



Butchers Block

Written and constructed by Craig Tilley

A mobile butchers block is a very useful and versatile addition to any kitchen. It provides a dedicated chopping surface and leaves the kitchen bench free from contamination and clutter while preparing other foods.

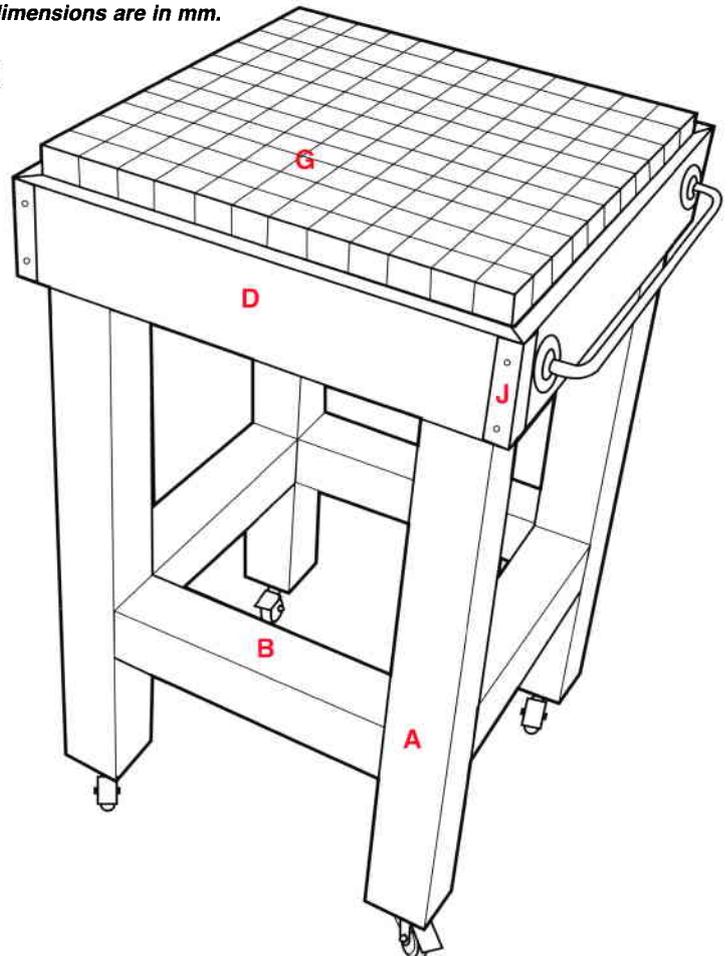
The timber chosen is pacific maple (meranti), which is not too dense or too heavy. Biscuit joints are used in the construction of the frame. The design features castors on each leg. If castors are not desired, we recommend cutting the legs longer to compensate. An onboard knife rack and towel rail complete the design and offer convenient functionality. If desired, a drawer can be built into the frame, or alternatively the underpart can be boxed in to make a cabinet for additional storage space.

The chopping surface is finished with Triton wood oil to provide a safe surface for contact with food.

Component Specifications

All dimensions are in mm.

Part	Description	Quantity	Width	Thickness	Length
A	Legs	4	75	75	760
B	Base rails	4	75	75	350
C	Upper rails	4	42	19	350
D	Sides	4	110	19	538
E	Top blocks	4	19	19	350
F	Top support panel	1	500	16	500
G	Chopping blocks	144	42	42	45
H	Knife rack sides	2	42	19	450
I	Knife rack ends	2	19	4	42
J	Aluminium Angle	4	25	25	110



Tool Requirements

1. ESSENTIAL Triton Workcentre and saw, Triton Router & Jigsaw Table and router, Biscuit Joiner, sash or pipe clamps, electric drill and drill bits, tape measure, tri-square, screwdriver, 600 mm steel rule, glue brush, sanding block & sandpaper sheets, F or C clamps, dust mask, eye goggles, hearing protection, pencil, hacksaw, file.

