



## Writing Desk

Written and constructed by Craig Tilley

This elegant writing desk was designed by Jason Hindes & Scott Zellar for Worldskills Australia. Construction was a requirement for their 2001 National Cabinetmaking Competition.

Everyone needs a desk if for no other reason than it gets you off the kitchen table and creates your own place to write or to do the household accounts. This plan utilises biscuit and rebate joints and incorporates a clever liftable writing slope with adjustable tilt angle.

Tassie oak or any other suitable hardwood can be used for the desk frame. The panels are veneered board and the dark timber highlights are made from jarrah. The drawer fronts feature decorative finger joints. Of course, the desk top can be made in one piece and the writing slope omitted if so desired.

### Component Specifications

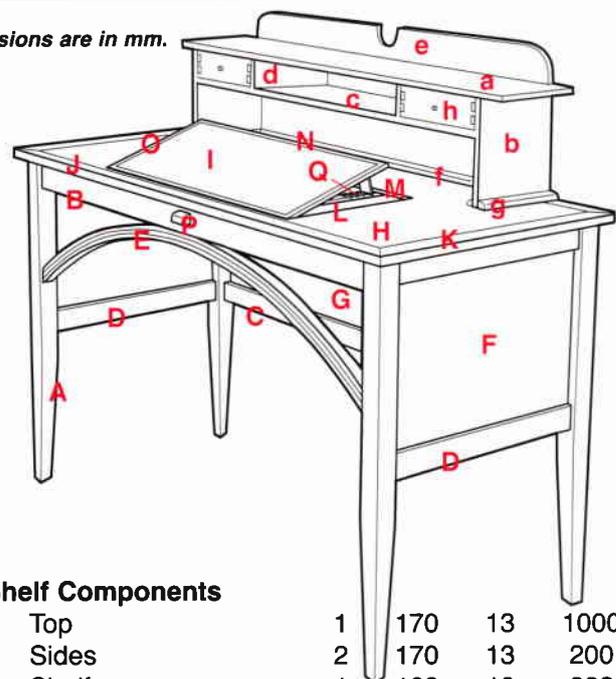
All dimensions are in mm.

Part	Description	Quantity	Width	Thickness	Length
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#### Desk Components

A	Legs	4	42	42	740
B	Front rail	1	60	20	1080
C	Back rails	2	42	20	1080
D	Side rails	4	42	20	430
E	Curved rails	5	30	4	1400
F	Side panels	2	310	5	440
G	Back panel	1	310	5	1090
H	Desk top	1	470	19	1120
I	Writing slope*	1	260	19	550
J	Desk outer edges	2	42	20	1204
K	Desk outer edges	2	42	20	554
L	Desk inner edges	2	19	5	300
M	Desk inner edge	1	19	5	600
N	Slope edges	2	19	20	588
O	Slope edges	2	19	20	298
P	Push rail	1	60	20	420
Q	Stretcher rails	2	42	20	450
R	Trestle legs	2	42	20	160
S	Trestle	1	42	20	320
T	Location block	1	65	20	200
U	Wedge	1	42	10	20
V	Attachment cleats	6	20	20	120

\* Writing slope is cut out of part H, Desk top.



#### Shelf Components

a	Top	1	170	13	1000
b	Sides	2	170	13	200
c	Shelf	1	162	13	882
d	Divider	2	155	13	70
e	Back	1	275	13	890
f	Base foot	1	42	20	928
g	Base feet	2	42	20	182
h	Drawer fronts	2	60	20	200
i	Drawer sides	4	60	20	155
j	Drawer backs	2	42	20	160
k	Drawer bottoms	2	170	5	140

### Tool Requirements

**1. ESSENTIAL:** Triton Workcentre with power saw, Triton Router Table, Triton Biscuit Joiner, router, jigsaw, bar or pipe clamps, electric drill and drill bits, hammer, tape measure, try square, hand saw, screwdriver, steel rule, glue brush, sanding block & sandpaper sheets, dust mask, eye goggles, ear muffs, pencil, C or F clamps, chisel, mallet.

**2. USEFUL:** Triton Sliding Extension Table, Triton Multi-stand(s), Triton Dust Bag, Triton Random Orbital Sander & sanding discs, taper ripping guide, power plane, Triton Jigsaw Kit, Triton Finger Jointer Kit.

# Construction details

## Material Shopping List

### 1. WOOD

Tassie Oak veneered particle board or MDF  
19 mm - 1 @ 2400 x 1200 (8' x 4') for desk top.  
13 mm - 1 @ 2400 x 1200 (8' x 4') for shelf parts.  
5 mm - 1 @ 2400 x 1200 (8' x 4') for side and back panels & drawer bottoms.

### Hardwood (Tassie Oak)

42 x 42 - 3 @ 1.8 m for legs and 4 curved rails  
42 x 20 - 7 @ 1.8 m for rails, edges, trestle, attachment cleats, base feet & drawer backs.  
65 x 20 - 1 @ 2.4 m for front rail, location block & drawer sides.

### Jarrah

42 x 20 2 @ 1.8 m for slope edges & curved rail  
65 x 20 1 @ 1.2 m for push rail & drawer fronts

### 2. FASTENING

Triton wood glue, Triton biscuits (49), woodscrews:  
30 mm x 8G (36), 40 mm x 8G (2), 8 mm dowels (2),  
20 mm flat head nails (4).

### 3. OTHER

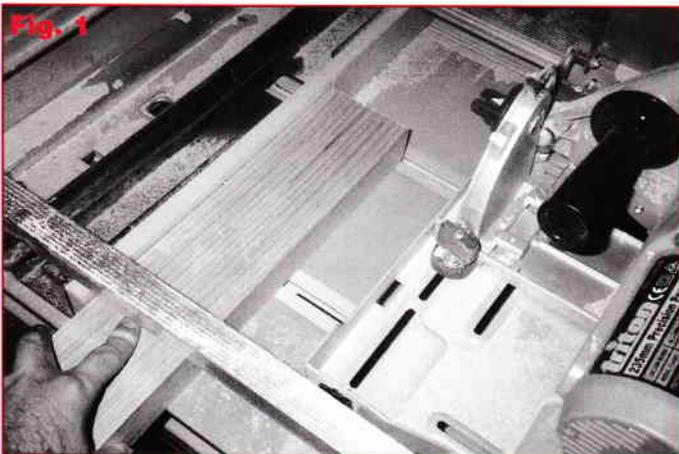
Drawer handles (2) of your choice with fitting screws,  
masking tape, 4 x hinges 50 x 16 mm and fixing screws.

### 4. FINISHING

Estopol of your choice.

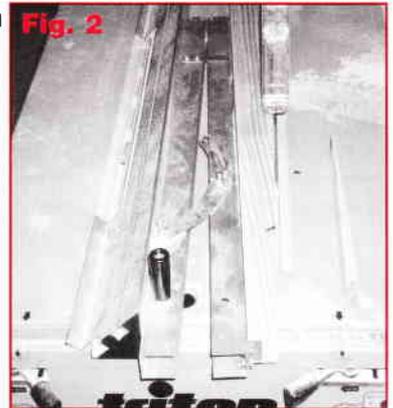
## The Desk

Cut the four legs (A) to length on the Workcentre in crosscut mode, cutting them in pairs if possible to ensure they are identical in length (Fig. 1).

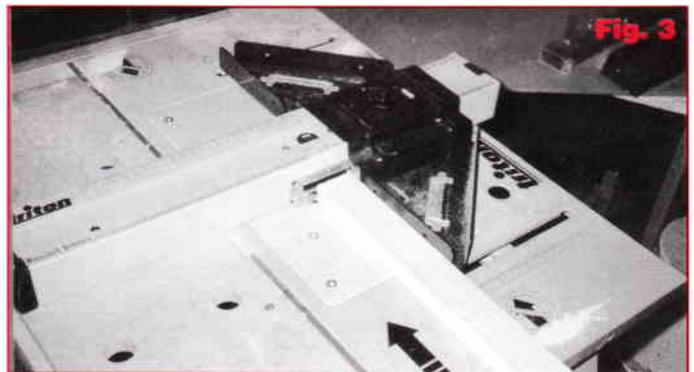


Cut two tapers on adjoining inside faces of all four legs. Do this by using the Workcentre in table saw mode and a taper ripping guide if you have one (Fig. 2). If you don't, make one up as shown in the Workcentre Operating Manual.

