

# MAKING AND USING A MARQUETRY PRESS

*by John Sedgwick*

Although there are several other options to a “**Clamp press**” such as a vacuum press and the use of contact adhesive, by far the most used system of gluing a picture is the mechanical press using white PVA glue. In the previous article by Paul Armstrong it is correctly noted that the pressure applied by a heavy weight while appearing considerable, is insignificant when distributed over a wide area.

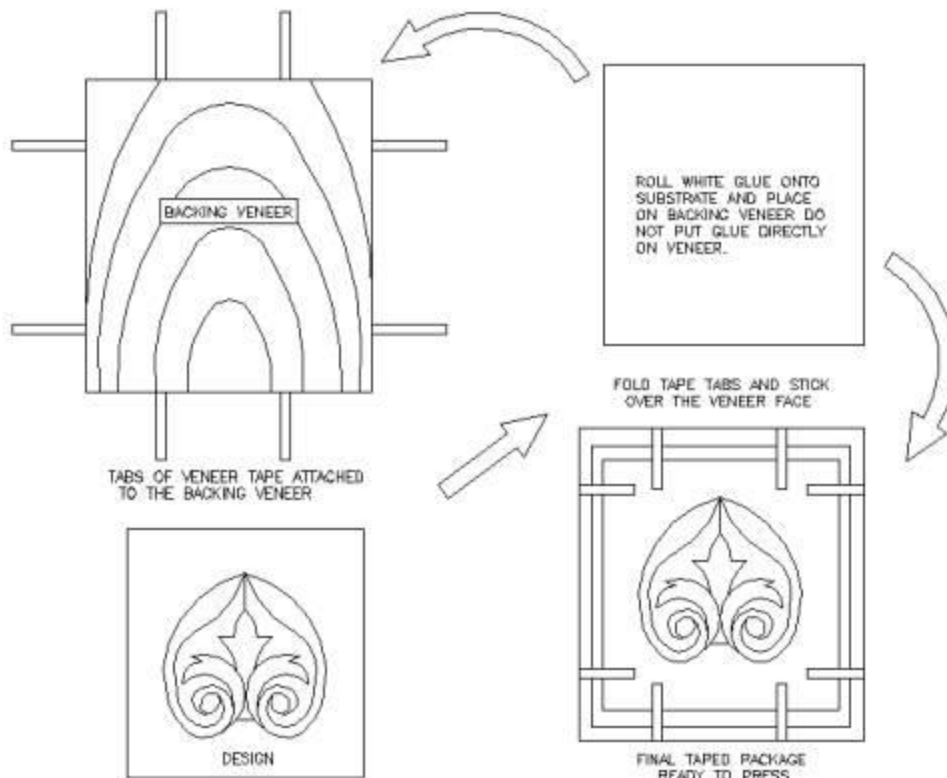
## **Procedure**

The finished piece of marquetry is assembled as a packet to be inserted into the press as shown in the drawing below. The first thing to know is that as soon as you put water near your marquetry picture it will begin to warp. So the faster you can get it in the press the better. You will need the following

- 1-** A veneer slightly bigger than the board onto which your picture is to be glued.
- 2-** A stable substrate  $\frac{1}{2}$ ” or  $\frac{3}{4}$ ” thick, bigger than your picture + expected framing borders.
- 3-** Veneer tape
- 4-** White glue, (not yellow carpenters glue!!) a wide glue brush, and preferably a small roller.
- 5-** Several sheets of newsprint cut larger than your picture
- 6-** A veneer press as shown on the following page.

**Step-1** Trim Picture and square corners, if there is a chance that after gluing, the flattening of the picture will slightly distort, or move it out of square you may wish to install the border stringers later. In which case make sure the board is large enough.

**Step 2** Square and centre picture on the board, with or without stringer then draw pencil line around it. You can also draw diagonal lines from each corner to check the picture to be square to the board.



**Step-3** Cut the mounting board –use M.D.F. or similar product, if you use plywood make sure it is of good quality, many hours of work can be ruined by using rough plywood which may have cavities or suspect gluing of the laminates.

**Step 4** Cut backing veneer slightly bigger than the board and stick tape fingers on as shown.

**Step-5** Place the picture on the board, make sure you can see all four lines at picture edges and corners touch the diagonals. Apply masking tape on the board about ¼” beyond the pencil lines.

**Notes:** *This is the last opportunity you will have to check the picture before it is glued down take the time to check the following carefully*

**A-** That every piece of the face design is well covered and glued securely with Veneer tape

**B-** There is no tape of any kind anywhere on the surface to be glued down.

**C-** There are no overlapping pieces, especially on the stringer borders. This can easily be established by running your hand over the surface.

**D-** All of your equipment is ready and there will be no delay once you begin to apply glue.

**E-**Take the phone off the hook or tell anyone present to take a message, you will be busy for the next 5min.

**Step-6** Apply glue to the complete backside of the substrate

**How much glue?** A visual rule is that the glue should be thin enough to appear as spilt milk and be spread transparent and even enough to see the substrate below. I use a soft rubber roller used in screen-printing called a “Brayer” to spread the glue, after I roughly apply it with a brush. The roller spreads it perfectly even eliminating any puddles and the need to squeeze out any excess glue trapped beneath the veneer.