2. USEFUL Triton Multistand(s), Triton Dust Collection, Triton Planer Attachment, power plane, Triton Series 2000 Bevel Ripping Guide, Triton Height Winder Kit, Sliding Extension Table, Triton Random Orbital Sander & sanding discs and Triton Superjaws

Construction details

Material Shopping List

1. WOOD

Meranti

75 x 75 - 2 @ 2400 m

45 x 45 - 3 @ 3000 m

110 x 19 - 1 @ 2400 m

MDF (for top support panel)

16mm - 1 @ 600 x 900

2. FASTENING

Triton Premium Woodworking Adhesive,

Triton biscuits (24),

Woodscrews: 8G x 30 mm (51),

Roundhead screws: 6G x 20 mm (16).

3. OTHER

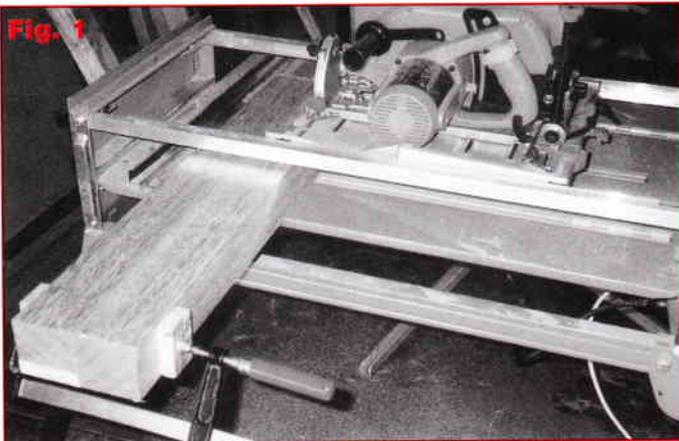
Swivel castors 50 mm with locks (4), towel rail (480 mm long).

4. FINISHING

Wood stain and estapol or undercoat and paint of your choice. Chopping block surface can be oiled with Triton Interior Wood Finishing Oil.

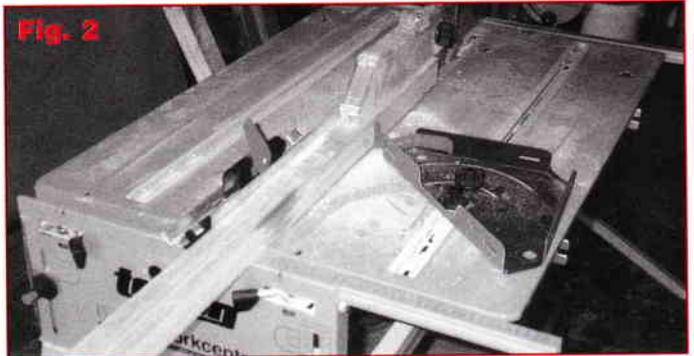
Begin construction by cutting the legs (A) to length. Cut one end of each leg square with one pass of the saw. **Note:** Double cuts may be required to achieve this cut depth with small saws.

Turn the legs around and line up their cut ends. Clamp them together with an F clamp, two at a time and cut them to length with a second pass of the saw. Repeat for the other two legs (**Fig. 1**).



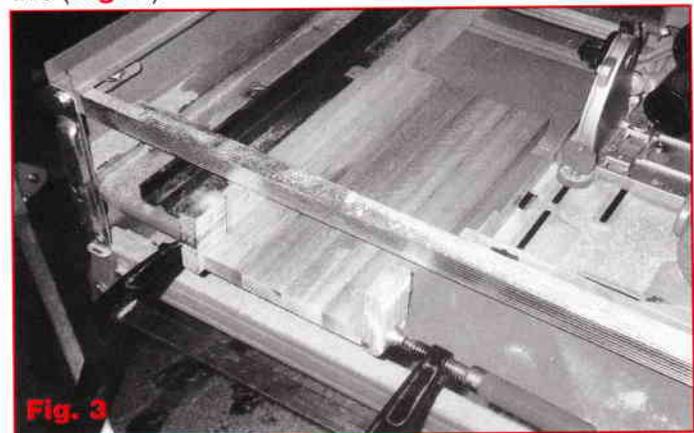
Next, cut the four base rails (B) using the same technique as the legs. Sand the ends of the rails and legs smooth in preparation for cutting the biscuit slots.

