Appendix A2 - - - Walnut Leaf Inlay:

The new seat leaf inlay method

The new method is faster and more accurate. It has a lot of short steps. All these steps are required in addition the making a seat with no inlay. Each step requiring glue drying time is shown in blue. This can't be accomplished in a day.

1. The seat is made out of three 6-inch boards (1.75 x 6 x 22). The leaf inlay is entirely in the middle board. The middle board is sawn into three pieces on a slight angle.
2. The pattern for the walnut leaf inlay is in AutoCAD, so full sized prints are made of the leaflet haves and the leaf layout
3. Stock is prepared for the leaflets. One piece is required (0.25 x 2.5 x 34). It seems like the best final optical effect is when the seat is plain sawn and the leaflets are quarter sawn. The only difference to show the inlayed leaf of the same species is the way that light reflects.

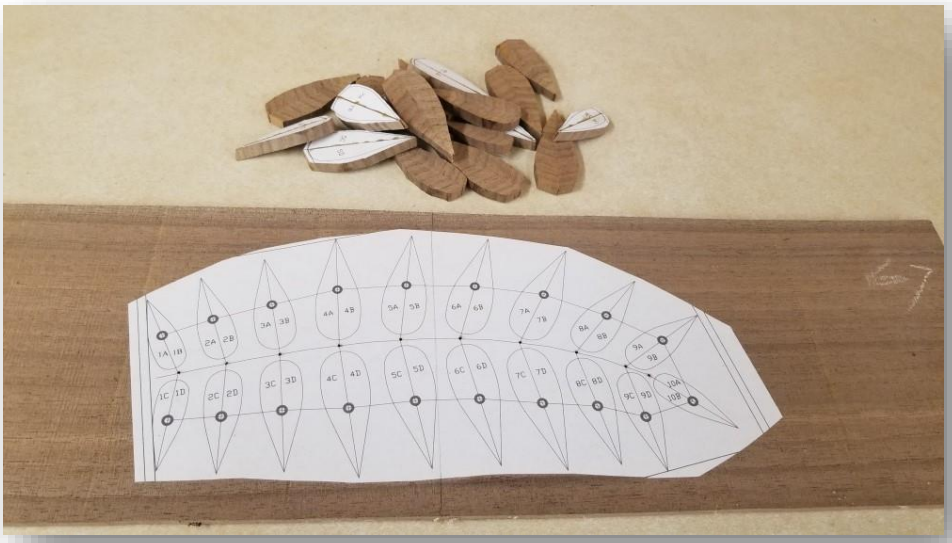
4. Rubber glue the leaflet prints onto the stock in the correct order from petiole to tip. Trust me, this is important to the final light reflection.

5. The 38 leaflet halves are band sawed from the stock leaving about 1/16 inch extra material outside the printed lines. Don't lose any pieces!

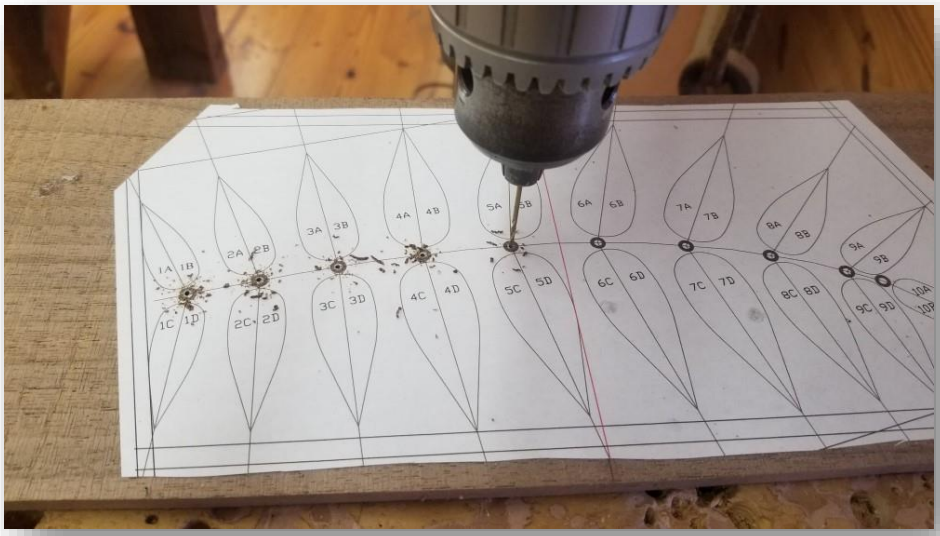
6. The half leaflets future center lines are trued on a belt sander.

7. The 38 half leaflets are glued at the centerline and clamped to make whole 19 leaflets.

8. After the glue is dry the leaflet bottoms are sanded flat for gluing – next.



9. Draw a centerline on the middle middle board and rubber glue the full leaf layout centered on the board. The full print has a centerline to help the alignment.



10. Ten 1/16 holes are drilled to later insert the scroll saw blade. The full leaf layout print shows where the holes go.

11. The leaflets are glued onto the full layout print.

12. The scroll saw I used to cut out the 19 leaflets. The saw is cutting through two thicknesses, the prepared leaflet and the board. For ¼ inch stock and a _____ scroll saw blade the scroll saw table is tilted 3.5 degrees. This taper lets the prepared

leaflets drop down ¼ inch for an exact fit in the board. This is the longest step. It takes me 1.5 hours.

13. The prepared leaflets are separated from the board waste and glued into the board.

When all the leaflets are glued in place, you are out of danger for losing any of the pieces.

14. When the glue is dry, the leaf's stem area is sanded smooth, filled, and sanded again in preparation for inlaying the leaf stem.

15. The trench for the stem is made with a guide template and scratchers.

16. Make the stem material about 0.040 inches thick and glue it in place.

17. When the glue is dry, the stem material is rough sanded flush with the board surface.

18. Of the three middle boards, the center of the top board is removed to expose the leaf inlay.

19. The three middle boards are glued back together as close as possible to like they were sawn apart. The more clamps the better.

20. When the glue is dry, the sides of the middle assembly are kiss ripped or joined in preparation for gluing the three seat boards together