The tapers start 300 mm up from the bottom of the leg and are cut at an angle of 3.5 degrees. Cutting the tapers correctly should leave a 25 x 25 mm square at the bottom of each leg.



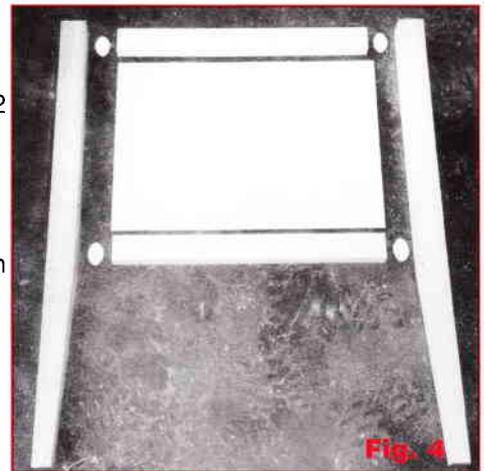
2 Cut the front (B), back (C) and side rails (D) to length on the Workcentre in crosscut mode, keeping them in pairs like the legs.



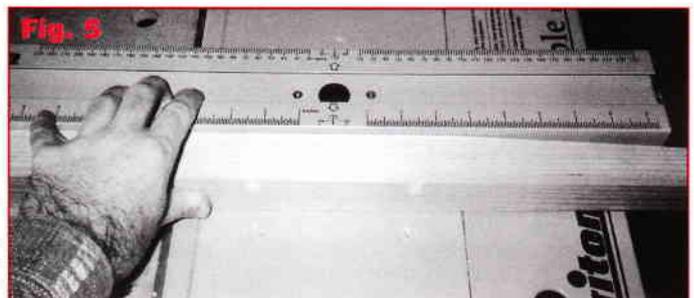
Rip the front rail to 60 mm wide. Mark and cut biscuit slots centrally in the end of each rail (Fig. 3).

3 Mark and cut matching biscuit slots in the centre of the inside faces of the legs (Fig. 4).

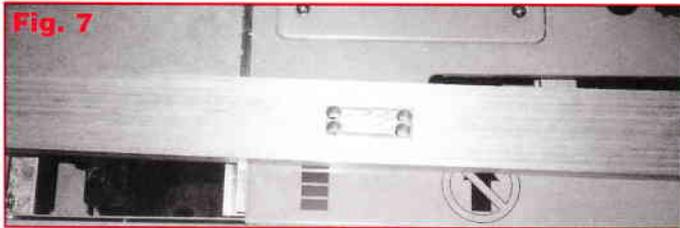
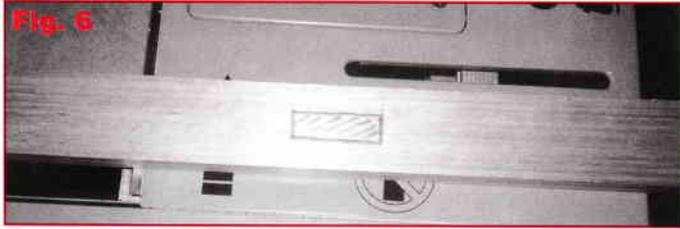
There will be a biscuit joint at the top for the 42 mm wide top rail (60 mm for the front rail), then a space of 300 mm for the 5 mm thick panels, then another biscuit joint for the 42 mm wide lower rail (Fig. 5).



The front legs have only one biscuit joint at the inside top for the front rail.



**4** Cut the slot for the push rail in the front rail (**Fig. 6**) by drilling out the corners (**Fig. 7**) and then joining up the holes with a jigsaw to produce a rectangular cut out 60 x 20 mm, in the centre of the front rail.



**5** Cut the 5 mm deep and 5 mm wide rebates in the centre of the side and back rails for the side and back panels to fit into.

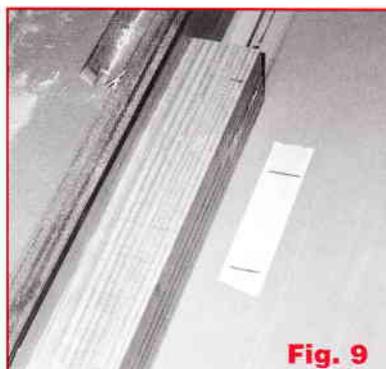
Make these cuts by either passing them through the saw on the Workcentre in table saw mode or use a 5 mm router bit and make the cuts on the Router table.

If you are using the saw method, lower the blade to 5mm, make one pass, then adjust the fence slightly and cut again to make up the 5mm width (**Fig. 8**).

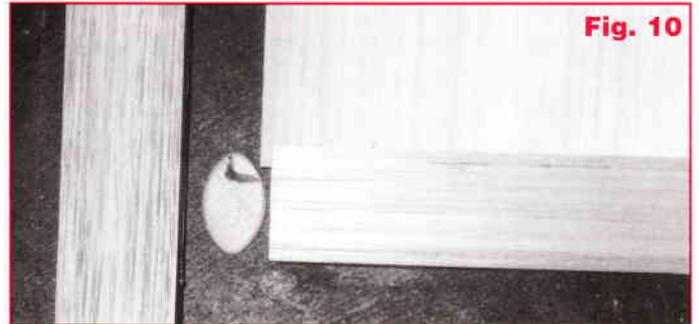


**6** Cut the same sort of rebates in the legs but this time the rebates should stop at the biscuit joints.

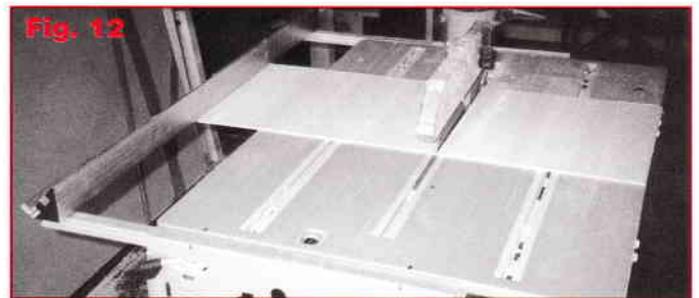
Plunge cut for the top of the rebate then run the cut down until reaching the bottom biscuit slot. A strip of masking tape stuck to the Workcentre table top next to the saw blade, will mark where the saw blade starts and finishes (**Fig. 9**).



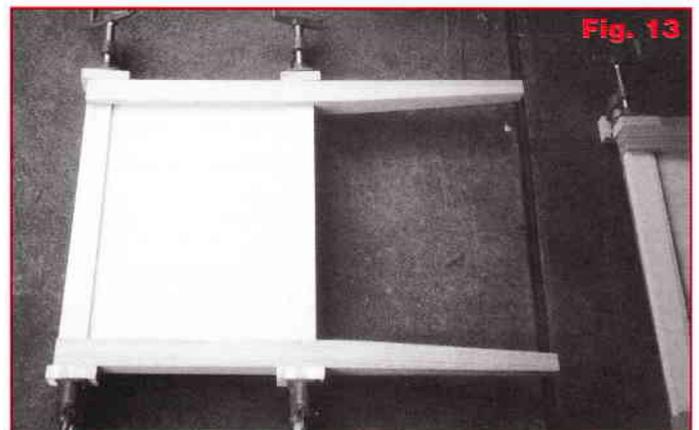
Running the rebates into the biscuit slots won't matter. In fact, the ends of the biscuits next to the 5 mm thick panels will need to be trimmed down slightly so they don't get in the way of the panels when they are inserted into their rebates (**Fig. 10**).



**7** Cut the side panels (**F**) and back panel (**G**) to size on the Workcentre in table saw mode using the fence to guide the panels as they are cut (**Figs. 11 & 12**).



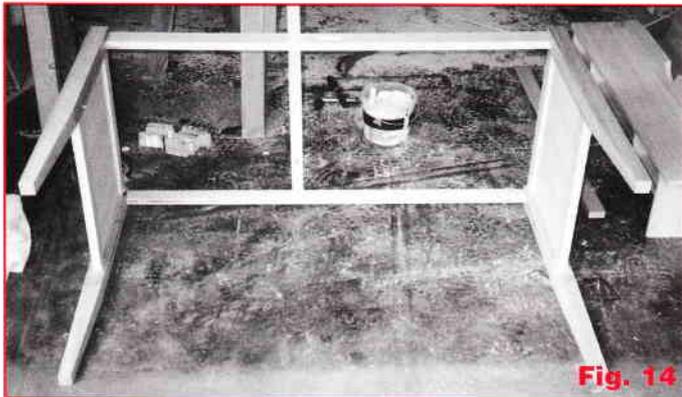
**8** Dry assemble two side rails, two legs and a side panel and test that it all fits together okay before dismantling and reassembling with glue.