The upper rails (C) are cut next to a width of 19 mm. Use the Workcentre in the tablesaw mode. Rough cut one of the 2.4 m lengths of 42 x 42 to a 1.6 m piece. Rip this down the centre, creating two 42 x 19 pieces (**Fig. 2**).

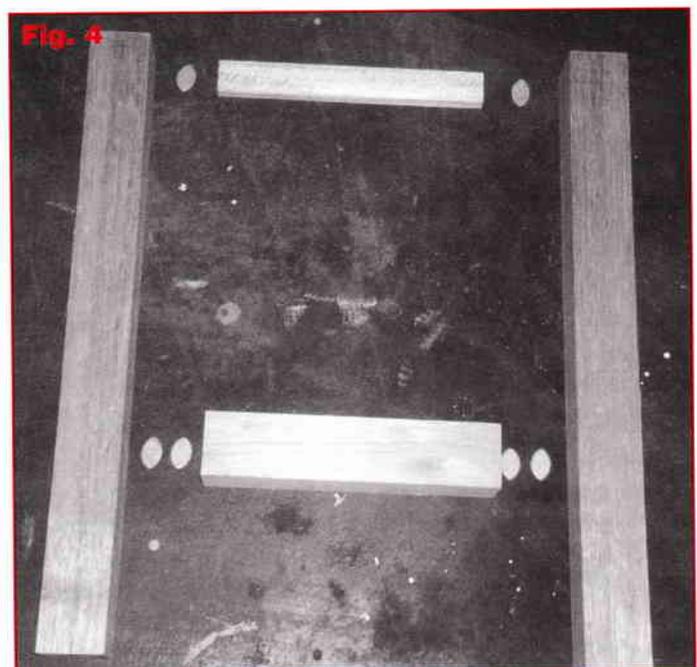


The 19 x 19 top blocks (E) can also be ripped to width while the Workcentre is in the tablesaw mode. If necessary, plane the cut faces of these pieces using the Triton Planer Attachment to remove the marks from the saw blade.

From these pieces, cut the upper rails (C) to length as for the legs. All four rails can be clamped together to do this (**Fig. 3**).



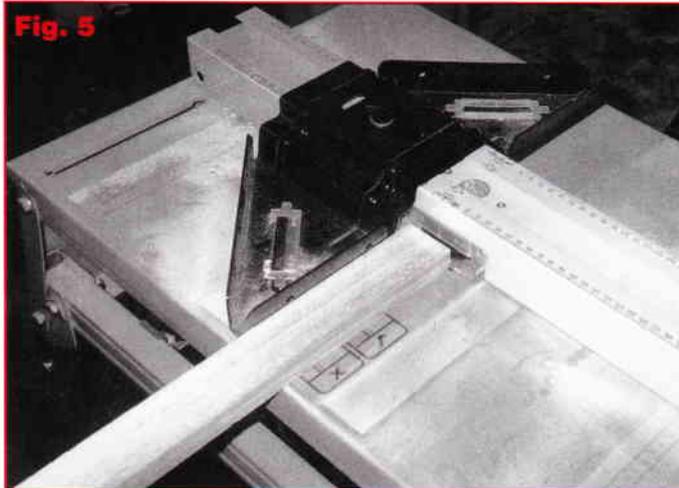
Mark the legs for attachment to the rails. The upper rails are positioned flush with the tops of the legs. The base rails are positioned 200 mm up from the bottom of the legs. Mark a pencil line onto the legs to show where the rails will fit so the biscuit cuts can be made in the correct places (**Fig. 4**).



5 Cut the biscuit joints using the Triton Biscuit Joiner. The joints in the legs for the upper rails are cut first. This joint uses a single biscuit, whereas the base rails use two biscuits per joint.

Set up the Triton Biscuit Joiner so the cutter will cut 8mm in from the edge. Cut single slots in the positions marked on the legs for the upper rails. Use the sliding guide to help make these cuts.

