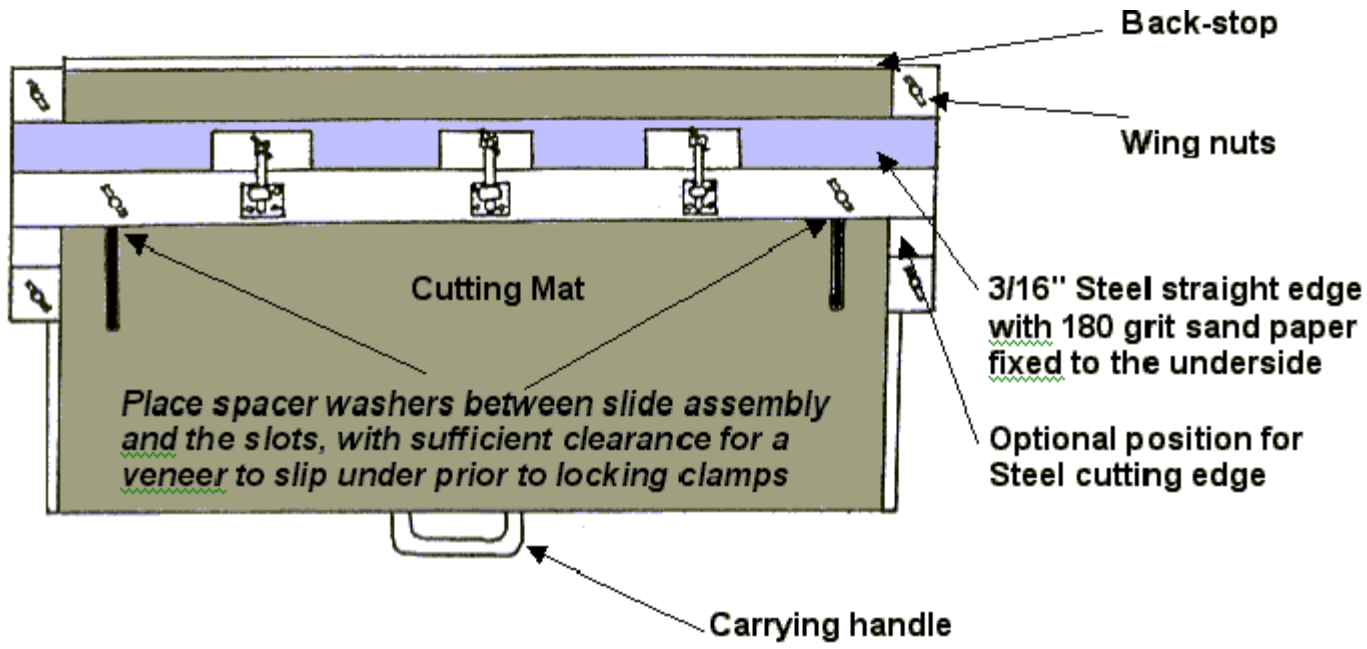
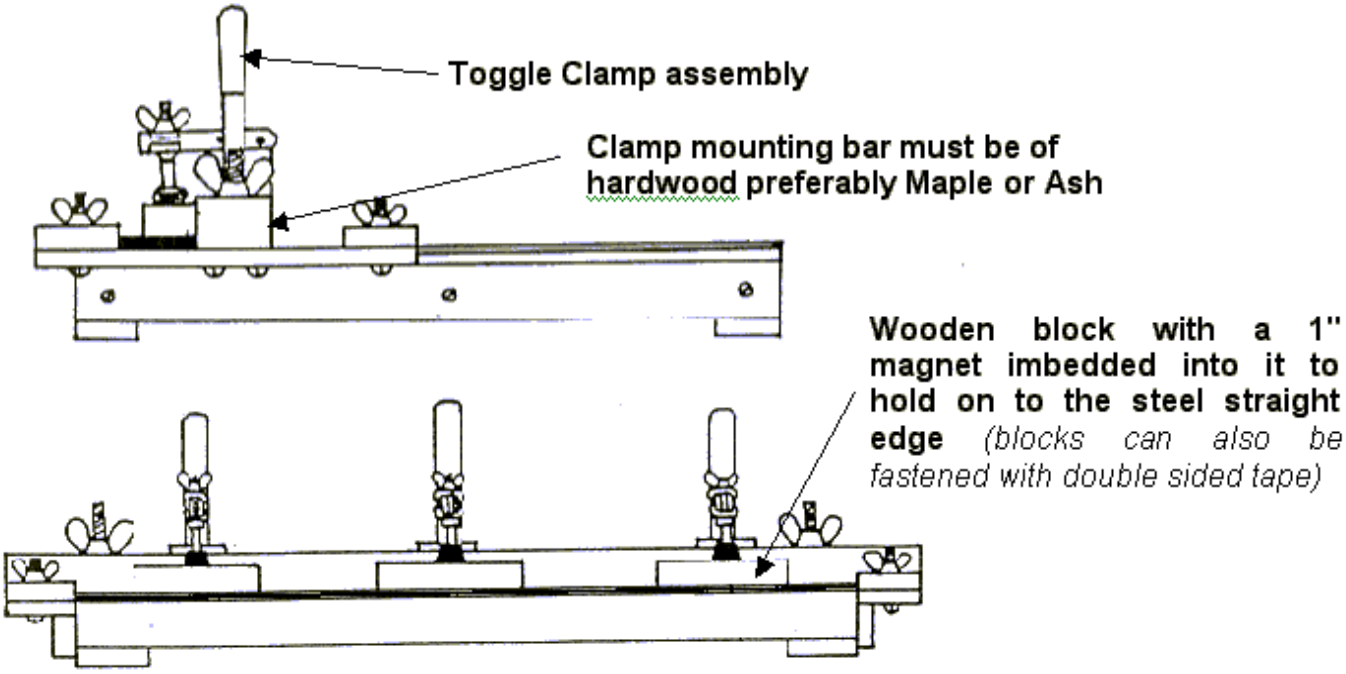
STRIP CUTTING FIXTURE

