

BAILEY'S ROUTER CLASS

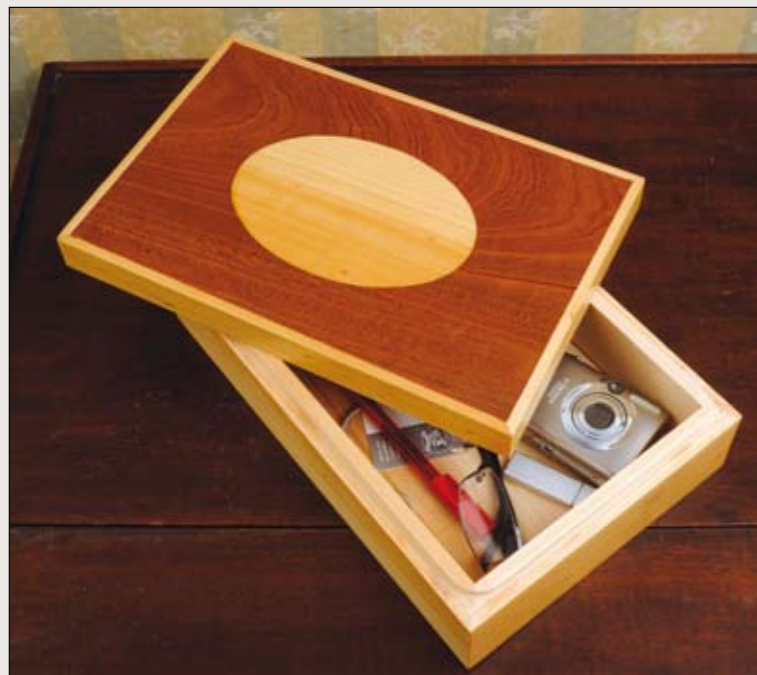
Trinket box



Anthony Bailey builds and decorates this nice box

THE PROJECT

There are times when a wooden object can look a little dull - take this perfectly functional, useful trinket box. One way to enliven the design is to inlay a shape in the top, for added detail. This is easier than you might think if you have the appropriate cutter kit available. This project has several other interesting router techniques, two of which I last used in WPP46 for my Tea Caddy project.



The inlaid ellipse on the box's lid adds that nice finishing touch

The router is still the most versatile power tool there is. Along with a vast range of cutters, jigs and gadgets - many of which you can also make for yourself - it can help produce high-quality woodwork.

This series is intended to show you what the router can do, while assuming the reader has a general level of woodworking knowledge. We hope to show you the aspects of each project that specifically involve the router and how this great bit of kit can expand your woodworking skills.

Each month we will highlight the jigs, cutters and gadgets you will need to help you get more from this incredible machine. Feel free to send us pictures of your routing endeavours, or post them on the WPP forum at:

www.woodworkersinstitute.com

THE JIG



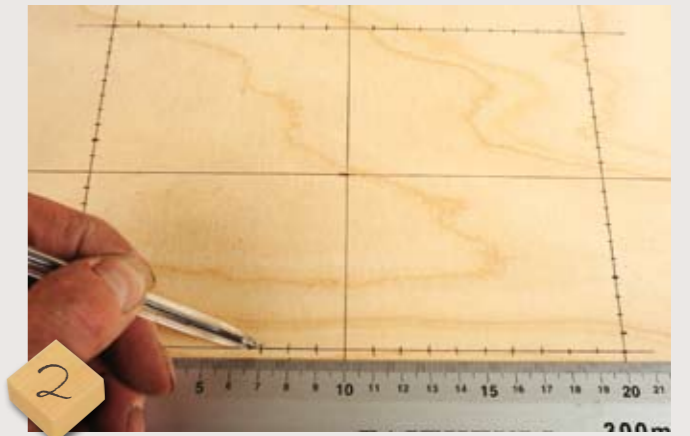
1

The template could be any shape, such as a swan or a star, but I chose an ellipse because I like the shape. Here is my schoolboy method for setting it out, just as I did in the very first Routerclass back in issue 40. Draw a rectangle the same width and height as your ellipse



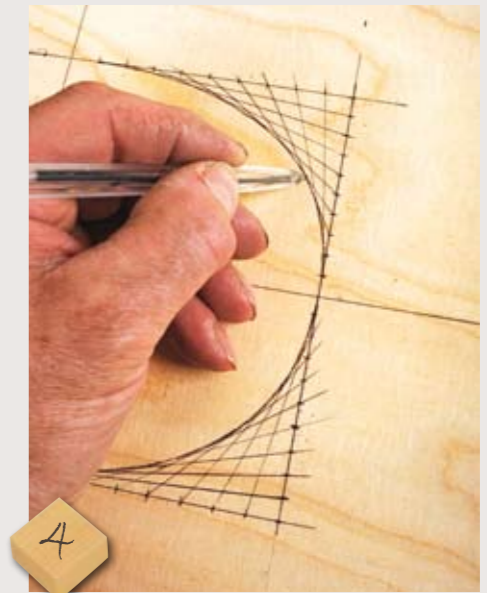
3

Use a ruler to draw lines from the first mark after the middle division across to the first mark on the adjoining space, and so on. Carry on round and you end up with something remarkably like an ellipse!