**Glue failure.** Excess glue is the primary reason for failure to press the picture “**flat**”. From your lessons in Physics you may recall that it is not possible to compress a liquid, which is fortunate fact in some instances, especially when you come to apply the brakes on your car, or operate mobile hydraulic excavation equipment. So a puddle of glue in the centre of the substrate **will not** completely squeeze out and usually cause a distorted ripple on the veneer surface.

**Step -7** Place the substrate with glue side down, in the centre of the backing veneer aligning the grain direction the same as the predominant grain direction of the face design/picture. Never put water-based glue directly on veneer!!

**Step -8** Apply glue to the board within the masked area and spread evenly. Remove the masking tape when you have finished spreading glue.

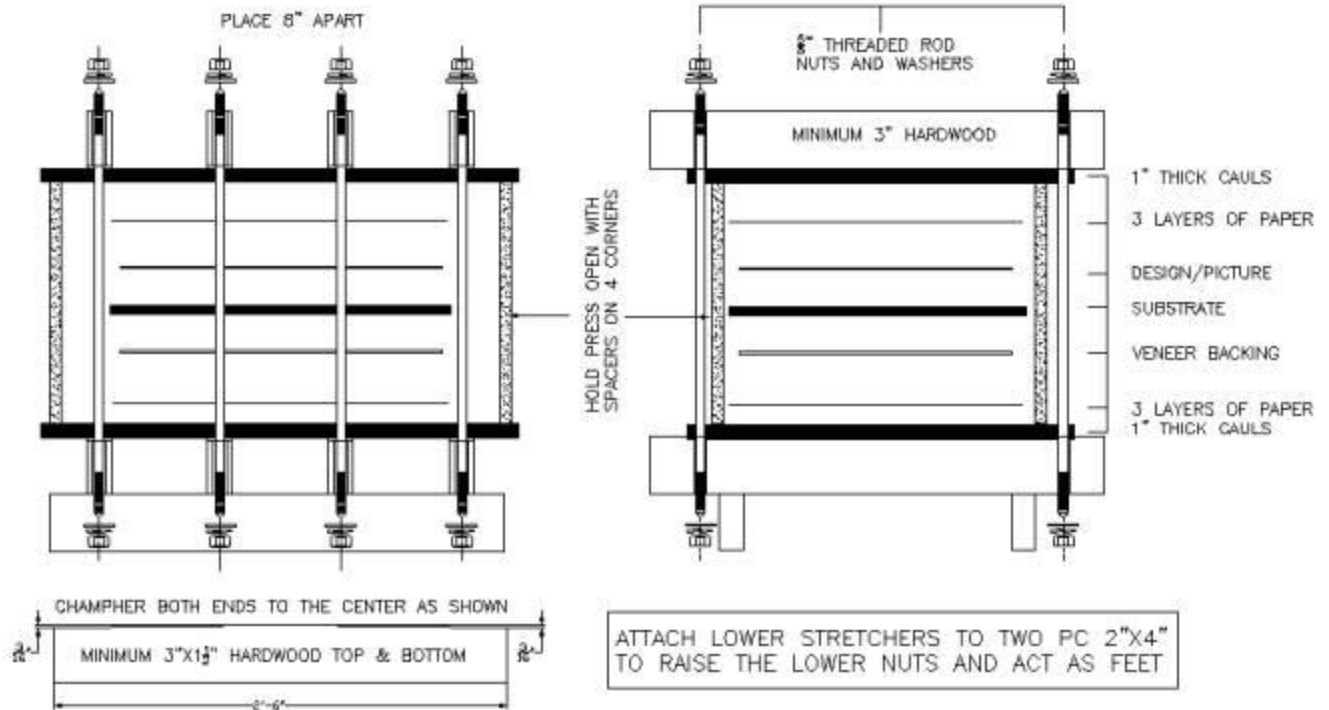
**Step -9** Wet the veneer tape fingers with a moistened paper towel

**Step -10** Place picture on the substrate within the registration area and align with the diagonal lines as close as possible and fold the moistened tape fingers over the face veneer and press firmly.

**Step -11** Putting the packet into the press can be a four handed job so the press should have already been set up by holding the Cauls open with four spacers

**Step -12** Place “package” in the press on 3 layers of newsprint in the sequence shown below

**Step -13** Place 3 more layers of newsprint on top of package, remove spacers and tighten nuts on the threaded rod by hand until all the nuts are finger tight



**Step 14** Tighten the nuts with a wrench in a rotational sequence until the chamfered ends of the stretchers are flat on the cauls top and bottom. Remove in 1 hour and check if everything is OK place it back in the press for 24hours.

**Step 15** Trim the backing veneer to size of the substrate. Do not trim the board to suit the picture until you have removed the tape.

**Step 16** Use a hand scraper to remove as much tape as possible. This will also establish where the low spots are due to differences in veneer thickness. Moisten any remaining tape with water or a cotton rag.

**Notice** I said “Moisten” excess water would reactivate the white glue. After about a minute of contact with water the tape will loosen and can be peeled away. Repeat as necessary to clear the surface of all tape.

**Step 17** Trim substrate to match the picture dimension. Veneer or glue a solid frame onto the edges of the substrate. Continue to level the picture face by scraping and final sanding ready for finishing.