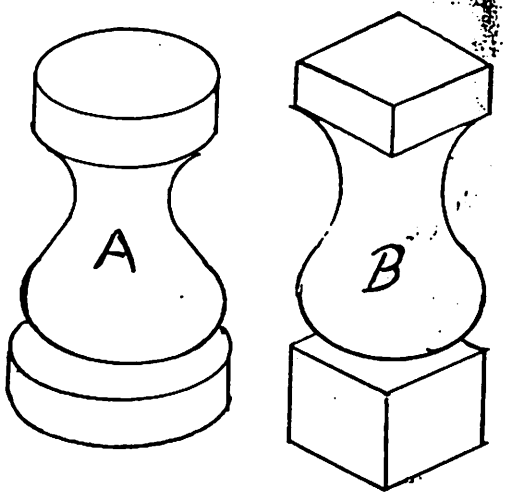
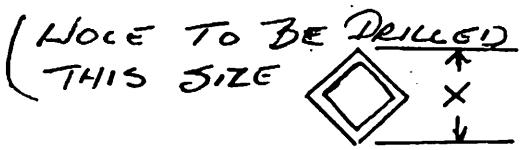
STANCHION CONSTRUCTION

MAKING STANCHIONS by Bob Graham

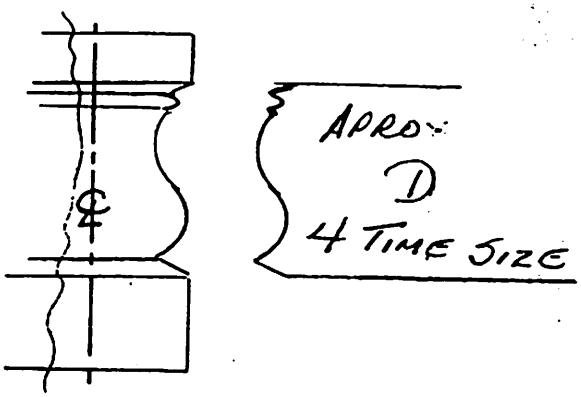


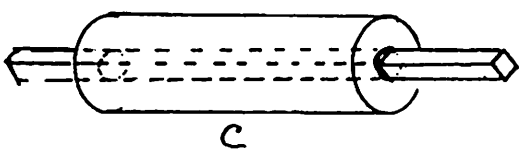
Just about all drawings show that stanchions should be square at the top and bottom such as (B). The only ones I ever found and that I could buy were round all the way as (A), made of walnut and never quite to the right scale or size I wanted.

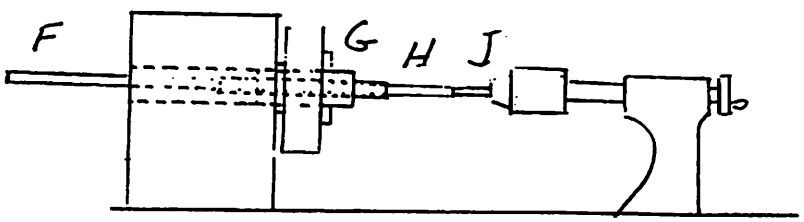
With a lathe and two homemade tools, you can make them very easy. The tools are the hardest part - I took a piece of brass bar stock approx. 1/2" dia x 3" long and square tubing (the size that the wood for stanchions would just slide in snugly). I turned one end down to .409" dia so it would go inside the shaft of my Unimat. I then drilled a hole thru the bar stock so the brass tubing would press tight into the hole. You might have to file the edges of the brass tubing to get it to fit.



The next step is to make a pattern as in (D). This can be made from 1/4" lathe tool stock. I had to re-work pattern tool many times to get it to cut correct (to keep it from breaking or chipping the stanchions). Put (C) in 3-jaw chuck with square wood through it sticking out the shaft in lathe