Clamp this side assembly together with two bar or pipe clamps (**Fig. 13**). Repeat for the other side of the desk.

**9** When the two side assemblies are dry, remove the clamps and dry assemble the remaining front and back rails between the two end assemblies.

Measure between the top front and back rails and cut the two stretcher rails (**Q**) to match this measurement (**Fig. 14**). Disassemble the parts.



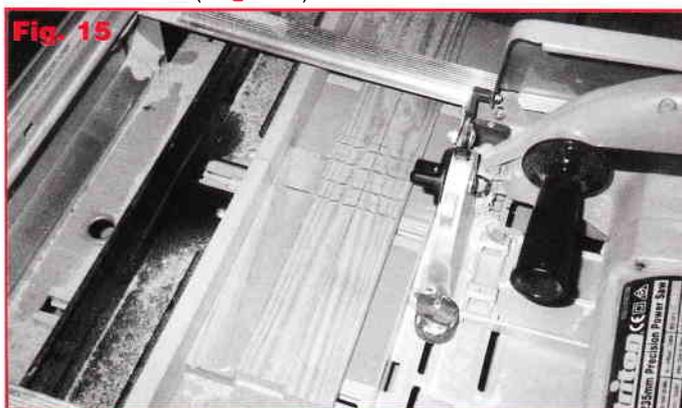
**Fig. 14**

**10** The stretcher rails have 4 notches in them to receive the trestle legs and support the writing slope when it is in the raised position.

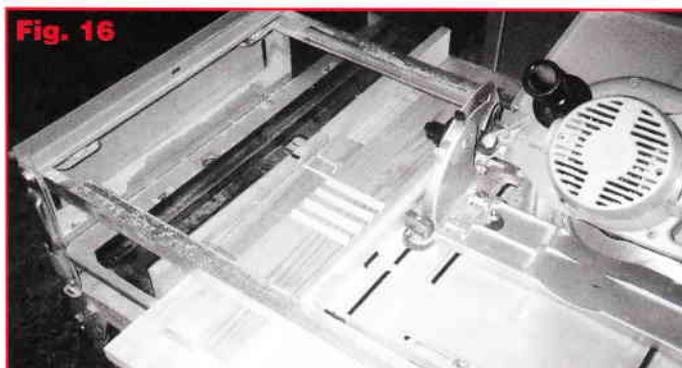
The notches are triangular in shape and extend at an angle of 45 degrees to a depth of 9 mm at the rear. They are spaced 12 mm apart along each stretcher rail. The first notch starts at a distance of 200 mm along the rail from the front.

Cut the notches on the Workcentre in cross cut mode by setting the saw blade to a depth of 9mm. Cut both rails together to ensure their notches line up correctly. Make the cut for the back of the first notch, then move the rails along 24 mm and make the 2nd, 3rd, then 4th cuts.

Use an offcut behind the rails to ensure the full depth of cut is achieved (**Fig. 15**).



**Fig. 15**

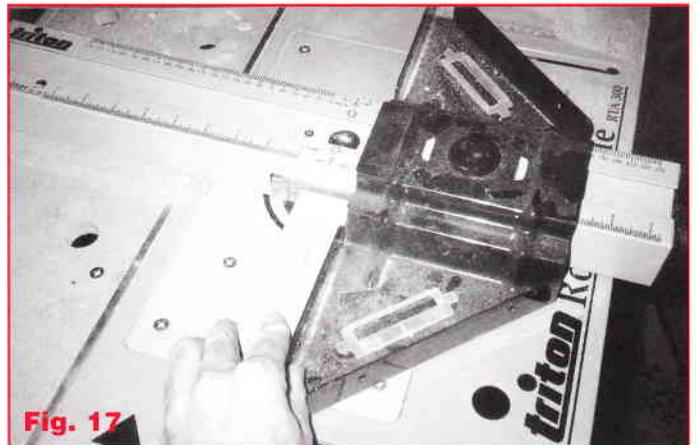


**Fig. 16**

Adjust the saw blade back to maximum depth of cut and to an angle of 45 degrees. Place a packing piece under the rails and make 45 degree cuts to complete the notches (**Fig. 16**).

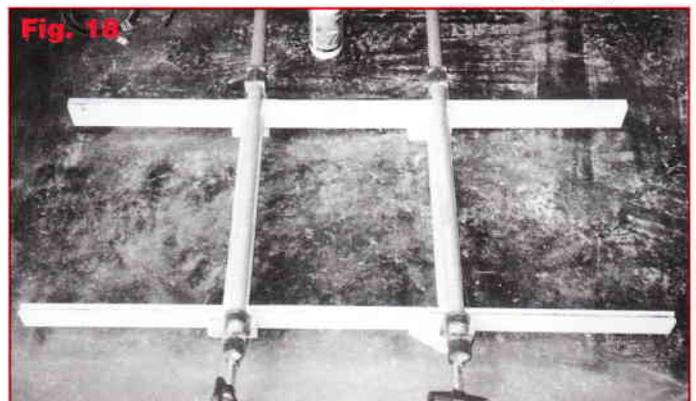
**11** The stretcher rails are positioned 320 mm apart, 338 mm from the ends, and 22 mm down from the top edges of the front and back rails.

Use these dimensions to mark and cut matching biscuit joints in the front and back rails. Then cut matching biscuit slots in both ends of each stretcher rail so they will be positioned at the correct 22 mm depth (**Fig. 17**).



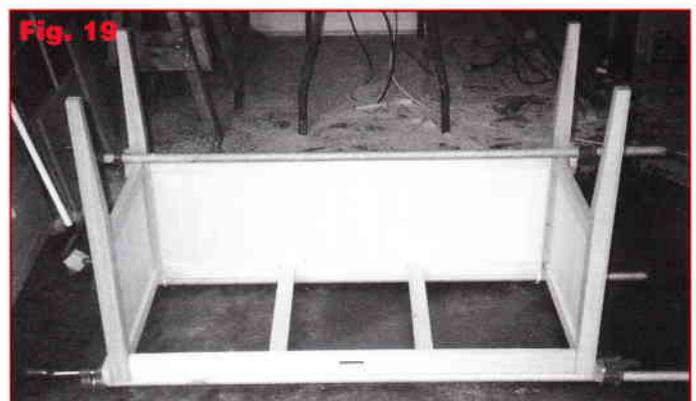
**Fig. 17**

**12** Glue the stretcher rails to the front and back rails and clamp this assembly together ensuring it is flat and square (**Fig. 18**).



**Fig. 18**

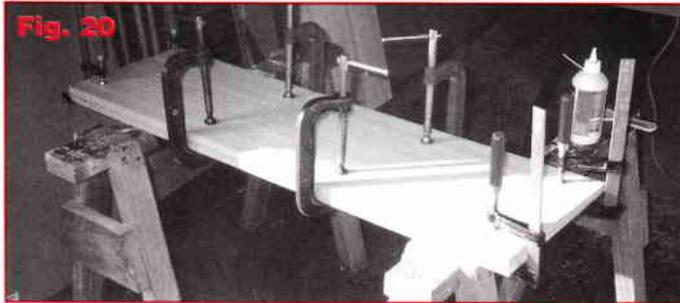
When this is dry, glue the front and back rails to the legs, with the back panel in its rebates. Clamp this together with bar or pipe clamps (**Fig. 19**).



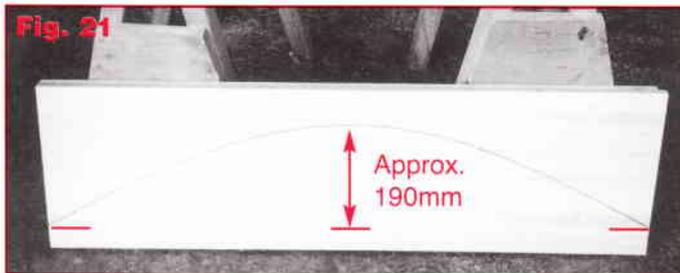
**Fig. 19**

**13** The curved rail is made up from 5 pieces laminated together and clamped in a "jig". The jig is made in two halves with matching curves cut on each inside edge. When the laminated pieces are glued together they are placed inside the jig which is then clamped together. This will hold the pieces in their curved positions until the glue dries.