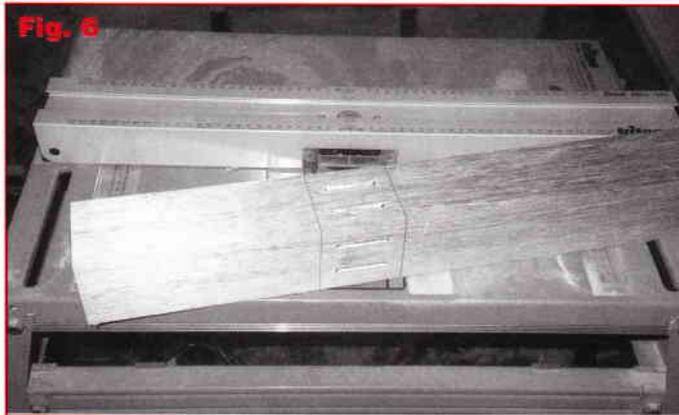
Cut matching slots in the ends of the upper rails with the sliding guide still in place (**Fig. 5**).



6 Next, remove the sliding guide and adjust the cutter height to 22mm. Cut double slots for the base rails as marked.

To cut a double slot, cut one slot, then turn the leg over onto the opposite face and cut the other slot (**Fig. 6**).

Replace the sliding guide and cut the double biscuit joints in the ends of each of the base rails.



7 Do a dry run without glue to check the position of the biscuit joints. When all joints have been tested, set up to glue together two legs, an upper rail and a base rail.

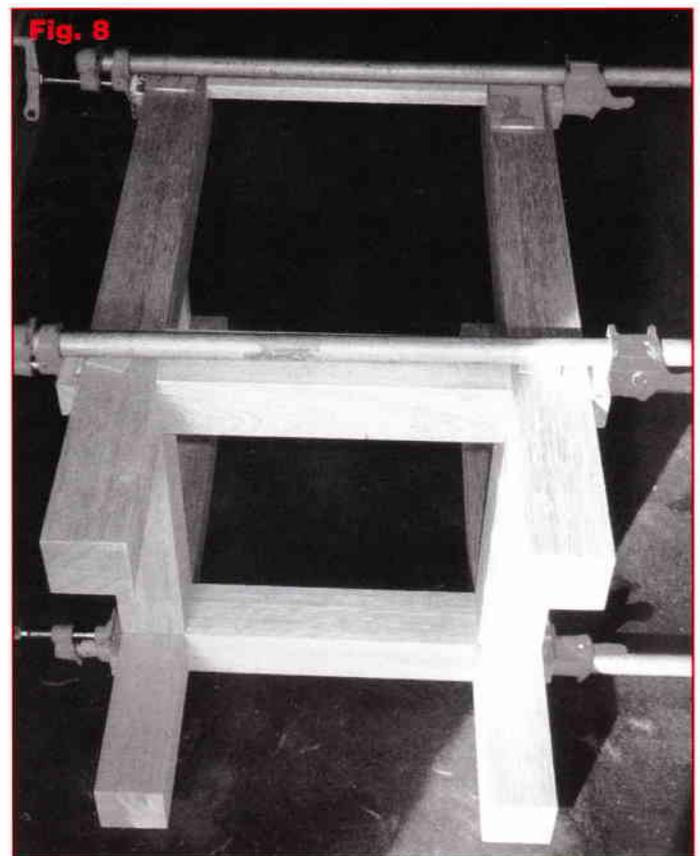
Apply a good quality PVA (Triton Premium Woodworking Adhesive is ideal) and two pipe clamps (or sash cramps) to hold the joints together while the glue dries (**Fig. 7**). Smear glue on both sides of the biscuits and the mating surfaces using a small paintbrush. Wipe off any glue that spills out of the joints with a damp cloth as the clamps are tightened.



Check that everything is square by measuring the diagonals. Adjust the clamps until both measurements are identical.

Do the same for the two other legs, an upper rail and a base rail.

8 When the glue is dry, join the two frame halves together with the remaining rails in place. Clamp the assembly together and check the frame for square (**Fig. 8**). Allow the glue to dry.

