

“It is simplicity personified and another example of the ingenuity of the inventor”

hold the components which enabled me to accurately position the pivot points and hold the pieces in place while routing away the waste material. The baseboard also enabled me to work right or left handed as the shape of the top was a mirror image on either side of a centre line.

Cutting the outer curve was quite simple, but moving the cutter to the position of the inside curves of the lipping was very much a question of trial and error, even though the circle jig I was using had a screw adjuster. The problems of the backlash that results from the relatively loose fit of a conventional machine screw and the lack of a graduated dial made the adjustment to the new position reliant on visual alignment. The skill of craftsmanship rather than that of engineering.

I had no such problem when I tested this facility with the Micro Fence Circle Jig. I chose to cut the outer curve first as this seemed to be the most convenient approach for my test attempt. The clear recommendations in the instruction booklet suggest cutting the inner curve first and in most practical applications this would be the right sequence.

The next thing to do is to measure the diameter of the cutter, which in my case was  $\frac{1}{4}$ in down-cut, spiral fluted. In metric this is equivalent to 6.3mm, not an easy dimension to measure unless you use dial callipers. To benefit from the accuracy of



**Cutting the outer radius with the Circle Jig**

the Micro Fence dial, a pair of dial callipers is essential.

To make the next cut the diameter had to be moved by 6.3mm. This wasn't a problem. I had zeroed the dial for the first cut, so six revolutions and three graduations moved it by precisely the diameter of the cutter. Now the second cut and hey presto the two curved edges mated perfectly. This is what I expected, but the reality of the experience was a revelation. To test the fit further I cramped the two pieces together and you could not see the joint line! It looked like one piece of MDF.

For the purpose of clarity in the second photograph I have coloured the edge of the outer curve to differentiate between the two pieces.

### GROOVING IN THE HOUSE

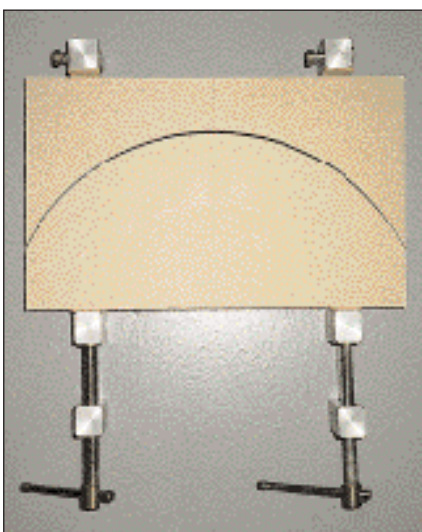
It is often necessary to cut a groove or housing in a situation where it is not



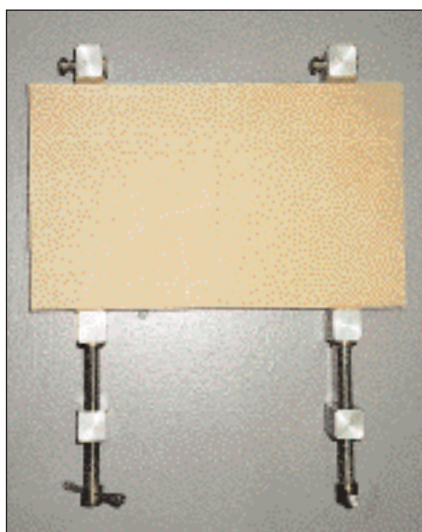
**Cutting the inner radius with the Circle Jig**

possible to use the router with a fence due to the distance of the cut from the edge of the component. The simple answer is to clamp a strip of wood down and use the edge in relation to the baseplate of the router or to use a guidebush against the edge. The biggest problem is that of holding the strip in place and making sure it is parallel to the previous cut. I had this challenge when fitting the horizontal frames to a tall chest of drawers.

The housings for the frames that were positioned near the top and bottom of the carcass could be cut using a fence referenced from the top and bottom edges. Those housings that were beyond the reach of the fence-connecting rods had to be cut with a slotted jig and guidebush. I managed to do the job but it would have been so much simpler and far more accurate with the Micro Fence parallel cutting insertion fence that screws to the underside of the Circle Jig. It is simplicity personified and yet another example of the ingenuity of the inventor and the reliable control of the precise adjustment of the Micro Fence system.



**Inner and outer radius curves before applying pressure**



**Pressure applied – you cannot see the joint line**



**Coloured edge on inner radius curve to distinguish between the two components**