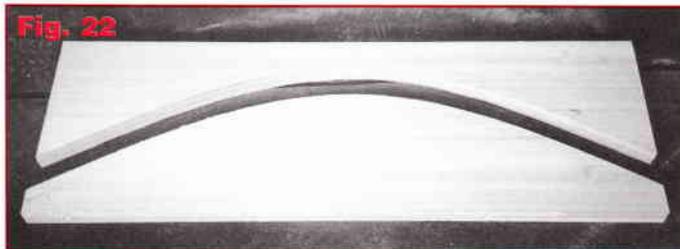
To make the jig laminate two offcuts of the 19 mm veneered board, or use thicker MDF if you have it available. Cut it out to a size of 340 x 1100 (**Fig. 20**).



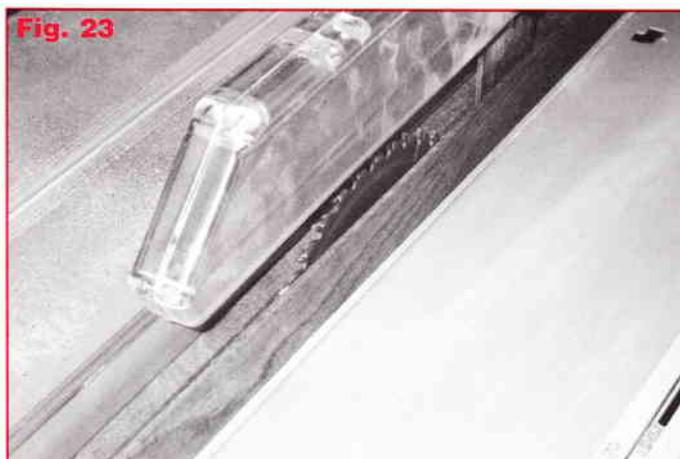
Mark the curved shape of the rail onto this piece. Do this by using a thin piece of wood, aluminium or steel, flexed to make a curve. Hold this in place with some small nails and mark along the curve (**Fig. 21**).



Cut out the shape using a jigsaw (**Fig. 22**).

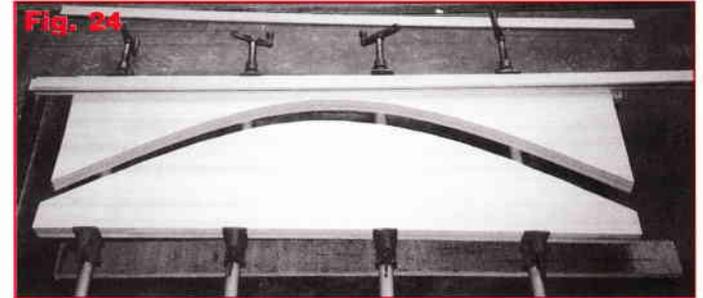


**14** Cut four pieces for the curved rails (E) from 42 x 42 Tassie Oak and one piece from 42 x 20 Jarrah.

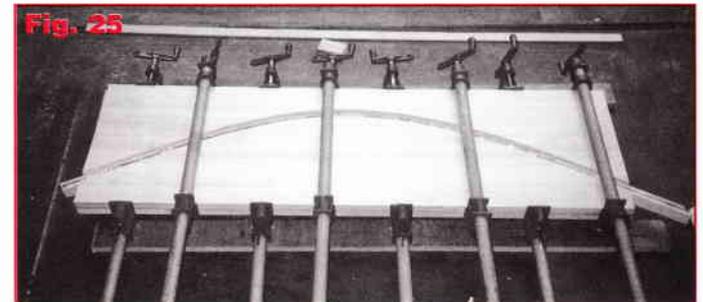


Rip the wood to 30 mm width first, then cut 4 mm thick pieces from the Tassie Oak. Ensure the 4 mm thick offcut is not on the side of the saw next to the fence (**Fig. 23**).

Glue these pieces together as a "sandwich" of layers, with the Jarrah piece as the middle layer. Clamp them together in the jig made earlier and tighten the clamps to bring the two halves of the jig together (**Figs. 24 & 25**).



Some of the wood may stick out the ends of the jig. This will be trimmed to length later to fit in place on the desk. Leave this assembly overnight until the glue is dry.



**15** When the rail is removed from its jig, lay it on a flat surface and sand or plane the glued faces smooth. Using the Triton Random Orbital Sander for this job greatly speeds up sanding time.

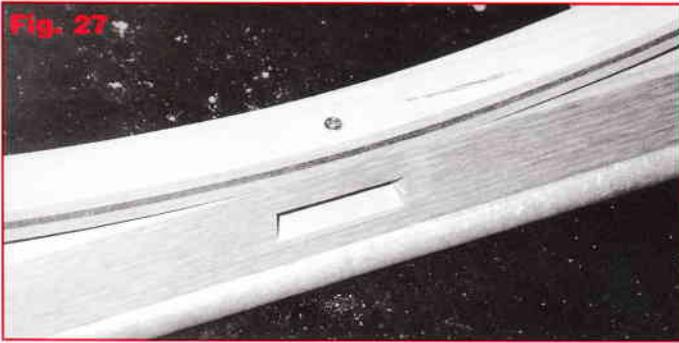
Hold or clamp the curved rail against the front of the desk and mark the centre for screw attachment to the front rail. Mark the ends to finish flush with the legs. Flex the rail downwards before marking the cut offs so it will self-clamp in position when glued against the legs. Make sure both ends of the rail come to the same position on the legs and therefore that the rail is central in the desk frame.

Remove the rail and trim the ends to shape on the Workcentre. The protractor can be used to guide the wood while it is cut (**Fig. 26**).

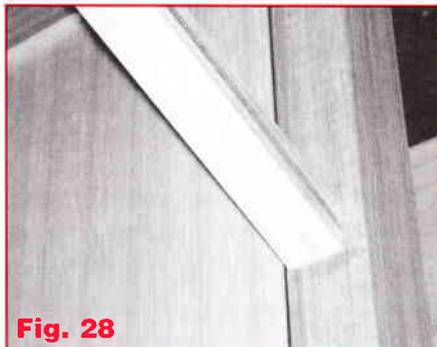


Drill a clearance hole in the centre of the curved rail and a pilot hole in the front rail, then glue and screw it to the desk frame using one 8G x 30 mm screw (**Fig. 27**).

**Fig. 27**



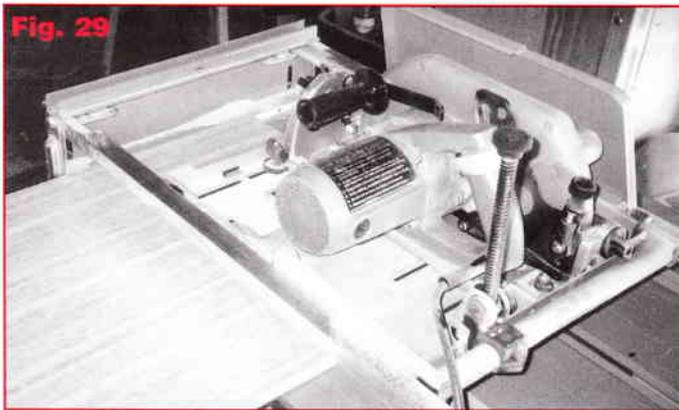
The ends of the curved rail should hold themselves in place without the need for clamps or screws (**Fig. 28**).



**Fig. 28**

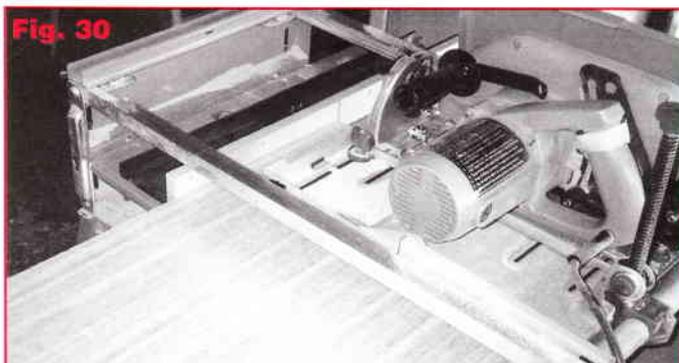
**16** Cut the desk top (**H**) to size on the Workcentre in table saw mode for width and crosscut to length in the crosscut mode or using the Sliding Extension Table.