by John Sedgwick

W5 PARQUETRY

Parquetry is the close relative of marquetry and can be defined as geometric veneer shapes assembled so as to form a repeating pattern. The shapes must be precision cut and identical, to do this we require a device or jig to make consistent cuts and once set will duplicate pieces exactly. Some years ago I designed and build a parquetry fixture, which is shown on the following page. It allows the quick setting and clamping of the veneer to be cut. There is of course simpler set ups that can be made for occasionally cutting veneer strips, such as two "C" clamps to hold a straight edge against pre-measured blocks. Although these simple parquetry set-ups work, they tend to be less accurate and require more attention to component set-up positioning





If you do a lot of Parquetry and have need of a quick method of cutting strips without constant clamping and set up, this fixture provides one set up and quick consistent dimensions. The cutting surface is an *"Olfa"* cutting mat, your purchase will dictate the size of your fixture. These self-repairing mats will last for hundreds of repetitive cuts in the same place, however eventually it will be necessary to cut a section off of the mat. Secure the mat with double-sided carpet tape on both edges prior to cutting the slot. Once built the operation of this parquetry fixture is simple.

TYPICAL PARQUETRY DESIGNS BEGINNING WITH VENEER STRIPS

1 The veneer strip width is best set by positioning pre sized wooden blocks at both ends between the backstop and the steel cutting edge. An assortment of pre-sized blocks ½" ¾" 1" wide. about 2" long should be made with this fixture for future set up.

