Getting stuck in

Gluing options have kept **John Lloyd's** thinking cap firmly on as he tackles stage two of this wall-hung tool cabinet

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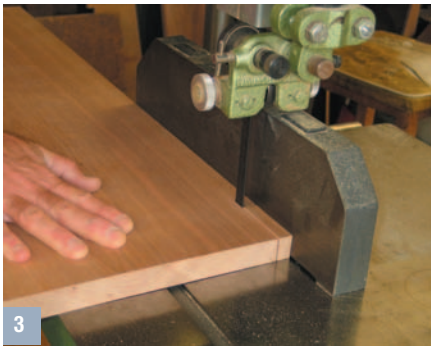
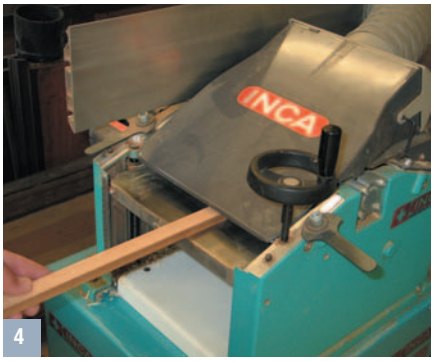
Having created the basic components for the main part of the tool cabinet from birch plywood – see *F&C* 93 – it's time to add a bit of lipping to the edges of the ply.

The lipping has two functions – it will reinforce the vertical edges of the cabinet, so that hinges can be screwed to the edge without any danger of the ply splitting, and, by using a contrasting wood, it might even make it look pretty. It would also work well for the drawer fronts.

Cherry goes well with birch without being too dramatic. Having machined the cherry to a thickness of 12mm (½in) and to a slightly oversized width, the lipping can be glued to the ply. The gluing surface of ply is going to consist of about half long grain and half end grain. This means the glue line is pretty strong. However, not being one to shirk from using belts in conjunction with braces, I took the view that a few biscuits would not go amiss along the vertical edges. That's because these edges were going to have hinges and big heavy doors attached to them.

The lipping is relatively thin, so a small biscuit, size 0, is called for. A larger biscuit would probably end up becoming a design statement by peeking through the front face of the lipping.



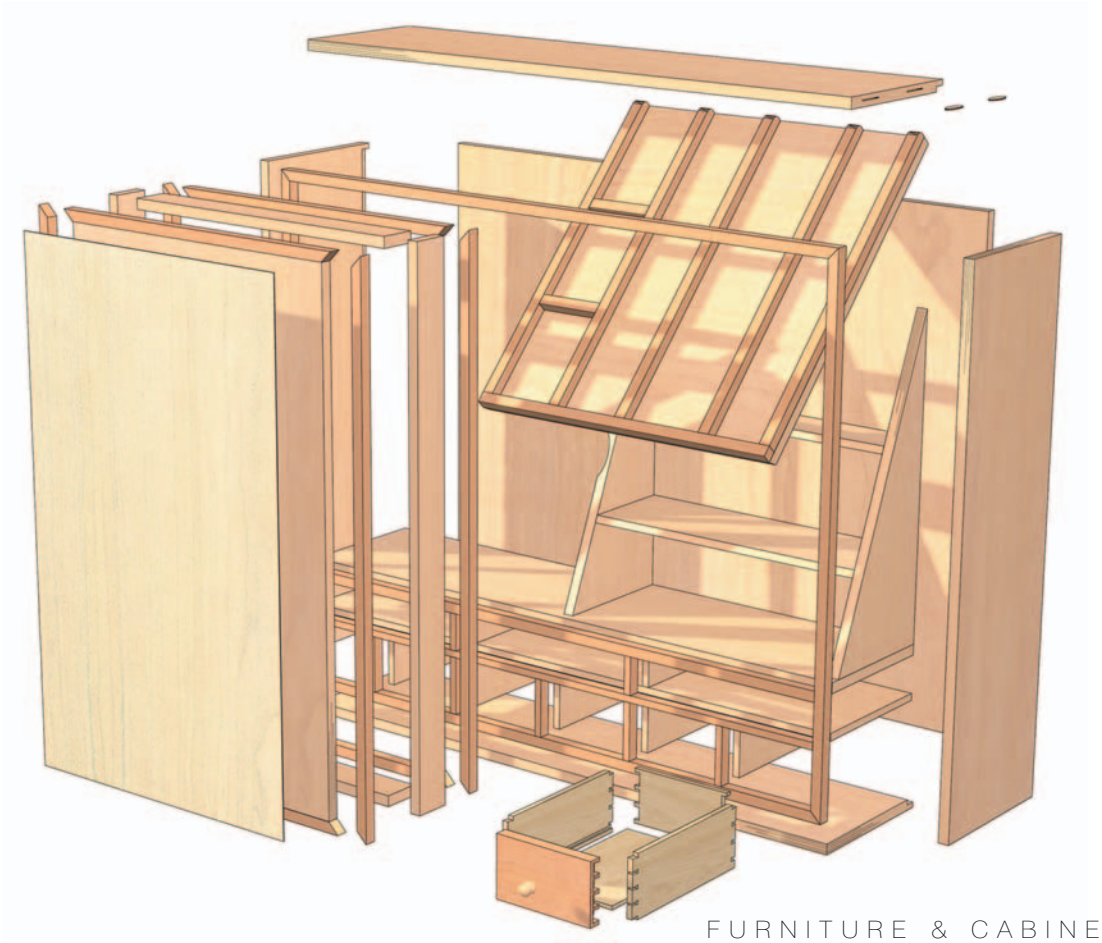


Impossible

Biscuit jointing into a skinny piece of wood is not impossible, but, quite frankly, I have enough challenges in my life, without adding to them unnecessarily.