**Fig. 29**



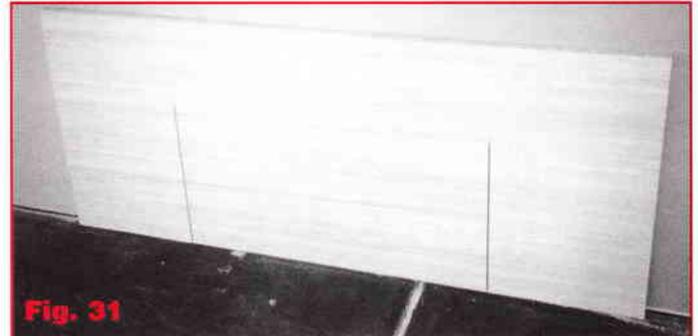
If using the crosscut mode, remove the fence and use the end panel as a backstop, to give greater cutting width (**Fig. 29**). Then replace the fence and finish the cut (**Fig. 30**).

**Fig. 30**



This is explained in the Workcentre operating manual.

**17** To cut out the writing slope (**I**), make two 305 mm long cuts in the desk top on the Workcentre in crosscut mode. Use the technique in step 16 to give greater cutting width.



**Fig. 31**

These cuts are made 260 mm from each end of the desk (**Fig. 31**). Ensure you cut on the writing slope side of the marks.

Then change the Workcentre into the table saw mode and lower the saw blade. Set the fence to about 303 mm to allow 2 mm for the width of the saw blade. Plunge cut between the two previous cuts.



**Fig. 32**

To do this, hold the desk top against the fence, but angled above the saw blade and start the saw. Slowly lower the desk top onto the saw blade so the cut begins in the middle of the piece of wood (**Fig. 32**). Don't saw right up to the cuts, stop short and remove the desk top.

Join up the cuts carefully with a handsaw. The cutout produced should be 305 mm deep and 600 mm long.

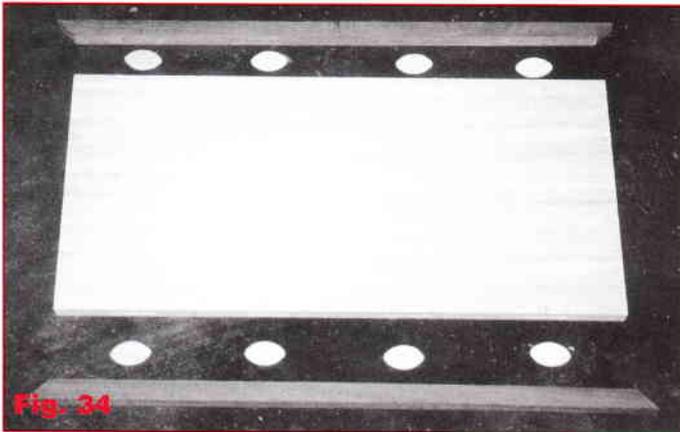
**CAUTION:** Great care should be taken with your hand positions, as the saw guard is not used and the saw blade is hidden by the workpiece. If you are not confident to plunge cut in this way and an alternative method is desired, consider using a jigsaw and sand or plane the cut surface straight and smooth afterwards.

**18** Trim the writing slope to size on the Workcentre in the table saw mode using the fence for width and length (**Fig. 33**).

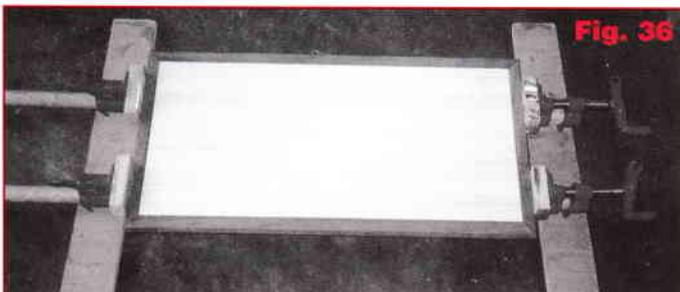
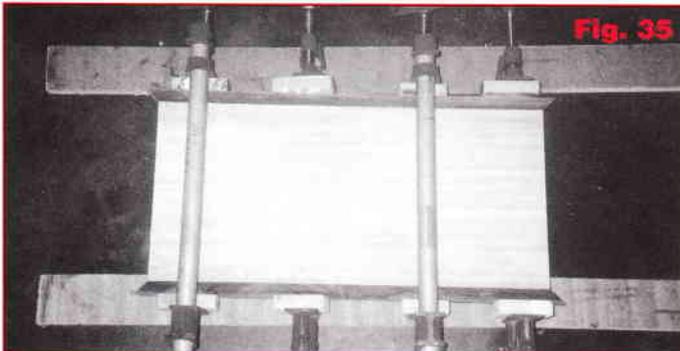


Cut the writing slope edges (**N & O**) to size from jarrah and mitre the corners with the protractor fixed at 45 degrees.

Mark and cut biscuit slots along the slope edges and writing slope for 12 biscuits, four on each long side (**Fig. 34**) and two on each short side.



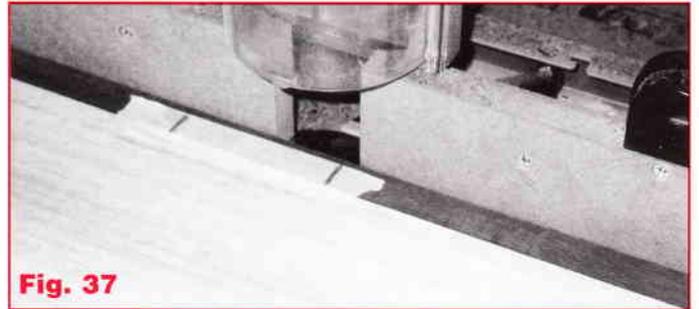
Glue the edges to the writing slope in pairs (**Fig. 35**) and clamp them in place (**Fig. 36**).



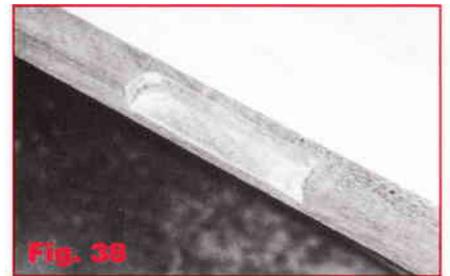
**19** When the edges are dry, cut the finger lifter slot in the underside of one long edge.

Use a straight cutter in the router to produce a 15 x 15 slot along the edge. A cove bit would produce a curved profile.

Carefully plunge cut onto the cutter on the Router table. A strip of masking tape on the top face of the wood, marked to show where to start and stop should help guide the cut (**Fig. 37**).



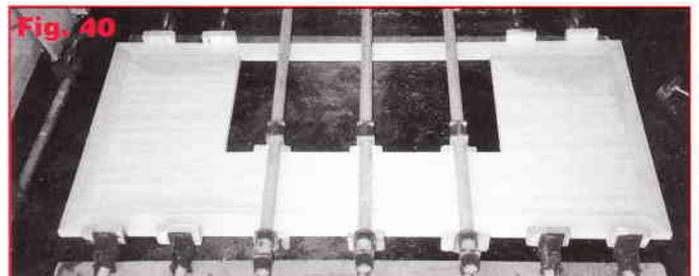
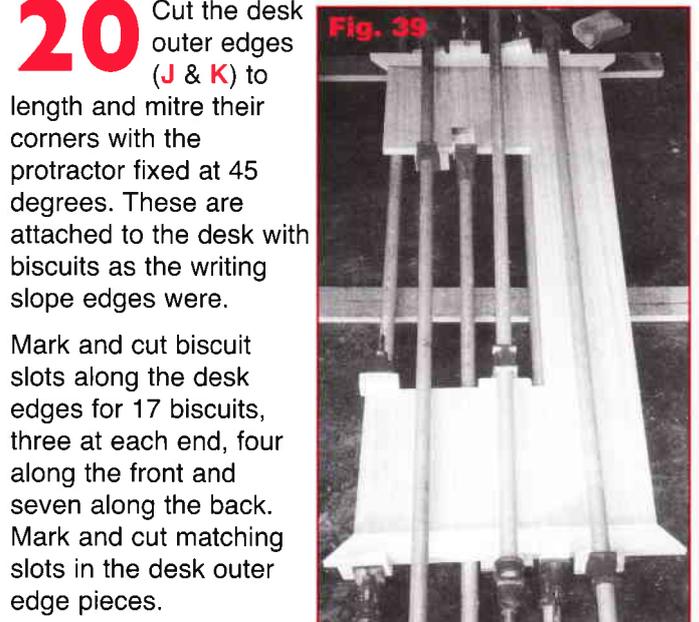
The slot should be made 250mm from each end of the piece (**Fig. 38**).