2

Divide each side of the rectangle into an equal number of divisions. I tend to use centimetre spacing for the long sides and reduce the width of each division on the short sides, keeping the number of divisions equal on both sides



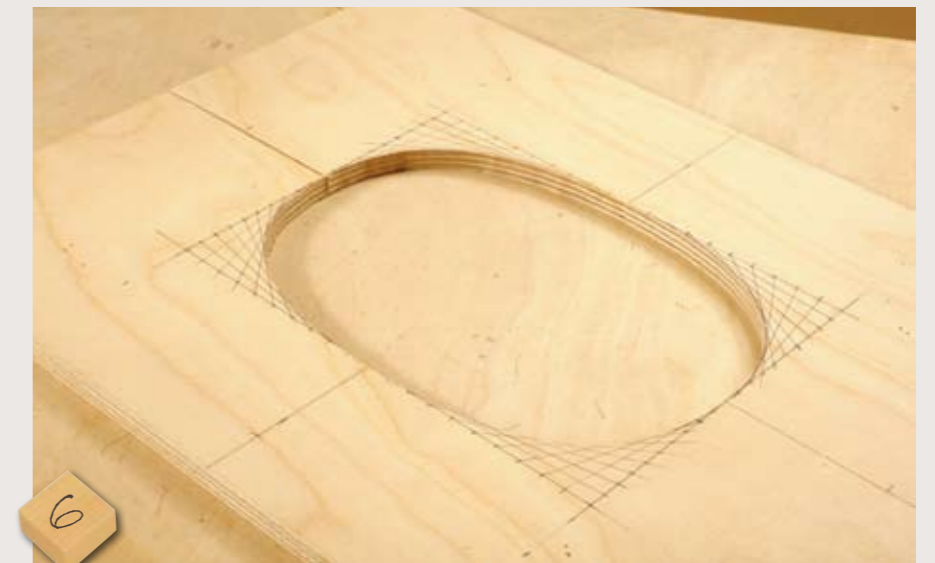
4

Smooth the line with your pen or pencil until it appears as a proper curve. Once this is done, bandsaw or scrollsaw very close to the line, doing so carefully to preserve the curve



5

Use a fine rasp or woodfile to give an even, sweeping curve the router can follow



6

The finished template: note the bandsaw blade escape kerf. With large guidebushes this kerf isn't a problem, however the tiny inlaying guidebush we are going to use will require the kerf to be filled with a slip of wood so the guidebush cannot drop into the kerf opening and create a bump in the ellipse

THE CUTTERS

The box corners were joined using an Oldham Viper small lock mitre cutter. All the rebates were made using a Trend rebate cutter, swapping bearings to obtain the correct rebate sizes. The solid carbide inlay cutter and guidebush are from Trend. A

Wealden bottoming cutter, designed to clear large areas, finished off the waste removal. Lastly, a Wealden arbor with a thin slitting cutter is used to cut the box from the lid



MAKING IT



1 Decide on the size of box you wish to make. In my case I found a part board of parana pine so the dimensions of the board governed the box size for me. Thickness all stock and finish the sides and ends to size, but leave the top and bottom oversize at this stage. Mark the outside faces at each end so you know that the joints will be cut on the opposite face. Note: in the picture, the cutter is already mounted and a breakthrough fence added for vital support across the cutter gap in the fence



2 You must make test cuts on waste wood to get the correct cutter height and fence depth settings for the mitre cutter. I make the test cuts with the grain, which caused problems later.



3 The front and back components are machined in the lying down position on the router table, with the finger profile section of the joint in the centre of the workpiece. Note the pushblock behind keeping the workpiece under control



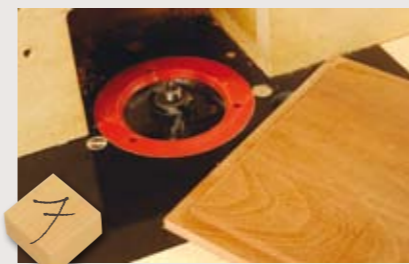
4 I realised that the box ends, which are machined in the vertical position, would drop into the cutter opening in the table. So, as in WPP60, I resorted to a sub bed – a piece of 6mm MDF which, after I had raised up the cutter by a suitable amount, I swung sideways on to the running cutter so it fitted neatly around it and then clamped it in place. My test piece allowed me to set the cutter height



5 Before assembly, a rebate for the top and bottom is run along all the long component edges



6 The sides of the box are glued and assembled and clamped square with a board on top to ensure it is completely level. Once dry, clean any glue residue away



7 The box top and bottom are rebated so they will sit flush in the sides. Readers will note I had a sudden change of heart and opted for a darker wood on the top so I could do a tight inlay



8 Glue and clamp the top and bottom in place, and then fix the template in place with double sided tape



9 This tiny guidebush and cutter are for inlaying. The internal, or first cut, is done with a special collar in place which is just visible here. It is removed for shaping the inlay itself



10 The inlay cutter has cut the ellipse, with the guide bush following the template. Then the waste is removed with the Wealden bottoming cutter



11 The inlay timber is planed to fit flush in the recess. The guidebush collar is removed and the router run around the template on the inlay timber – don't let the cutter wander



12 A test fit revealed I needed to trim the inlay fractionally. A spokeshave proved equal to the task



13 Once the inlay is a neat fit, apply an even layer of glue, press it home and clamp it in place with a board and paper insert



14 A slitting cutter is used to separate the top from bottom neatly. In this case it didn't go quite through, which is safer as the box won't separate unexpectedly. A fine tooth handsaw completes the cut



15 The box lid is rebated by sitting it over the cutter taking care of the bearing and machine screw holding it do not contact the underside of the lid. Place it centrally over the cutter before switching on and only feed into the cutter rotation



16 Rebate the top edge of the box bottom so the lid slips on nicely. The corners of the upstand edge must be rounded with a chisel so it fits the rounded rebate in the lid. Sand the box exterior and apply a suitable finish! ■