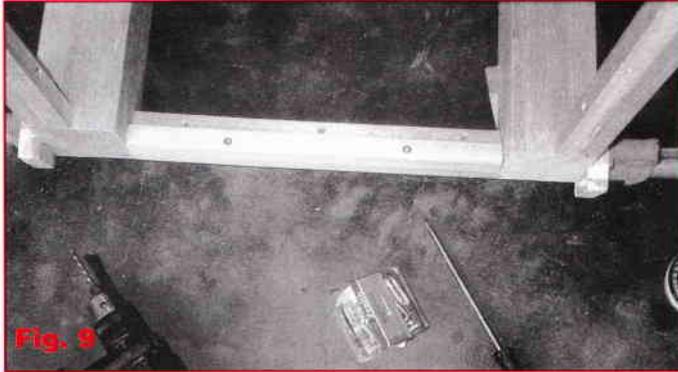


9 While this dries, prepare the top blocks (**E**). These are attached to the insides of the upper rails and to the top support panel (**F**) with glue and two 8G x 30 mm woodscrews. (**Fig. 9**)

Drill clearance and countersink holes for the attachment screws (two in each block) and for the screws that will attach later to the top support panel (three in each block).

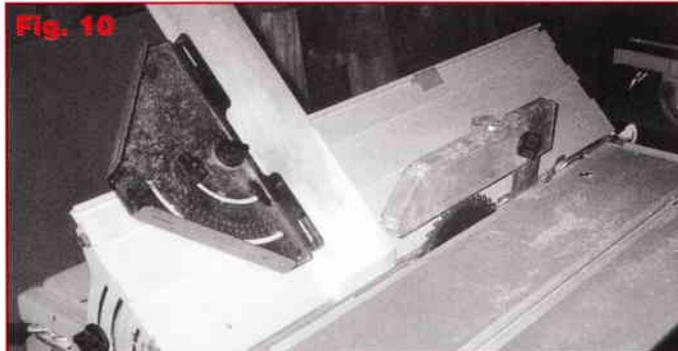
10 When the frame is dry, glue and screw the top blocks to the inside face of the upper rails, with the top edges level (**Fig. 9**).

Drill three clearance and countersink holes through the lower part of each of the upper rails for the 8G x 30 mm screws that will hold the sides to the rails.



11 Next cut the sides (**D**) to length in the tablesaw mode. Allow for the overlap of the bevels. Use the protractor to guide your work.

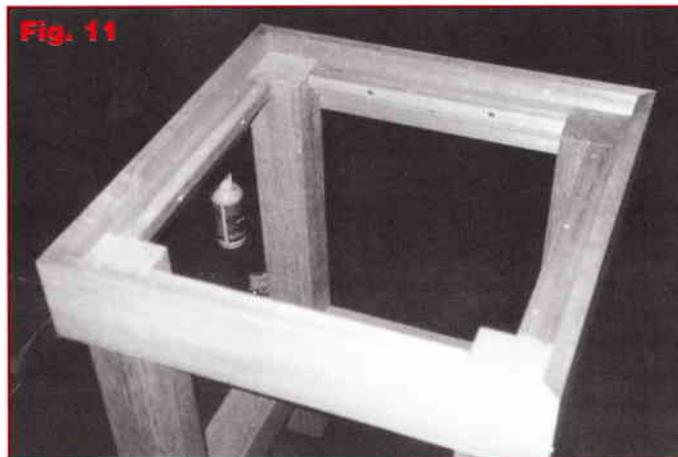
Cut the bevels on the Workcentre using either the 45° face of the Series 2000 fence or the Bevel Ripping Guide set at 45° (**Fig. 10**).



If you don't have either of these, use the Workcentre in the crosscut mode with the power saw set at a 45° angle.

Screw the sides in place dry first to check the bevels fit snugly together. Aluminum angle (**J**), fitted in Step 13, will cover any imperfections in these joints.