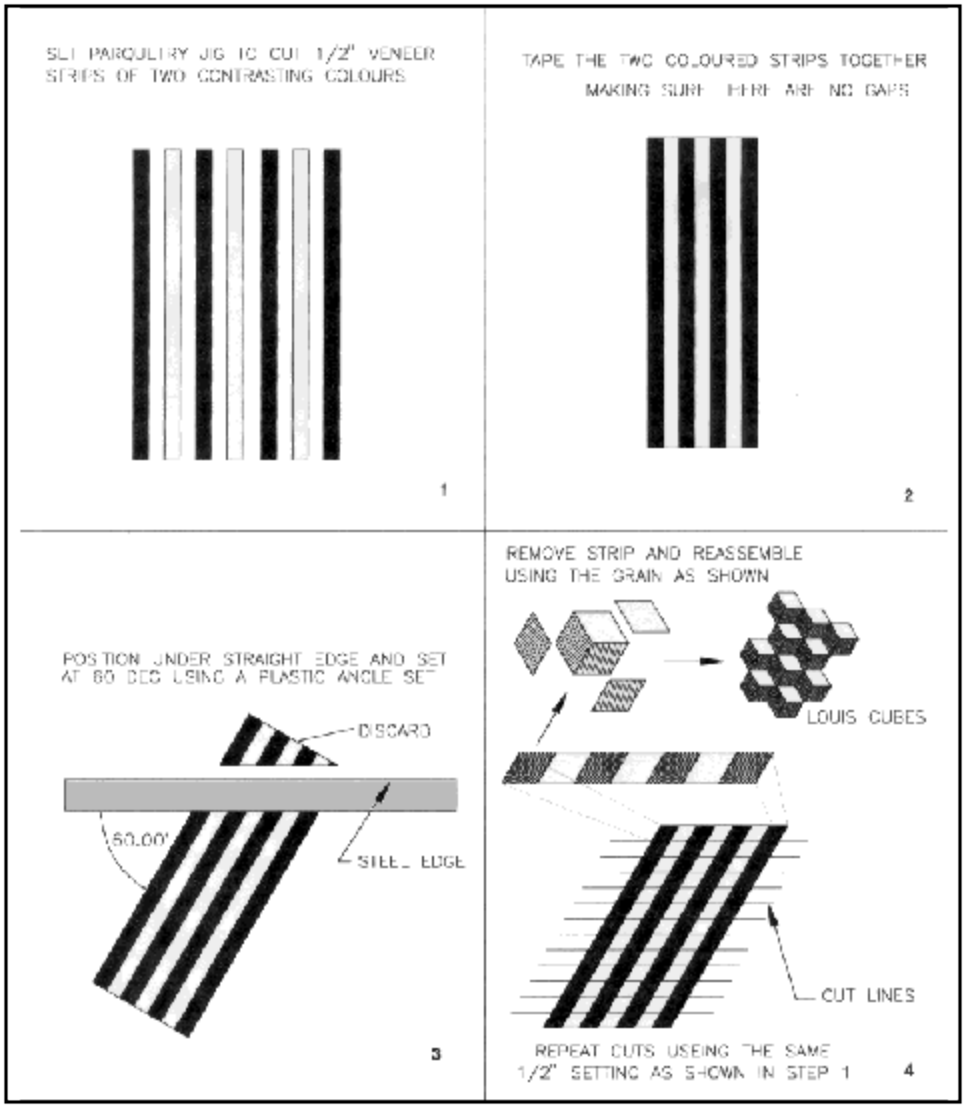


Fig 20 *Examples of typical designs starting with veneer strips*

2 Loosen the clamp mounting bar wing nuts and slide the bar forward to touch the dimension block and lock in place, repeat both sides.