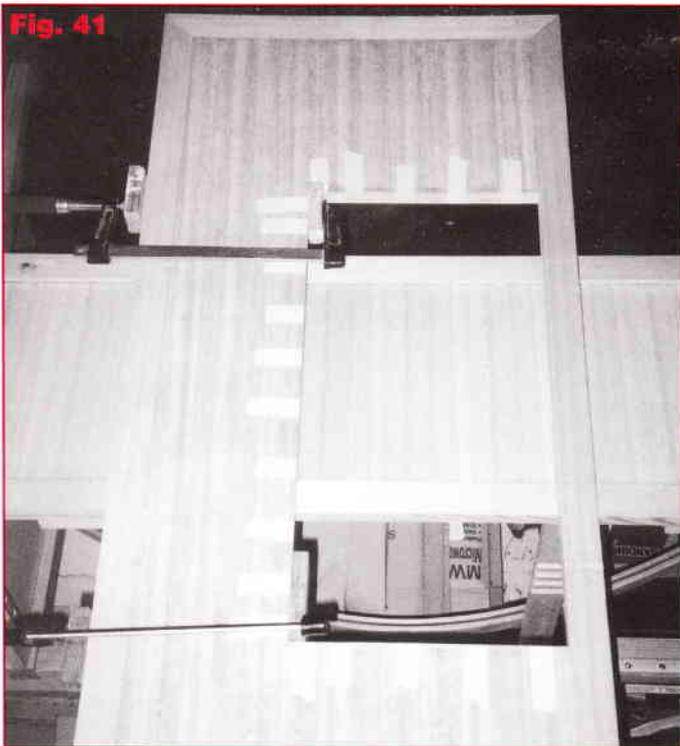
**20** Cut the desk outer edges (**J & K**) to length and mitre their corners with the protractor fixed at 45 degrees. These are attached to the desk with biscuits as the writing slope edges were.

Mark and cut biscuit slots along the desk edges for 17 biscuits, three at each end, four along the front and seven along the back. Mark and cut matching slots in the desk outer edge pieces.

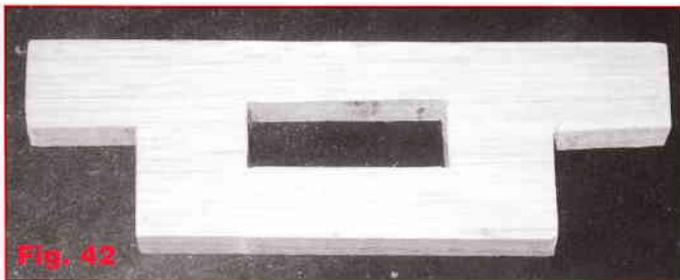
Glue and clamp the outer edges to the desk top in pairs as before (**Figs. 39 & 40**).



**21** Cut the desk inner edges (**L & M**) from 42 x 20 Tassie Oak. Glue them in place and clamp them with strips of masking tape and F or C clamps (**Fig. 41**).



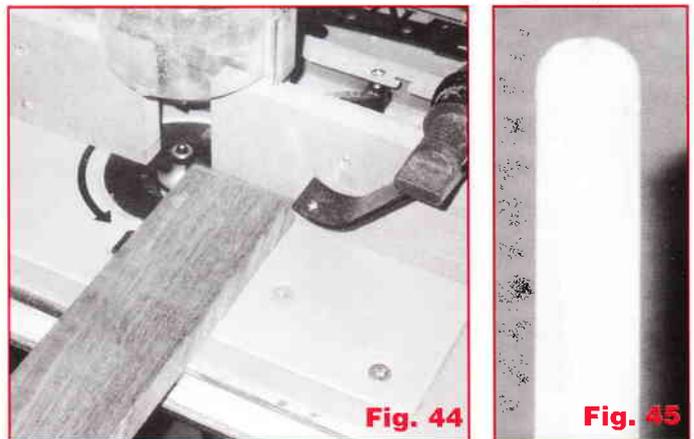
**22** Cut the location block (**T**) to size and cut two 35 x 35 notches from the bottom corners. Cut the 60 x 20 opening in the block the same way the 60 x 20 opening was cut in the front rail at step 4 (**Fig. 42**).



Glue and screw it to the underside of the desk top, using two 8G x 40 mm screws. The block should be positioned 370 mm from the front edge of the desk and equally spaced from each end of the desk top (**Fig. 43**).

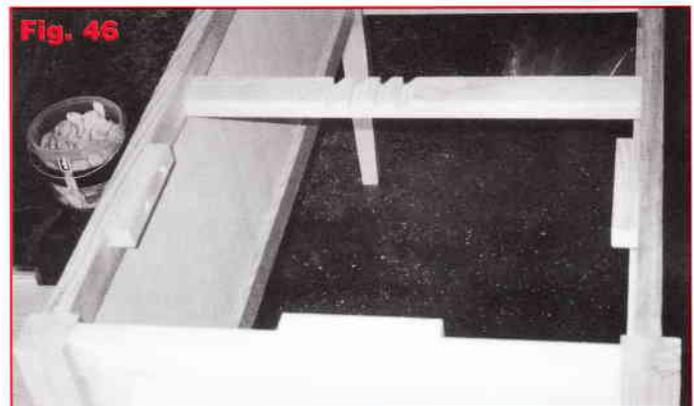


**23** Cut the push rail (**P**) to length from jarrah and shape the front end. Use a rounding over bit in the Router Table (**Fig. 44**).



Make two passes, turning the wood over in between, to produce a circular profile on the end of the rail (**Fig. 45**).

**24** Cut the six attachment cleats (**V**) to size. Install them with glue and two 8G x 30 mm screws each into the desk rails, one cleat at each end and two cleats against the front and back rails (**Fig. 46**). All cleats should be flush with the top edge of the desk rails.



Temporarily install the desk top by laying it upside down on top of a clean sheet. Place the desk frame on top and centre it by measuring from the desk edges to the desk rails (**Fig. 47**).

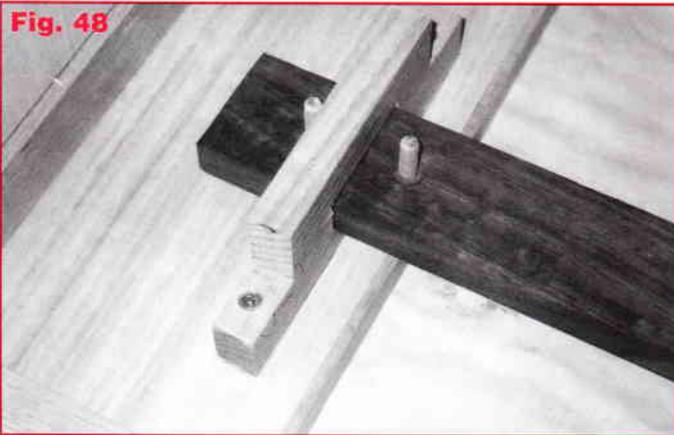
When it is in the correct position, drill two clearance and pilot holes through each attachment cleat into the desk top and screw it in place with twelve 8G x 30 mm screws.



**25** With the desk still upside down, insert the push rail through the slot in the front rail and through the slot in the location block.

Two 8 mm diameter dowels are inserted into holes drilled in the push rail to limit how far it can slide in and out. Position the push rail so 15 mm of it protrudes from the front rail. Mark it on its underside for one dowel, flush with the rear of the location block so the rail can't slide out any more than its present position. The second dowel is positioned 15 mm in front of the location block to stop the push rail when it is pushed in.

Remove the push rail and drill the two dowel holes to a depth of 15 mm. Reinsert the push rail and press the dowels into the holes (**Fig. 48**).

