

# Jewellery box



## What you will need:

- Rip saw
- Crosscut saws
- Marking gauge
- Cutting gauge
- Narrow chisels
- Coping saw
- Mallet
- Clamps
- Combination plane

## Michael T Collins

makes an elegant jewellery box, fitted with plenty of drawers and compartments

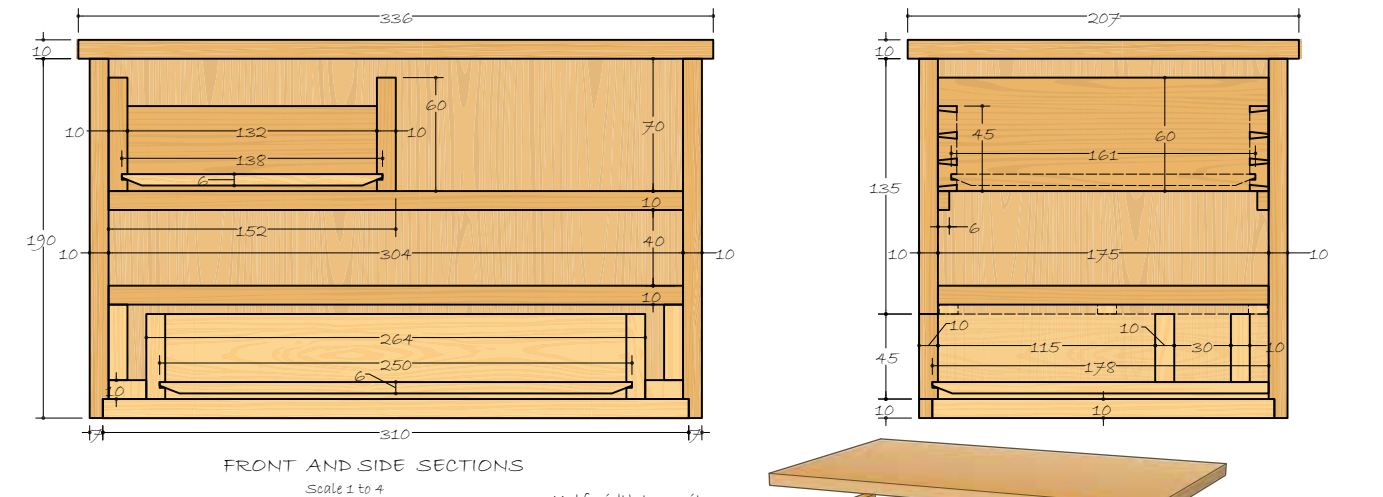
From childhood I have been fascinated by boxes. We still have our children's 'treasure' boxes in the attic with countless treasures inside. Jewellery boxes are equally fascinating with their treasures, many drawers, trays and compartments. In this article we will make a simple, handcrafted cherry (*Prunus avium*) box with a single drawer, drop in tray, hinged lid and secret compartment.

## Making the jewellery box

**1** The dimensions of this box are based on the golden-rectangle, with a width-to-length ratio of about 1:1.6. This box will be about 324 x 190 x 195mm. Rip the board in half using the techniques we have discussed in previous articles. Plane one side of the board flat – this will be the face. Then plane an adjacent edge at 90° – this will be the face edge. Mark these faces. From the face side, use a marking gauge to mark a 10mm gauge line around the edge and plane down to that line – the advantage of using a marking gauge is that the groove it creates becomes a 'stop' visible from the surface.

**2** Cut all the pieces to size.

**3** For all secondary wood use a species like pine (*Pinus sylvestris*) or poplar (*Liriodendron tulipifera*). Plane a 10 x 3mm rebate at the bottom of all the pieces and on the ends of the front and back pieces – these will



FRONT AND SIDE SECTIONS  
Scale 1 to 4

Half width tray sits on battens front and back, 6mm chamfered pine panel bottom

Main carcass has rebates on front and back for sides, and around bottom edge for base

Drawer with 'secret' section at back. Inner back housed into sides, outer back joined with through dovetail.

## The wood

Many years ago I acquired some 50mm thick boards of beautiful Pennsylvania cherry, which I had re-sawn to a little under 25 x 25mm. Pennsylvania-grown cherry has quite the reputation as being superior in quality to cherry of the same species grown elsewhere in the eastern US. Whether that's true or not is debatable, but what is true is that cherry is a beautiful wood – rich in colour and a delight to work. If you are purchasing wood for a project and willing to do a little work, it is always cheaper to buy rough-sawn boards and rip and plane to size. To make this box you will need a board 25 x 200 x 1,220mm. While you could make a box with scrap wood, nothing beats a box with matched grain, so layout the wood for best grain matching.

house the bottom and sides. Remember to set the knicker to slice through the grain on the end cuts. The base is made from a piece of poplar.