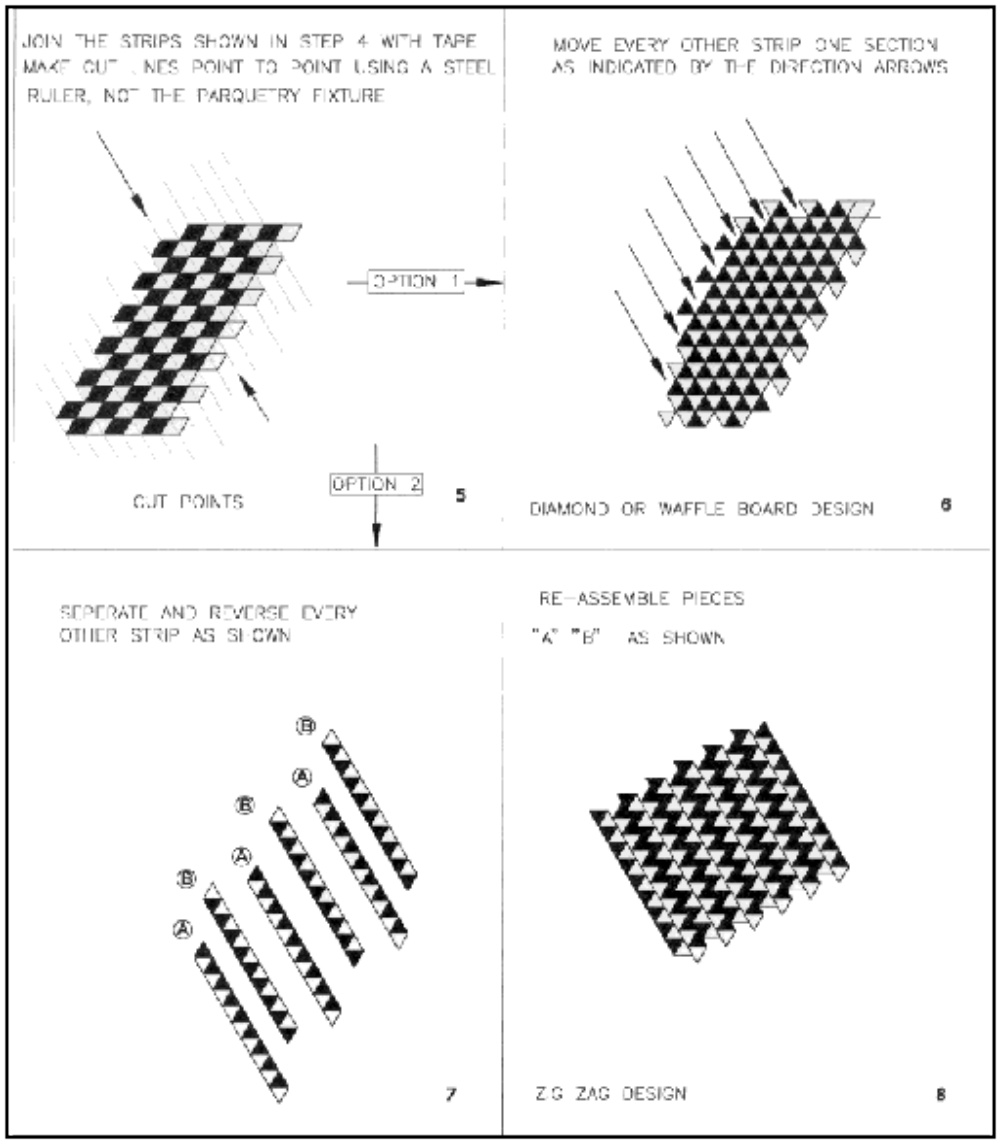
3 When the toggle clamps are open there is sufficient room to slide a veneer under the cutting edge to touch the backstop.

4 Once you have set the distance each repetitive cut will remain the same as the clamping only eliminates the clearance beneath the cutting edge and does not reduce the set width.

5 The other blocks with wing nuts are to hold the cutting edge firmly in place.

The alternate cutting position is to allow for larger strips or squares to be cut using the same fixture.

When cutting strips and beginning the assembly it is important to remember the concept of *"compound errors"* which multiply with each successive cut. The variables can definitely be reduced but not completely eliminated. Please note the following details.



ADDITIONAL STRIP CUTTING SEQUENCES 5 - 8

1 Use the sharpest edge possible, I use breakaway blades and replace the edge often

2 Use many repetitive cuts; if you force the knife through the veneer it will tend to pull the wood fibres apart leaving a rough edge.

3 Hold the knife vertical at all times, a variable angle will make a dimensional difference when compounded or placed alongside reversed pieces.

4 Glue a piece of 180grit abrasive paper to a hardwood block and run it along the cut edge of the strip, some species such as mahogany or walnut usually leave small imperfections and prevent a tight joint.

5 Because some designs require strips to be reversed end to end or turned over there will be a build up of tape due to repetitive cutting, making it difficult to make tight seams. When you have finished an assembly sequence tape the strips and carefully remove the tape from the opposite side. Use low stick masking tape to join the strips together as it will hold the strips for cutting, but can be easily removed.