## Making Dowels

I always try to glue AND dowel any structural parts on the hull or masts wherever possible. Underwood (Plank on Frame Models) claimed he doweled everything and his models were at a scale of 1:96! Although I have treenailed the planking on brigantine Leon and Le Requin, I think it was more decorative than anything, and both models were scale 1:48. I think glue in the 1950's was not so good as today.

Jim Byrnes of "Model Machines" sells a draw plate for making treenails and dowels and I have heard it works great. I made myself a draw plate out of a piece of mild steel flat bar and it worked reasonably well, but I found it tedious pulling square stock through several holes before it came to the diameter I needed. Also towards the end of one piece the end became chewed up by the pliers and had to be cut off resulting in loss of material.

What is required? Some straight grained boxwood, or Eastern maple or Apple but any of the fruit woods will work---and for me the Delta 5 " disc/1" belt bench sander is one of the machines I use often. That together with a variable speed Dremel and their chuck. Here goes!

Forgot to tell you I do own the Model Machines sander and the Preac table saw.

Sand to slightly thicker than the dowel diameter required. I aimed for 0.030 " $(0.9 \mathrm{MM})$


Take to Preac and rip number of strips required.


Softwood block with one end corner sanded as shown.


Clamp block to sander table as shown and chuck one of the strips in the Dremel--start the sander and the Dremel.


Feed the strip slowly into triangular hole in block.---keep the Dremel speed fairly slow. Stop the Dremel and the sander and inspect.


Measure the diameter.


If the dowel is too large, loosen the clamp holding the block and with the sander running, sand a little off the end of the block and try again. Once you have the diameter you want, do not remove the block--you may want more dowel. I always make more parts than I need!

Keith Harrison
$21^{\text {st }}$ April 2011