The procedure is to thickness a board of cherry to the required lipping width, cut the biscuit joints into the edge of the board, slice the jointed edge off with the bandsaw and plane the bandsawn face to the required finished size by popping it through the thicknesser.

Gluing the biscuit jointed lengths of lipping onto the ply requires a few cramps to get a nice tight glue line. However, the other un-jointed pieces can just be glued and pinned on with a micro pinner, or with skinny veneer pins, which can be punched in and the holes filled later. The lippings can be trimmed flush with the surrounding ply, once the glue has set. This doesn't sound too traumatic, although if you are



1 **The cabinet so far**

2 **Biscuit jointing the edge of a ready pre-pared board**

3 **Bandsawing off the lipping**

4 **Planing to final thickness**

5 **Ready to glue up**

6 **Gluing with the Minicol, using a fin-ger to block one nozzle hole**

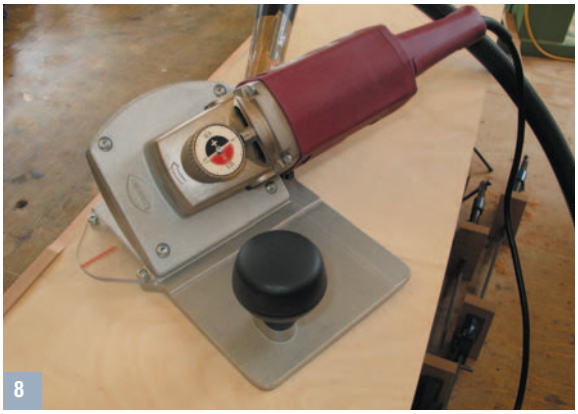
7 **Glue and pin lipping**

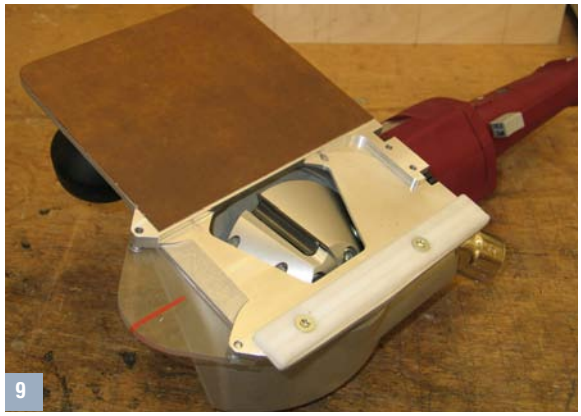
8 **The Lamello Cantex**

9 **The cutter block produces a shearing cut**

10 **Using the Cantex**

11 **Perfect flush trimming**





using a plane to trim, the chances are that the plane blade in some places will catch the surface adjacent to the lipping. This can often tear the surface and leave a rather nasty scar.

It's annoying enough with ply, but it's really irritating if you've just taken the trouble to veneer the surface. With just a tiny amount of veneer to play with, there's not much scope for scraping or sanding out any blemishes.

This is not the end of the world on a tool cabinet, perhaps, but there are ways to avoid it happening in the first place. A router can be successfully used - it just requires a decent sized straight cutter and a homemade jig to raise the base plate up off the surface. It also needs an extension to one side so that the router can hover over the edge of the board whilst trimming the lipping flush.

Smug

If trimming lipping is a regular occurrence in your life, there is another fine piece of Lamello technology guaranteed to give you that rather smug, self-satisfied smile. The piece of kit in question is the Cantex, which for this sort of work has several benefits over a router. It would be rather depressing for Lamello's designers if this wasn't the case. The Cantex has a completely different cutting action to a router – a router cutter can tear the edges of the lipping, whereas the Cantex has a cutter block fitted with three blades. It also has a 'helical milling geometry'. This not only sounds impressive but by giving a shearing cut, it also guarantees a very impressive finish.

The blades are like planer blades, and give a width of cut of 45mm (1¾in), so even wide lippings can be dealt with in one pass. Depth of cut is dealt with using the same 'step memory' dial as on the Top 20 biscuit jointer. The dial clicks round in 0.035mm (1.4 thousands of an inch) increments, to a maximum adjustment of +/- 0.7mm, so adjusting the cut to remove the excess lipping without touching the adjacent surface is easy. It ensures perfect, flush trimming too.

