

TRUSS MODEL

JIG FOR DRILLING HOLES IN JUMBO CRAFT STICKS USED AS TRUSS MEMBERS

Figure 1: jig assembly -- 3 pieces hot-glued to base so that jumbo craft sticks fit snugly -- I used common pine shelving (3/4" thick)

Figure 2: jig with 20 craft sticks in place

Figure 3: jig with drilled craft stick "template" in place to allow whole assembly to be correctly positioned under drill bit and then clamped in place

Figure 4: thin shims made from poster board inserted if necessary to eliminate any noticeable wiggle of the stack of craft sticks -- if shims are used, you may want to reposition the jig assembly with the template if necessary

Figure 1



Figure 2

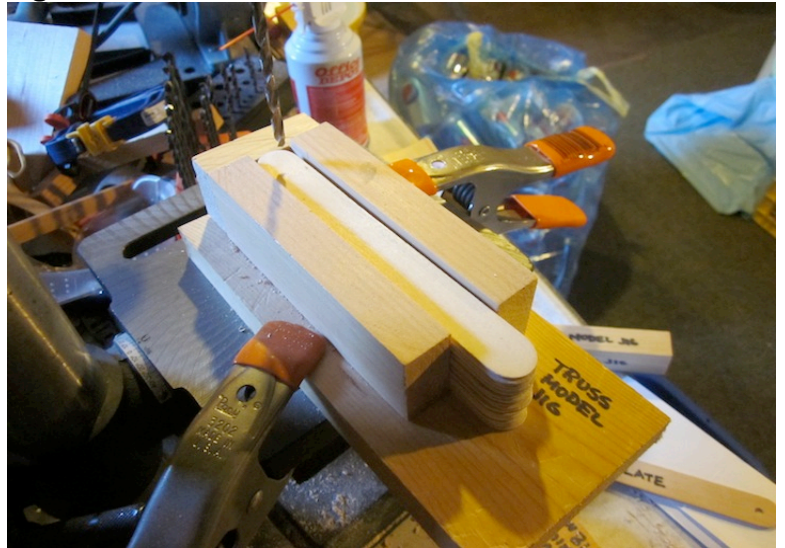


Figure 3



Figure 4

Truss Model Drilling Jig

Don Rathjen.....Exploratorium Teacher Institute.....Pier 15, San Francisco, CA 94111.....drathjen@exploratorium.edu

Figure 5: snug-fitting block (same $\frac{3}{4}$ " pine shelving) inserted on top of the craft sticks -- press down firmly with thumb to keep the craft sticks packed together as tightly as possible

Figure 6: close-up of drill bit just before hole is drilled, showing block in place

Figure 7: can of compressed air (can get at office stores -- used for cleaning computers, etc.) -- the accumulated drill waste needs to be blown out of the jig after each drilling so that there will be a firm fit for the next drilling



Figure 5

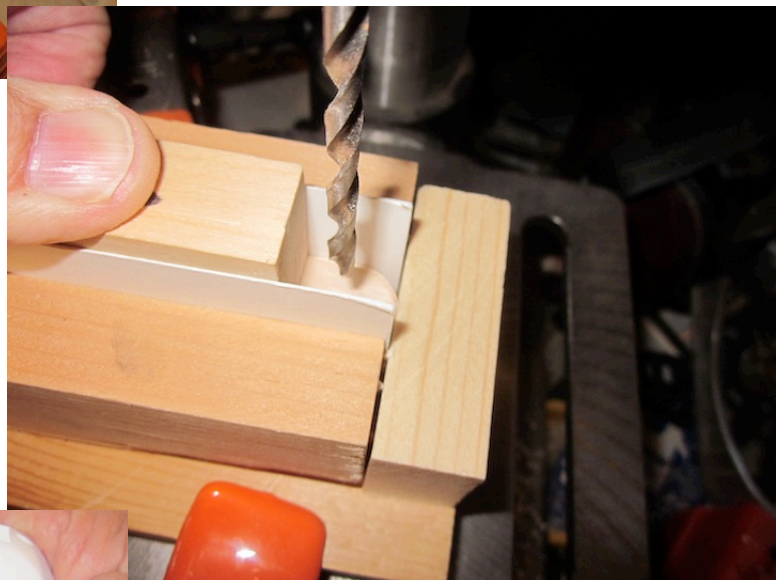


Figure 6



Figure 7