## Creating the drawer front

I covered the technique of creating a drawer front in issue 10 of *Woodworking Crafts*, while making a chessboard.

**4** Decide on the size of the drawer and layout the parts. Then, rip the front panel into those pieces. The beauty of this technique is that the grain flows through the drawer face.

**5** Once the pieces have been cut out, glue the face pieces back together in the same orientation. The drawer will be custom fit later. Cutting the front apart will reduce the height of the front panel – plane the other sides down to match.

**6** Cut a 12 x 3mm groove in the front and back piece to house the divider 'ledge'. ➤





**7** Glue the box together making sure that it is square – the base will help with this.

### Making the drawer

The drawer will have three very small half blind dovetails at the front and an unconventional through dovetail at the back. This will test your skills! The drawer has sides the length of the internal distance from front to back of the box. This will allow the back of the box to act as a drawer stop. It will also allow for a secret compartment, created by adding a 10mm groove and partition in the drawer sides about 50mm from the back (see step 18). Cut the sides and back out of 10mm poplar.

### Dovetail layout

**8** We covered creating half blind dovetails in issue 10 of *Woodworking Crafts*, but here's a quick recap. Square all the drawer pieces and set the cutting gauge to the thickness of the drawer side and then using the gauge mark the inside face of the drawer front – this gives the depth of the pins. Now decide on the length of the pins. As a rule I make mine about  $\frac{3}{4}$  the thickness of the stock – so in this case, 10mm will give about 7mm long tails. Mark this on the end grain of the drawer front only and also all around the drawer sides.

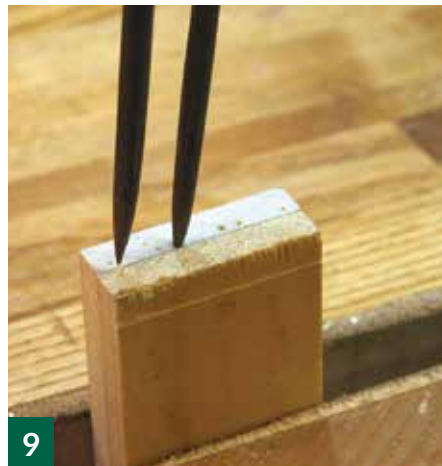
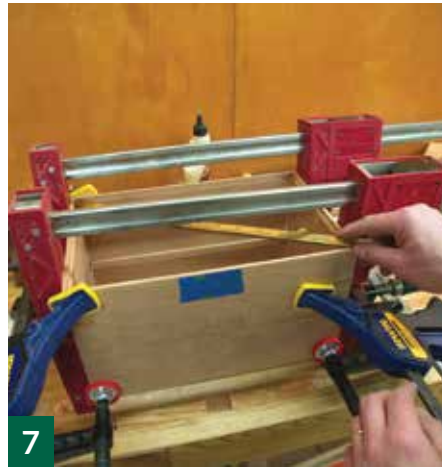
### Cutting the tails

**9** I like to cut tails first by ganging the parts together – cutting pins first would require all the tailpieces to be custom fitted and would take considerably longer. For three tails, set a pair of dividers to a little over  $\frac{1}{3}$  the width of the piece. Take the tail pieces and starting at the edge, walk them across the end grain and then come back from the other side: the holes made will be the location of the waste. You can adjust the size until you have achieved the desired look.

**10** Then, gang the sides together and draw the tails on one piece of wood.

**11** Saw on the waste side down to the knife mark, making sure you do not go beyond – this error would be difficult to hide.

**12** Remove the bulk of the waste with a coping saw. With a chisel placed about 1.5mm from the knife



line and held close to the end for control, chop half way through the wood. Turn the pieces around and repeat from the other side. Finally, place the chisel in the knife line and chop out the last bit of waste. I always do this last chop from the face side so that if there is any tear-out, it will be hidden inside. Clean up the tails.

### Cutting the pins

**13** These are going to be custom fit, so now is a good time to label all the mating parts with 'marriage' marks. With the drawer front placed



in the vice with the face towards you, place one of the sides on top so that the knife line matches with the ends of the tail. With a very sharp knife or pencil, draw it towards you along each tail edge. Do not draw the knife past the knife line on the end grain.

**14** Now, mark the waste and from the inside saw down on the waste side of the lines. Here, it is quite acceptable to saw beyond the knife line. Start by placing the chisel within about 1.5mm of the knife line and chop down.

**15** Then, from the end grain, remove the thin piece of wood and repeat the process. You will need to chop down along the side of the tails where the saw could not reach. Cherry is a very brittle wood and chopping too hard on the endpins runs the risk of splitting the wood. To reach into the corners use a smaller chisel. Lastly, place the chisel in the knife line and chop down, adding a slight undercut. This will allow the tail to snap into place without binding. Repeat this for other end of the face.