Chunky

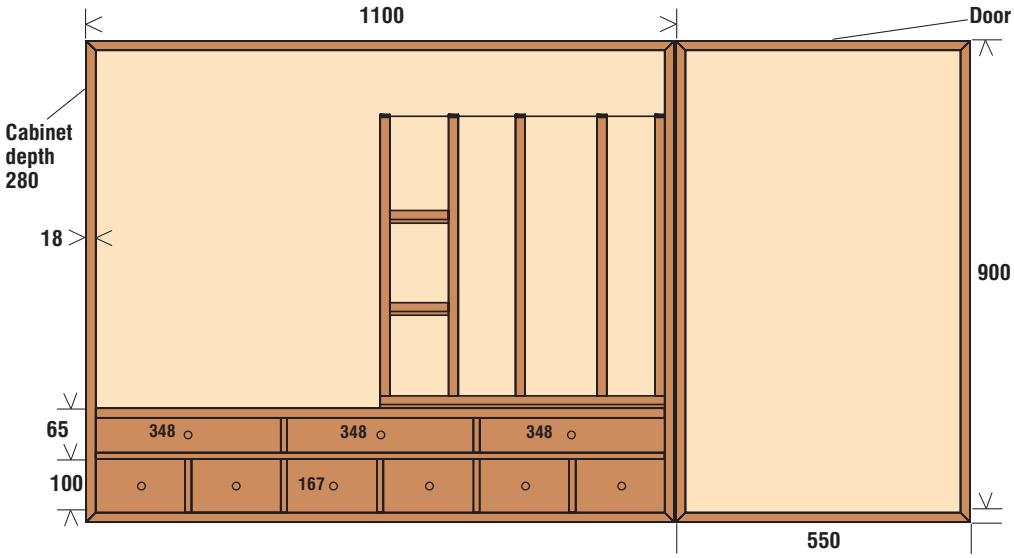
The wide support plate which sticks out to one side of the machine has a nice, chunky handle which gives good stability, and the underside is covered with low friction material to help it all glide over the surface with a minimum of fuss. Excellent and very quick.

A final operation before gluing the carcass together is to cut the rebate for the back of the cabinet into the rear edges of the four boards making up the main box. If I was an American, living in America, I suspect I would perform this operation on the saw table, a quick and easy way of creating this quiet big rebate. Of course in our British nanny state, where we are not deemed responsible enough to remove a crown guard on a table saw for fear of creating an instant blood bath, the best option is a router table. Perhaps a spindle moulder would do, and it is a bit more manly for removing big lumps of material!

Gluing up

Gluing up can be one of the more stressful parts of furniture-making. Even if you are using glue with a relatively long open time, getting the joints together quickly will usually result in a finer glue line – speed is normally of the essence.

The downside to using biscuit joints can be the amount of time taken to get the glue into all the



Next month
In next month's issue, John undertakes the veneering, and fits the doors and interior

relatively narrow grooves which house the biscuits. I have just used a small brush in the past to encourage the glue to go where I wanted it. However, I have since discovered that there are some cunning gluing systems aimed at making biscuit jointing a much more relaxed affair. Perhaps not surprisingly, these glue applicators are made by Lamello – don't be put off by their names, they probably sound better if you're Swiss! The first one I tried is the 'Minicol', which is just like a small plastic squeezy bottle with a metal nozzle. This is the cunning part. The nozzle has two flat faces narrow enough to fit into biscuit grooves, and has a hole on both faces which allow the glue to come out and coat two opposite faces of the groove when the bottle is squeezed.

It's great for gluing biscuits, and also works well for gluing dowels. It's useful too for applying glue onto narrow edges. Just put a finger over one of the holes on the nozzle while squeezing the bottle and you'll achieve a nice controlled bead of glue.

When not in use the nozzle is slotted into the metal stand, which seals the nozzle and stops it from getting blocked, avoiding having to wait for the glue to ooze out.

Cramping

Having got the glue into all the joints, a bit of cramping is needed to hold it all together while the glue sets. I have used band cramps for gluing up chairs and box-like creations for years but they don't have quite the same raw power as sash cramps. However, they are much lighter and generally more manageable. When using band cramps on a frame with sharp corners there is always the challenge of allowing the band to slip round the corners, whilst at the same time protecting the corners from damage. Up until now I have just made up wooden corner blocks with rounded outside corners for the strap to slip round. Now Lamello has come up with a complete band clamping set consisting of long bands which utilise a simple lever action to tension the straps, and aluminium section in various lengths from 120 – 600mm to deal with the corner challenge.

Gluing up the main box for the cabinet and the housing for the drawers in one go may well prove a bit stressful for one person. Gluing up the drawer housing bits separately is an option, but thankfully there are extra pairs of hands around in my workshop which makes the, 'glue-it-up-in-one-go' option far less challenging.

In addition to the band clamping set around the outside of the box, a few F clamps are needed across the drawer dividers to prevent any embarrassing gaps.

A quick measure across the diagonals of the main box will ensure everything is square. F&C

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12 **A Lamello Dosicol being used for gluing larger biscuits in the main carcass**

13 **The Dosicol in use**