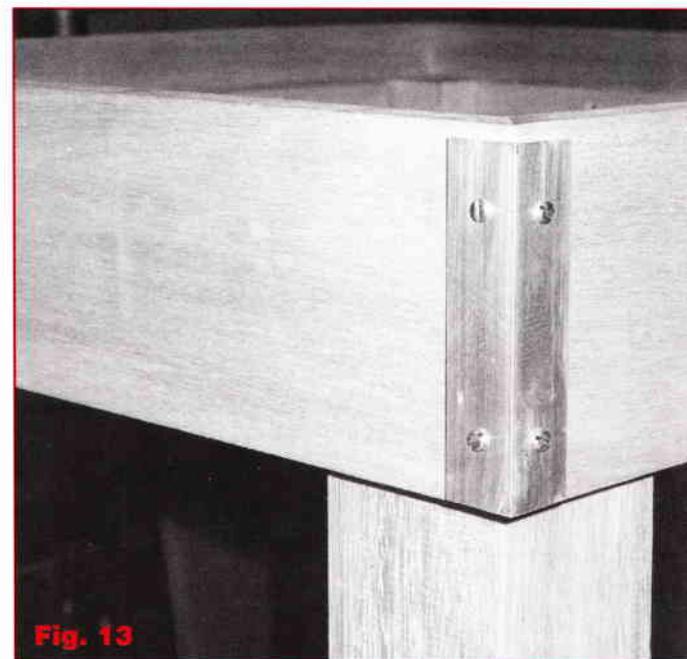
When you're happy with the joints, glue and screw the sides in place through the holes drilled earlier (**Fig. 11**).



12 The chopping blocks (**G**) sit on the top support panel (**F**). Cut this panel from 16mm in the tablesaw mode then sand the edges smooth.

13 Cut the Aluminium angle (**J**) to length with a hacksaw and smooth the cut ends with a file.

Mark and drill two holes in each face of the angle, offset on each side slightly, for 6G x 12 mm round head screws (**Fig. 12**). The holes are offset so the screws won't hit each other when they are installed.



Screw the angles in place at each corner with the four screws (**Fig. 13**).

14 Prepare the Chopping Block assembly (**G**) by cutting the three 3.0m lengths of 45 x 45mm into 12 pieces 750mm long.

Rip or plane them down to 45 x 42mm.

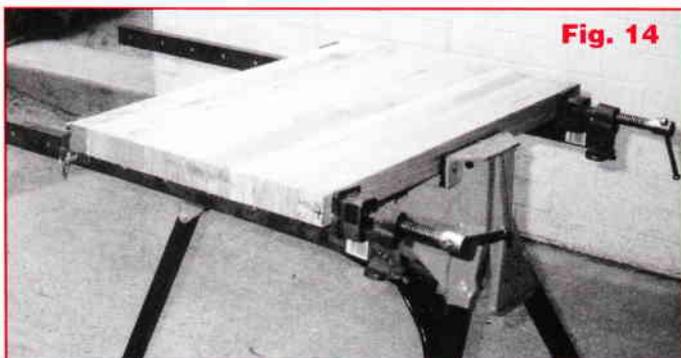
Lay them down on a flat surface with the 42mm sides vertical and their ends in line, then clamp them together.

Check that the overall width is approximately 502 - 506mm.

15 Ensure the assembly is square then scribe lines across the top face at 25mm from each end and down the centre. These will be the guides for cutting biscuit slots and will aid in the final alignment when gluing the assembly.

16 Use the Triton Biscuit Joiner to cut biscuit slots in all the mating faces. Match the scribed lines with the centreline of the cutter, as marked on the Biscuit Joiner.

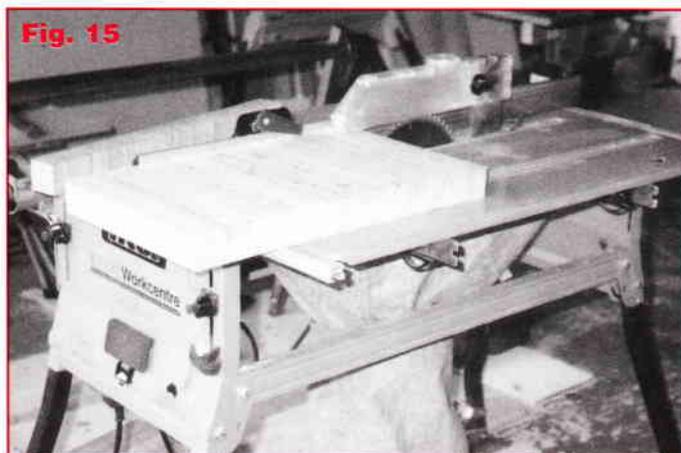
17 Apply glue liberally and assemble all 12 pieces using Triton Biscuits, cramping at each end and in the centre. Triton Superjaws is ideal for supporting and cramping the assembly in the centre while fitting the sash (or pipe) cramps at the ends. (**Fig. 14**)



Remove excess glue with a damp cloth. Allow 2-3 hours for the glue to dry then release all clamping.