**16** It's a good idea to add a small chamfer to the inside edge of each tail. This makes for a cleaner joint and a place for excess glue to go. Test fit the pieces and adjust as needed.

### Drawer groove

**17** A 3mm groove is cut into the front and sides of the drawer using a combination plane so that the groove lies within and at the bottom of the first pin and tail (approximately 6mm up from the bottom).

### Trough dovetail

**18** This is a non-traditional dovetail (I'm calling it a French dovetail). With a pencil, mark a line about twice the width of the drawer side from the end of the drawer side. Lay out the joint as per photo 18.

**19** Cut out the waste using a saw and chisel.

**20** Lay out a single pin and cut like any other through dovetail.

**21** The dovetail might look odd...>





**22** ... but is perfect for the back of a drawer.

### Drawer bottom

**23** The bottom is a piece of 6mm pine...

**24** ... cut and chamfered to fit the groove. Glue the drawer together. Check for squareness and test fit – use a block plane to adjust the fit.

### The divider

**25** This consists of a 10mm piece of cherry that is held just above the top of the drawer by thin pieces of cherry glued into place – nothing fancy as these will never be seen.

### The tray

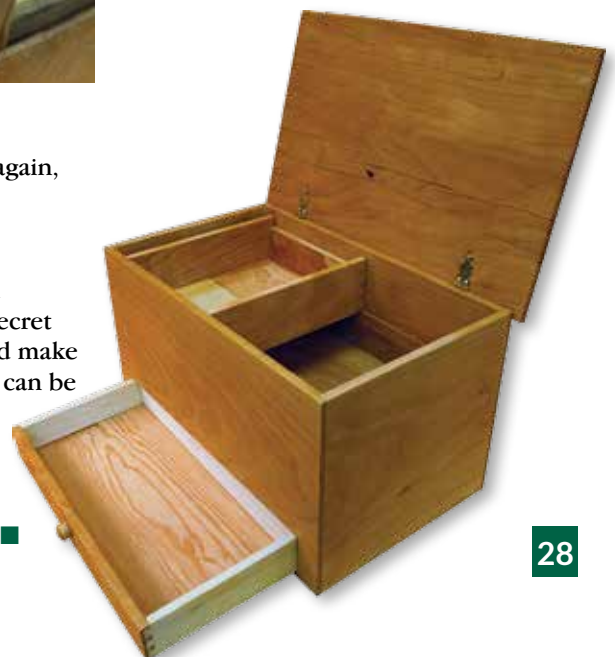
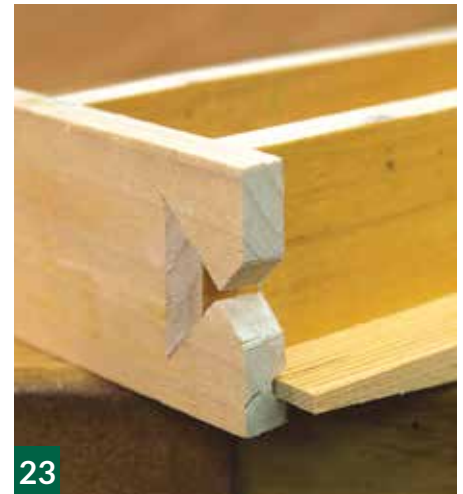
**26** The tray is half the width of the box and all joints are through dovetails. The dark patches are where I used some CA glue just to strengthen some flaws in the wood – they will not be seen when cleaned and finished. The 3mm groove in the bottom holds a 6mm pine panel; chamfer to fit.

### The lid

**27** The lid protrudes 6mm on all sides. Bevel all edges with a block plane – do the end grain first. This way, any tear out will be cleaned up. If your top needs to be wider than the pieces you have, plane two pieces together and then use a rubbed glue joint – make sure the grain matches at the joint. To prevent the top bowing with seasonal changes a couple of battens (grain running vertically) may be glued to the underside of the lid. Attach brass hinges so that the lid acts as a stop.

### The finish

**28** Tray and drawer are lined with good quality felt and the drawer pull is a simple knob. For the finish I'll



### Michael T Collins

British-born Michael has been working with wood off and on for 40 years. He moved to New York in 1996 and over the years, has made bespoke furniture, including clocks, inlay work, Adams fireplaces, book cases and reproduction furniture.

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be reaching for the Danish oil again, but only a light coating.

### Variations on a theme

Two drawer box, drop-in multi compartment tray and lots of secret compartments. Get creative and make an heirloom jewellery box that can be passed on for generations to come. For details of the secret drawer mechanism go to: [sawdustandwoodchips.com](http://sawdustandwoodchips.com).