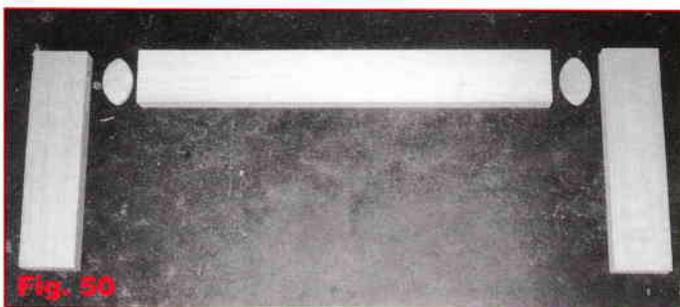


Test the operation of the rail and the dowels.

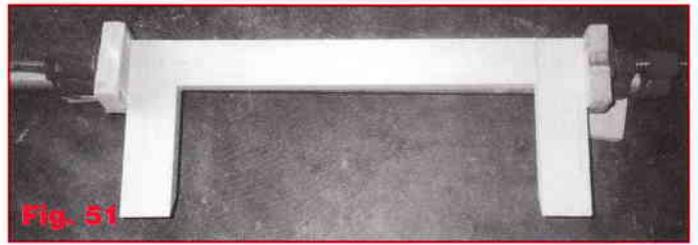
**26** Cut the trestle parts (**R & S**) to length. The ends of the two shorter pieces are cut at an angle of 45 degrees. Make these cuts with the protractor set to 45 degrees (**Fig. 49**).



Mark and cut biscuit slots in the trestle parts for 2 biscuits (**Fig. 50**).



Glue and clamp the trestle parts together (**Fig. 51**).



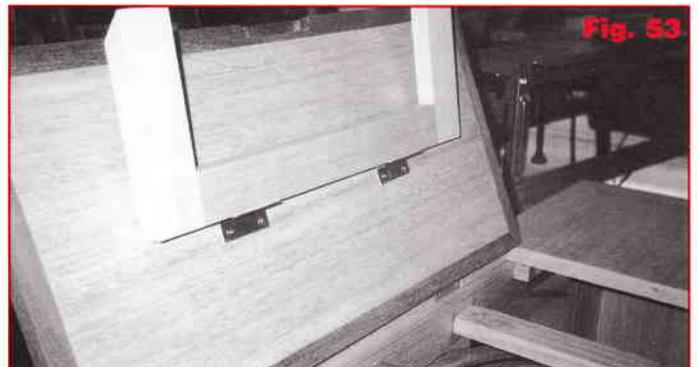
**27** Attach the writing slope to the front desk edge with a pair of 50 mm hinges.

Cut mortises for the hinges, 100 mm from the ends of the slope, and matching mortises in the front edge of the desk. The mortises should be cut wide enough to enable the hinges to sit flush with the top face of the desk.



Remove the waste with a sharp chisel and screw the hinges in place (**Fig. 52**).

**28** Attach the trestle to the underside of the writing slope with another set of 50 mm mortising.



Test that the trestle holds the writing slope correctly in each of the four notched positions (**Fig. 54**). Check the operation of the trestle legs and that they close correctly when the writing slope is lowered.



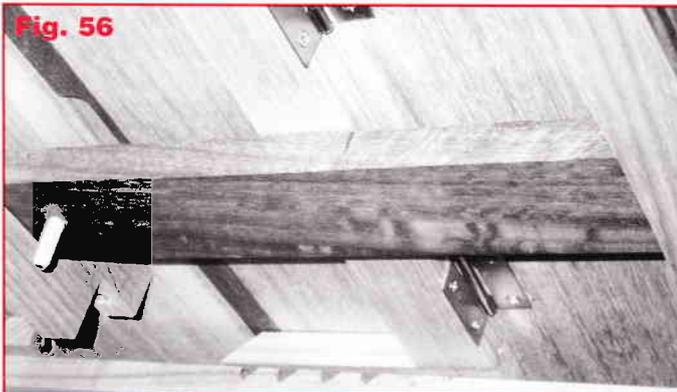
**29** A small wedge (U) is glued to the top of the push rail and rests against the closed trestle. Its job is to push the trestle and writing slope upwards when the push rail is pushed in. It needs to lift the writing slope high enough so the rear of it can be lifted with the finger lifter slot.

An angle of 20 degrees is adequate for the job. To cut the wedge, set the protractor to 20 degrees on the outside scale and cut a small corner from an offcut of 42 x 20 (Fig. 55).



The resulting wedge needs to be 15 mm long.

From underneath the desk, with the writing slope closed and the push rail out, mark where the front edge of the trestle rests on top of the push rail (Fig. 56). This is where the front edge of the wedge needs to be glued in place.



Lift the writing slope by hand and set the trestle to support it. Glue the wedge to the push rail in line with the mark (Fig. 57) and allow the glue to dry.



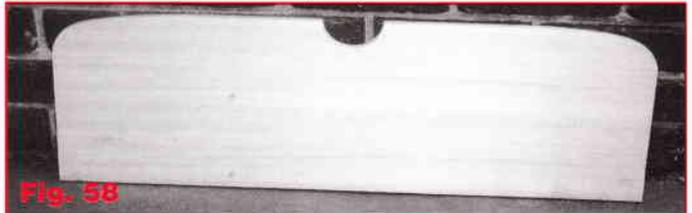
When it is dry, lower the trestle and writing slope and check that when the push rail is pushed in, the wedge raises the writing slope enough for it to be lifted by the finger lifter.

**30** Sand all parts of the desk smooth and finish with several coats of your choice of estapol.

## The Shelf Unit

**31** Start the shelf unit by cutting the back (e) to size. Use the Workcentre in table saw mode to cut it to width, then use the Sliding Extension Table to accurately crosscut it to length.

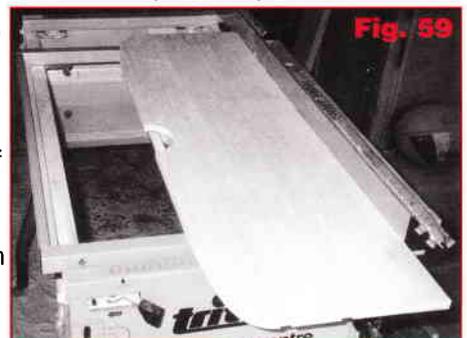
Mark the back for the curved end shapes and the central "scoop". Use freehand if you are good at it, otherwise trace around paint tins or other suitably shaped containers to get the shapes you want.



Make the cuts with a jigsaw used handheld (Fig. 58) or utilise the Triton Jigsaw Kit if you have one.

**32** Mount the Router Table on the Workcentre so you can utilise the Workcentre fence, then cut two 4 mm deep rebates in the back panel for the top and the shelf (Fig. 59).

These rebates are 13 mm wide and positioned 122 and 196 mm up from the bottom of the back. This should give a gap of 61 mm between them for the drawers.



Fence settings of 10 and 84 mm should give the right positions. Use a 12 mm straight router bit and make one pass, then move the fence by 1 mm and make a second pass to create the 13 mm width. Check that the rebates are the right width with a 13 mm offcut. They should not be too tight or too loose.

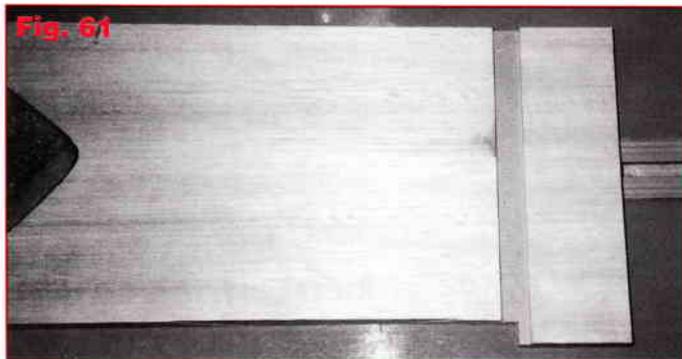
**33** Next, cut the top (a) to width and length. The top has a notched section cut in its rear edge so it fits "around" the back.

Mark 55 mm from each end of the top. Set the Workcentre fence to 7 mm, allowing 2 mm for the saw blade thickness and 4 mm for the rebate, then plunge cut between the two marks as in Step 17.



Finish the cuts with a handsaw to remove the notch sections (Fig. 60). Test that the top fits into the back rebate and around it at each end.

**34** Cut two 4 mm deep rebates in the underside of the top for the sides. These are made 50 mm from each end (**Fig. 61**). Cut them on the Router Table using the Router Table fence.