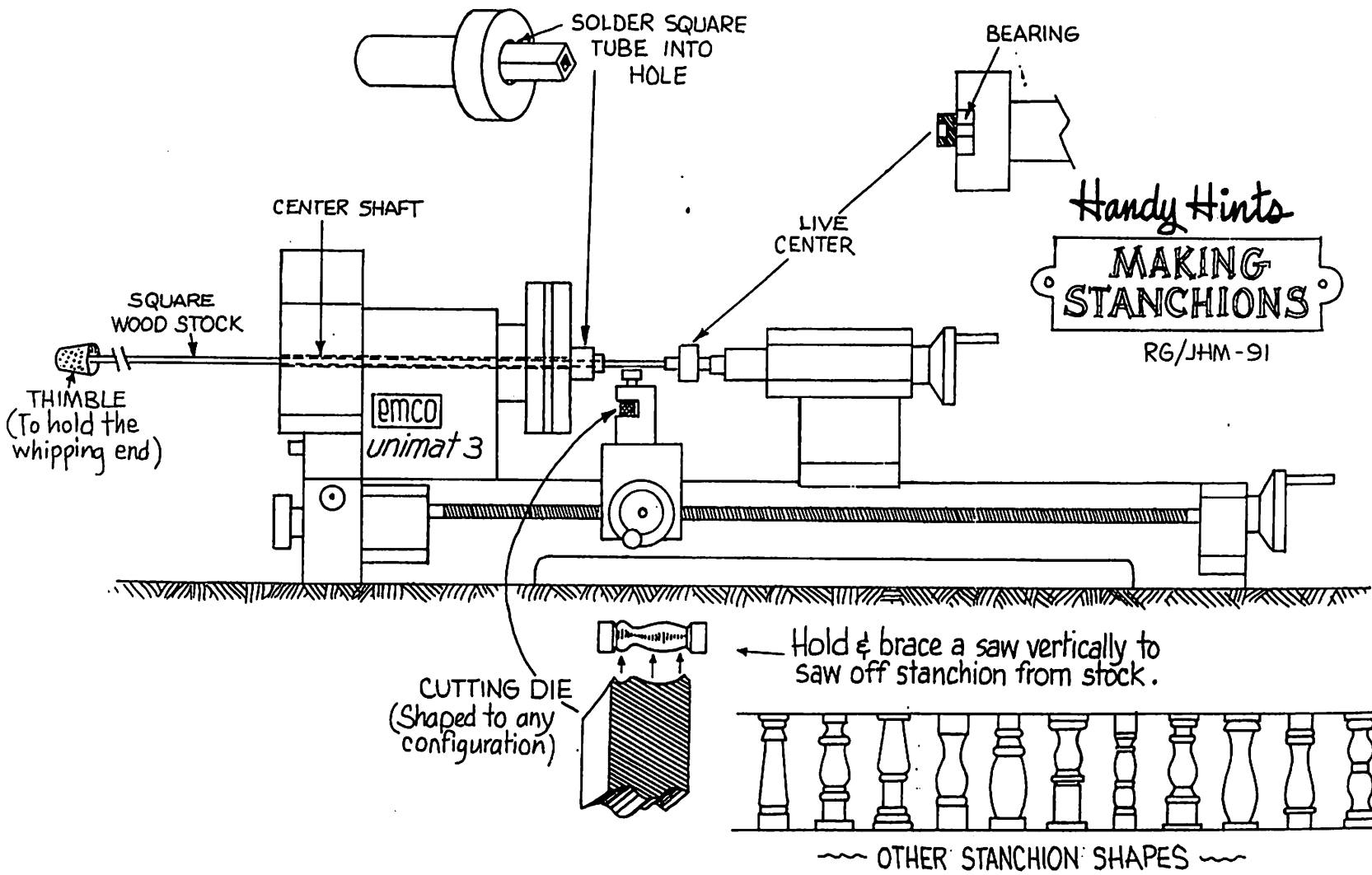


(F) Square wood sticking thru shaft of Unimat -A sewing timble is very good to hold end of wood and keep it from whipping around.

(G) This is the brass tooling stock with square tubing in it.

(J) I used the point out of a drafting compass for a center. Put it in a small 3-jaw or drill chuck and put it on the tail stop and set.

Now you'll have to adjust the pattern tool to the right angle so it cuts the stanchion the way you want it. After you get it set, cut the stanchion and note where you are on the infeed of your lathe. Back it out, take your razor saw and useing the end of the brass tubing as a guide, place the saw on the frame of the lathe for support (if you don't you'll find that it is hard to hold and will jump around and will mess up some of your parts). Bring it in slowly and cut off the stanchion.


SOLDER SQUARE TUBE INTO HOLE
BEARING
CENTER SHAFT
LIVE CENTER
SQUARE WOOD STOCK
THIMBLE (To hold the whipping end)
emco
unimat 3
Handy Hints
MAKING STANCHIONS
RG/JHM-91
CUTTING DIE (Shaped to any configuration)
Hold & brace a saw vertically to saw off stanchion from stock.
OTHER STANCHION SHAPES