screw holes to allow for any subsequent movement of the top. Traditionally, these parts were made of ash, but any suitable hardwood will do.



*When the table is not in use the top is folded down for decorative display*

### **Spindle & legs**

When cutting out the legs, make sure that the grain runs more-or-less in line with the curves to avoid splitting. It's my usual practice to make the dovetails in the spindle first before any further turning is done as it's easier to hold in the vice in this state.

I made the legs with a slightly tapering dovetail cut by hand. Fitting requires care and a steady hand; pare away the inside of the shoulder slightly to ensure a good fit but if you think this may be a bit too complicated there is an alternative; plane or file flats on the base to the width of the feet and then make the dovetail housings.

If you should end up with a loose fit, a piece of veneer glued onto the pin should cure the problem. The feet are glued up using one of the gap filling epoxy adhesives.

### **Finishing**

After everything has been sanded I gave the table a coat of linseed oil. Well rubbed in, this will reveal any lighter parts that require staining. In my case it was the lighter Brazilian mahogany base that needed attention but spirit mahogany stain with a few drops of black mixed in brought all to a uniform colour. A satin alcohol-resistant lacquer slightly thinned out was applied using a french polisher's rubber, cutting back every few coats. The top, the only part to receive constant wear, was given ten coats. Allow a couple of days to harden and then go over the piece with fine wire wool, finally burnishing with Liberon burnishing cream.

The only thing left to fit is the small banjo catch. If your local hardware store directs you to a shop selling musical instruments you have a problem. The suppliers listed may be able to help with some of the harder-to-find items. Incidentally, banjo catches are also known as round button catches.

## **Suppliers**

H. E. Savill, 9 St Martins Place, Scarborough, N Yorks. YO11 2QH. Tel: 01723 373032

The Art Veneer Co Ltd, Chiswick Avenue Industrial Estate, Mildenhall, Suffolk. Tel: 01638 712550

John Boddy's Fine Wood and Tool Store, Riverside Sawmills, Boroughbridge, N. Yorks. YO5 9LJ. Tel: 01423 322370

Isaac Lord, Unit 5 Desborough Park Road, High Wycombe, Bucks. Tel: 01494 459191

Romany Tyzack, 52 Camden High Street, London NW1 0LT. Tel: 0171 387 2579

If you wish to obtain carving gouges to suit, a template made from card giving the amount of dish required should be sent with your order. If you already have carving tools but not the ones suggested here, you can always alter the design to fit.

The nearest I could find to the antique carving tools I used are:

Henry Taylor pattern Shape 03. 25mm, Shape 05. 22mm, Shape 06. 22mm, Shape 06. 5mm, Shape 11.5mm, Shape 08. 5mm, Shape 07. 8mm.