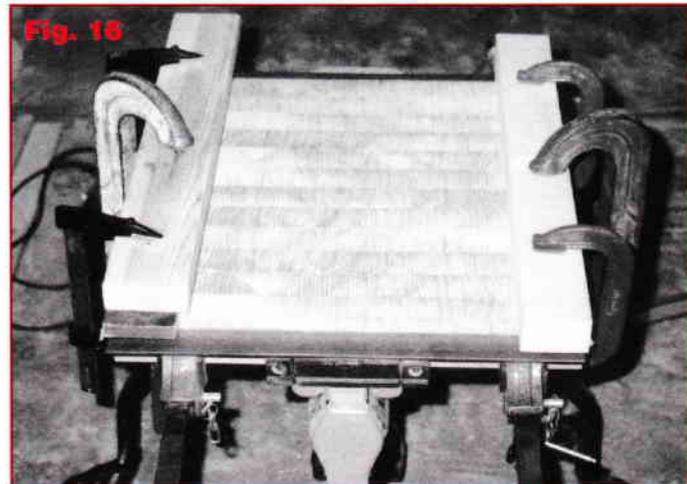
18 Use the Triton Sliding Extension Table in the sliding mode to remove 50mm off each end of the assembly. Alternatively cut them in the crosscut mode. (This will remove the portion of the assembly which included the end biscuits).

19 In the tablesaw mode set the Workcentre rip fence to 45mm and cut 6 pieces across the grain from each end, providing 12 strips of 12 blocks glued together. (**Fig. 15**)



20 Trim strips of blocks by setting the rip fence to, say 44mm, then machining one side of each strip first. Then set the fence to 42mm and machine the other side, to provide 12 strips of blocks 42mm wide and 45mm high.

21 As described in Step 17 glue all 12 strips to one another and also to the support panel using G or F clamps and straight packers. (**Fig. 16**)



22 When the glue has cured, trim the chopping block assembly to size (nominally 500 x 500mm) and square to suit the assembled stand.

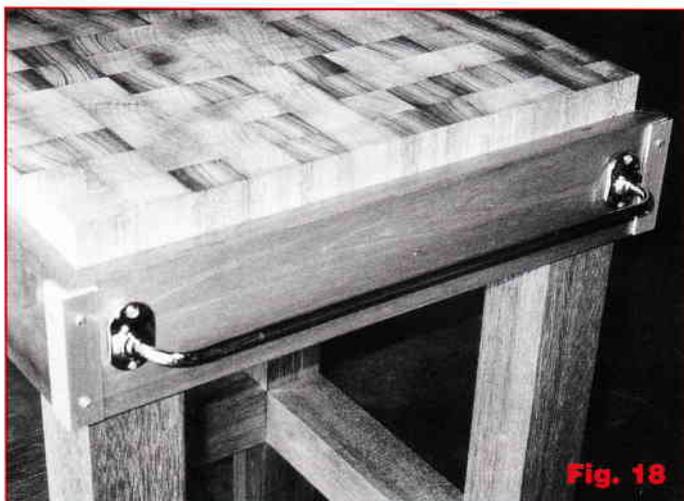
23 Fix the chopping block assembly to the stand via screws through the top blocks. This is best done by inverting the stand with the chopping block sitting on a clean flat surface.

24 Cut the parts for the knife rack (**H & I**) on the Workcentre. Attach the knife rack ends between the knife rack sides with glue and clamp them in place with F or C clamps (**Fig. 17**).

