

A Simple Scratchbuilding Tool

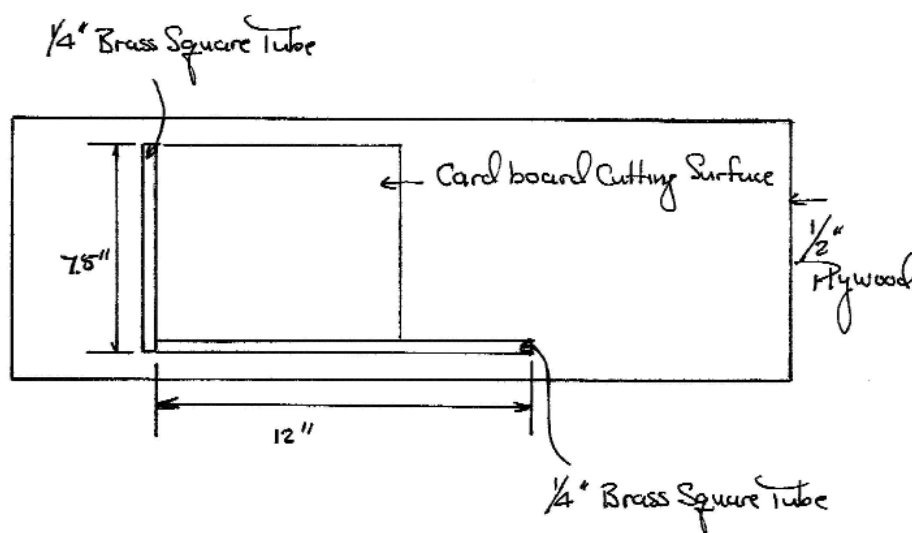
By Fred Willis

MY ENTIRE MODEL railroading “career” has involved scratchbuilding cars and structures. Therefore, it was a pleasure to see Martin Brechbiel’s article on scratchbuilding a flat car in the March/April 2004 issue of **The Local**. I have a few suggestions to amplify Martin’s excellent article.

There is a simple jig that is very useful in aligning and measuring parts. It is cheap, easy to make, and ensures parts are aligned properly. You need a piece of flat plywood and two straight pieces of 1/4” square brass tubing or channel. The part alignment is critical, not the dimensions. See Figure 1. Glue the brass channels or tubing, for their entire length, to the plywood. Ensure the two tubing pieces are at right angles to each other, this is critical. Use a square to line up the pieces. Use glue that bonds wood and brass together and scrape away any glue that bubbles up from beneath the tubing. The model pieces must be able to butt up against the brass tubes when the jig is used.

The jig can be used for measuring and cutting pieces as well as aligning and gluing them. To cut pieces, make a cutting surface from the cardboard backing of a writing tablet. It is easy to obtain and disposable. When gluing them remove the cardboard and cover the plywood with wax paper. This prevents gluing the pieces to the plywood base. This simple jig allows alignment of pieces, and ensures they remain square or straight.

Two additional comments: Stain all wood before beginning assembly. It is easier to scrape away excess glue from stained wood than it is to remove glue to permit staining. A simple method of staining wood is to use brown leather dye. Use 10 or 15 drops per 2 ounces of rubbing alcohol. Let this dry for 12-24 hours; then stain with dilute India ink at the concentration of 5 drops of ink per 2 ounces of alcohol. This method does not produce quite the detail Martin’s method does, but it is simpler for a first time.



Ensure the brass tubes are at 90°.

Figure 1