

CUTTING OVAL OR CIRCULAR BORDERS

by Frank Harris

Refer to **Figure 1**.

- Step 1

Cut the desired shape and size of oval #1 in veneer.

- Step 2

Cut 1/16" wide strips (parallel with the grain) of the veneer selected for the black and white strips.

- Step 3

In order to make an accent border with the grain running at right angles to the edge of oval #1, it is necessary to make a partial oval from wedge-shaped pieces of veneer as shown in **Figure 2** and oval #2. The accent border of the black and white strips can then be cut from oval #2 as detailed in steps 4, 5, 6, and 7. The number of wedges and their angles depend on the shape and size of oval #1 and therefore cannot be documented.

Wide wedges can be used on the flattest parts of the oval and narrower wedges on the tighter curves. Always try to maintain the grain at right angles to the edge of the oval. It is an individual cut and fit process and no production methods using identical wedges seem to be possible. Fasten the wedges together with veneer tape on the underside.

- Step 4

Align oval 1 on top of oval #2 and hold in place with masking tape. Using a compass, draw an oval on oval #2 bigger than oval 1 by an amount equal to two thicknesses of strips from step 2 plus the width of the accent border. Set the compass and holding one leg against the edge of oval #1 draw the oval (see **note 5**)

- Step 5

Step cut around oval 1 and through oval #2 using a spacer consisting of one thickness each of strips from step 2 between the edge of oval #1 and the knife. Step cut about 1½" then turn the taped assembly over and cut from oval #2 the 1½" piece of veneer along the knife cut. When

viewed from the top the taped assembly will show a space between oval #1 and oval #2 into which the strips from step 2 will fit perfectly. Before inserting the strips they must be mitred for a joint and I recommend wetting the strip to conform better to the curve. I also recommend making the mitred joints on the flattest part of the curve and using strips long enough to avoid joints on the sharp curves. Use veneer tape on the underside of the assembly to hold the strips in the cut space.

- Step 6

The next step is to carefully cut out the oval which was drawn in Step 4. I cut mine with a sharp scissors and then carefully sanded the edge to the line using a jig to keep the sanding block at 90 degrees to the edge.

- Step 7

We are now ready to step-cut this sub-assembly into the background veneer while at the same time adding another black and white strip to the outside of the accent border. Tape the sub-assembly (with masking tape) to the background veneer and repeat step 5.

- Step 8

All that remains are the normal finishing operations.

Notes

1. The black and white strip can of course be any colour you select for contrast. Black is usually good with almost any other wood but if the accent border is light coloured then a maple strip might not contrast very well with it.
2. It is important that the joints between the wedges of oval #2 do not show up in the accent border so a somewhat coarse grained wood will tend to hide these joints best.
3. To greatly simplify this project use a circle instead of an oval for then all wedges can be the same width and angle.
4. Depending on the veneer selected for the accent border it might be a concern for some marquetarians to always keep the same side of the veneer uppermost when assembling the wedges and to assemble the wedges sequentially as they are cut from a strip. This would be done to ensure more consistent light reflection from the grain.
5. Any other method of drawing a concentric oval is of course quite acceptable. The method described was selected because it is simple and does not required any special equipment or know-how.

BACKGROUND VENEER

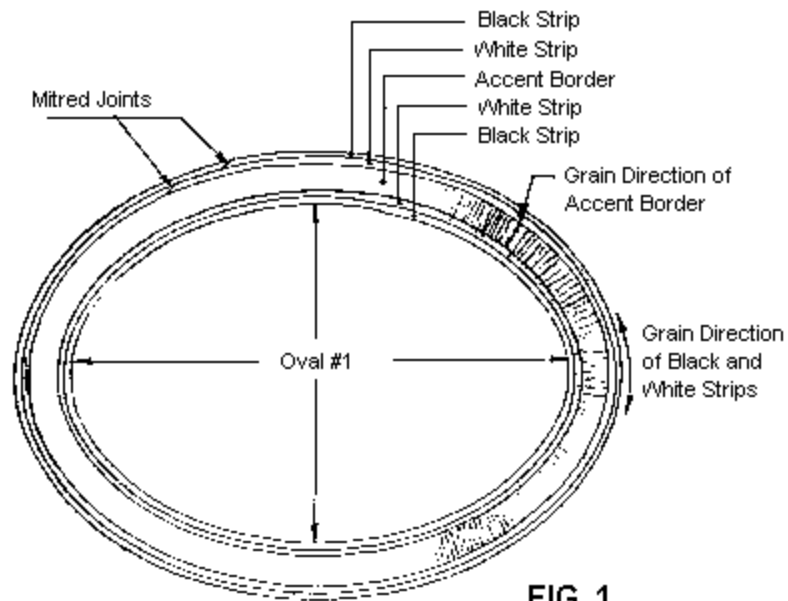


FIG. 1

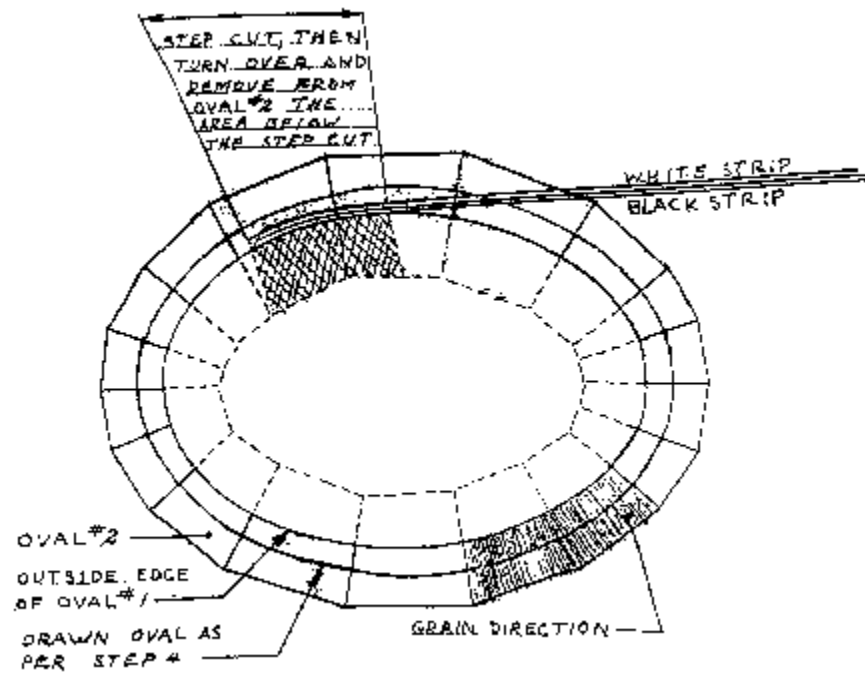


FIG. 2