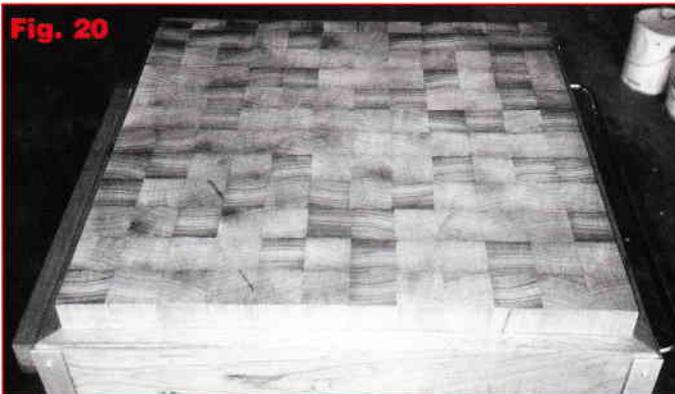


Mount the knife rack with three 8G x 30 mm screws driven from behind one of the sides, which will also conceal the screw heads.

25 Attach the towel rail on the opposite side of the chopping block with the screws supplied with the rail (**Fig. 18**).



27 Sand the project smooth and dust it off using a vacuum cleaner or cloth to remove all traces of sanding dust. This is essential to produce a really smooth surface when applying the desired finish. Apply the desired stain and estapole, sanding lightly between coats.



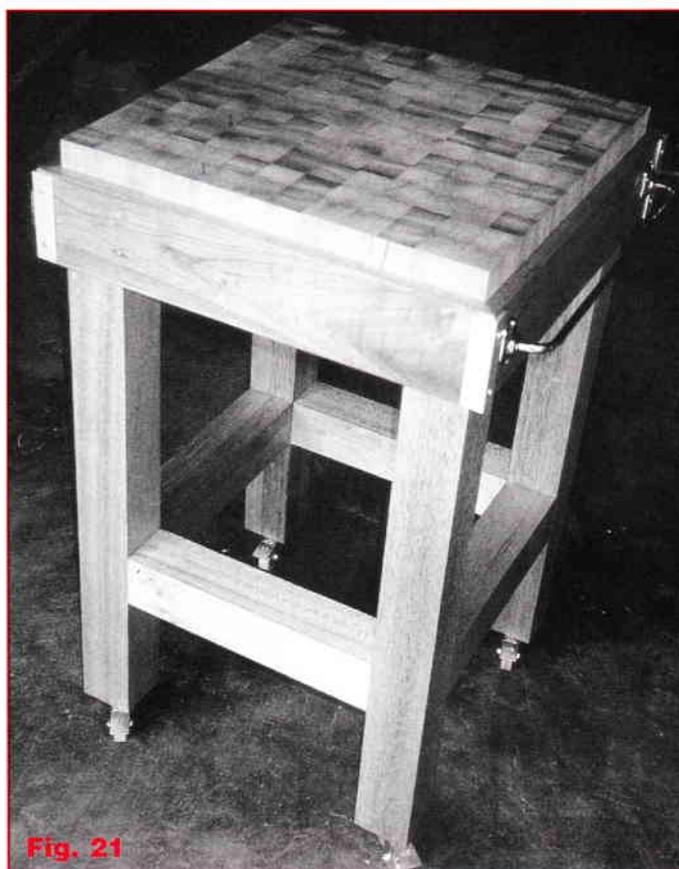
The top surface of the chopping block is oiled (**Fig. 20**). Triton Interior Wood Finishing Oil is perfect for this job, as it is safe for surfaces that come in contact with food.

26 Check that the chopping block stands level on its legs and doesn't rock. If necessary trim any offending legs, or insert shims beneath the castors to compensate for any movement.



Chamfer the base of each leg slightly by hand sanding the edge at a 45° angle.

Lay the chopping block on its side and mount the castors to the base of the legs with 8G x 30 mm screws or similar (**Fig. 19**). It is important to buy swivel castors with locks that will prevent the chopping block from moving when in use.



Apply it liberally with a brush. Wipe off the excess with a clean cloth, or try the burnishing method - as detailed on the can. If the chopping block has been estapole, apply a final coat of Wood Oil with a clean cloth (**Fig. 21**). Alternatively, use a vegetable oil on the surface.

As the chopping block is joined using a water based adhesive, saturation of the surface, during use, should be avoided. Keep clean using a damp cloth and re-oil regularly.