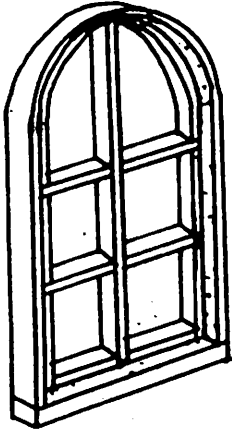


A Procedure For Making Stern Windows.

by Tom Palen.

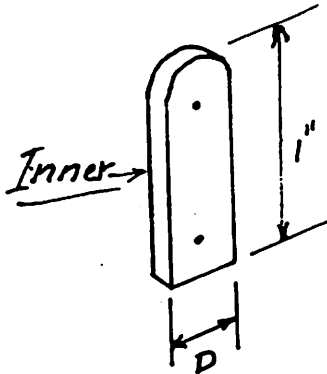
W15



I needed a set of five windows with rounded top frames for the transom of the "Endeavour". Boxwood with a natural finish was desired, and with a bit more detail than is obtained by using single strips for the frame. After a number of unsuccessful attempts to get boxwood to bend to the rather sharp curvature ($\frac{1}{8}$ " diam.), the following procedure was developed. Hot lemon juice had been suggested as an improvement over ammonia or hot water to increase ease of bending. I found no noticeable improvement in bending, but the lemon juice appeared to cause less discoloration to the boxwood, so I used it. Reducing the thickness of the boxwood sufficiently seemed to be the solution to bending.

The dimensions shown here are for the "Endeavour" on a scale of $\frac{1}{5}" = 1'$ (they are what I used--they were not on any plans).

1. Make 2 male forms for bending the casing strips, the inner casing to fit snugly inside the outer one, recessed as shown in the above sketch. See Fig. 1. Use $\frac{1}{16}"$ plywood.



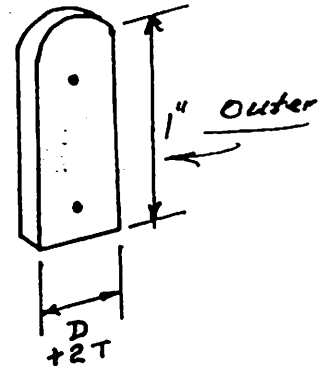
Bending forms.

D = inside diam. of inner casing (approx. $\frac{3}{8}"$)

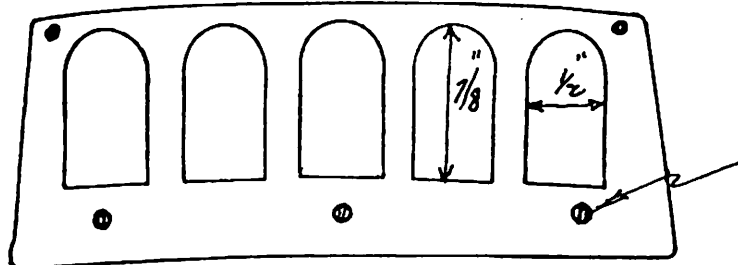
T = thick. of casing strips (approx. $.015"$)

Tack to base board, several inches apart for bending clearance.

Fig. 1



2. Make a female form of $\frac{1}{16}"$ plywood for gluing up the framing (casing) strips and mullions. I made 5 forms because the windows were slightly canted to follow ship camber. See Fig. 2.



Fasten to base with small screws to permit easy removal.

Gluing form.

Fig. 2.

3. Prepare casing strips of boxwood:-

Outer casing, 2 mm wide x $.015"$ thick x 4" long

Inner casing, 1 mm wide x $.015"$ thick x 4" long

Also, mullion strips, 1 mm x $.015"$, length as required.

I thinned down the strips by clamping on bench between two lengths of brass of correct thickness and sanding.