**35** Cut the sides (**b**) to size and rebate them along their rear edge to fit around the back.

These rebates are 8 mm deep and 13 mm wide. Cut them to a 4 mm depth first then readjust the depth of cut to give the 8 mm depth required.

Cut them using the Router Table fence (**Fig. 62**).



**36** Dry assemble the back, top and sides and mark the sides for a 4 mm deep rebate for the shelf.

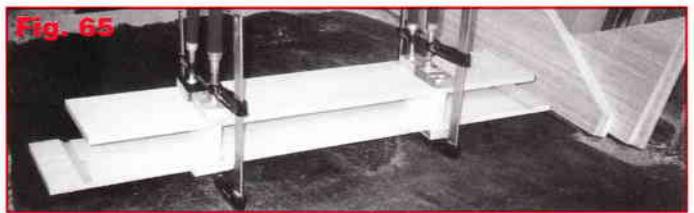
Cut these rebates as before (**Fig. 63**) then cut the shelf (**c**) to size and test assemble it too.

Cut the dividers (**d**) to fit into 4mm deep rebates in the top and the shelf. Position them 202mm from the sides to create a 202 x 61mm opening for the drawers to fit into.

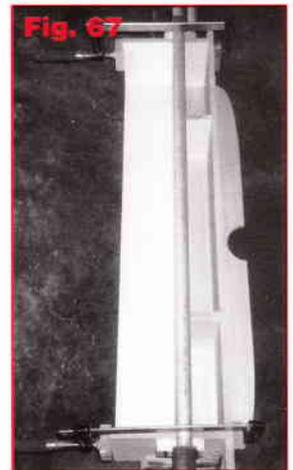
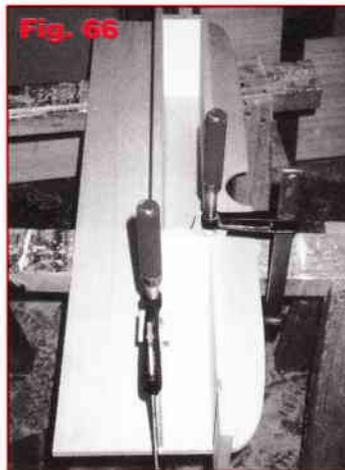
Cut the rebates for the dividers in the shelf and underside of the top using the protractor with a wooden batten attached (**Fig. 64**).



**37** Dry assemble the whole shelf unit, then dismantle and glue it together in stages. Firstly glue and clamp the dividers between the top and the shelf with F or C clamps (**Fig. 65**).



When this is dry, glue and clamp this to the back panel with F or C clamps (**Fig. 66**).



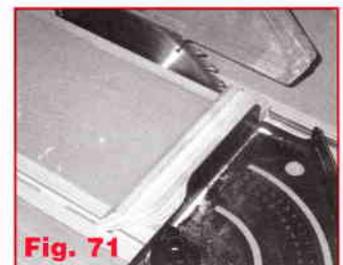
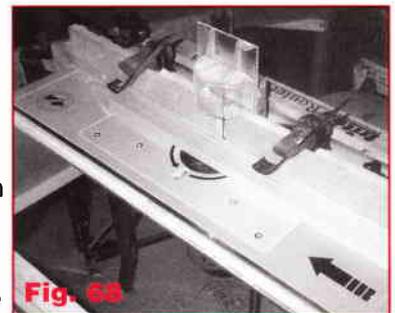
Finally, when this is dry, glue and clamp the sides in place using pipe and F or C clamps (**Fig. 67**).

**38** While these stages are drying, prepare the base feet (**f** & **g**). These are cut from 42 x 20 Tassie Oak.

Firstly prepare the rebates along the centre of the feet. Cut these on the Router Table to a depth of 4 mm (**Fig. 68**).

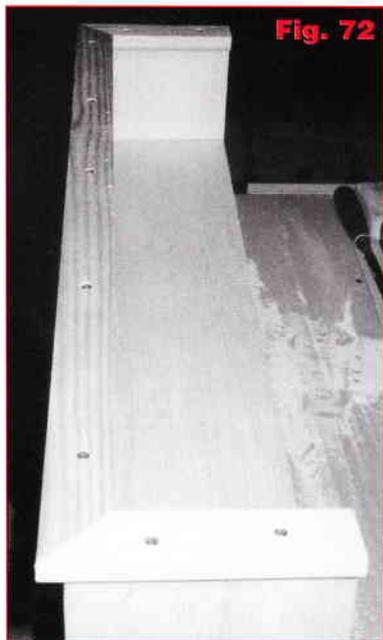
Then bevel the edges on the Workcentre with the Series 2000 fence reversed utilising its 45 degree face (**Fig. 69**).

Mitre the rear corners and trim the side base feet to length (**Figs. 70 & 71**).



**39** Attach the base feet by standing the shelf unit upside down and drilling, gluing and screwing from underneath.

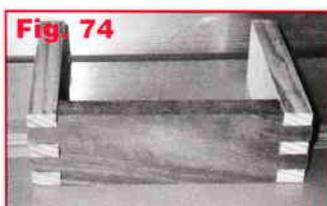
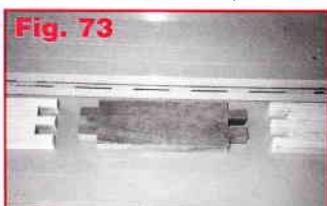
Drill clearance and pilot holes and use 30 mm x 8 G screws, two for the side feet and five for the back foot (**Fig. 72**). Countersink the heads well, so they won't mar the desk surface later.



**40** Cut the drawer parts (h, i, j & k) to size. Leave the drawer sides a few mm longer than 155 mm at this stage.

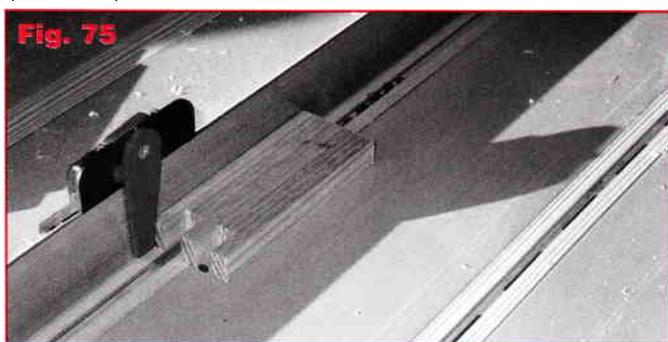
Finger joints are used between the drawer fronts and sides. The drawer backs are butt jointed and glued between the sides. The drawer bottom fits into a 5mm rebate in the sides and front, 12mm up from the base.

Cut the finger joints using the Triton Finger Jointer so that the sides have 3 fingers and the drawer fronts have 2 (**Figs. 73 & 74**).



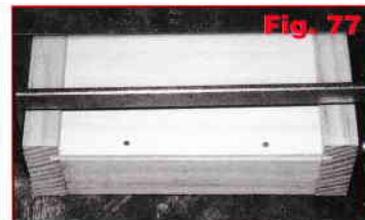
If you don't have a Triton Finger Jointer, the finger joints can be cut on the Workcentre alone utilising the method explained in the Series 2000 Training Video.

**41** Cut the rebates on the Workcentre in table saw mode with the saw blade lowered to a height of 5mm and the fence initially at 12mm, then increasing to produce a 5 mm wide rebate (**Fig. 75**).



**42** Dry assemble one of the drawers. Insert it into the shelf unit and see how far it goes.

Trim the rear of the drawer sides until a snug fit is achieved and the front of the drawer is flush with the sides of the shelf unit.



Remove the drawers and glue them together. Clamp them together with F or C clamps (**Fig. 76**) and nail the drawer bottoms to the bottom face of the drawer backs with a couple of 20 mm flat head nails (**Fig. 77**).

**43** When the drawers are dry, sand the finger joints smooth and flush and add a drawer handle to each one.



Check that the drawers slide easily in place and close flush with the front of the shelf unit (**Figs. 78 & 79**).

**44** Remove the drawer handles, and sand all parts of the shelf unit and drawers smooth. Finish with several coats of your choice of estapol.

**45** When finishing is complete, reinstall the drawer handles and position the shelf unit flush with the rear edge of the desk and equally spaced from each end (**Fig. 80**).



Mark the desk under the centre of the base feet at each end. A single 8G x 30 mm screw at each end, screwed from underneath the desk into the centre of the side base feet will hold the shelf unit in place.

Drill clearance and pilot holes for these two screws then install them from underneath the desk top.