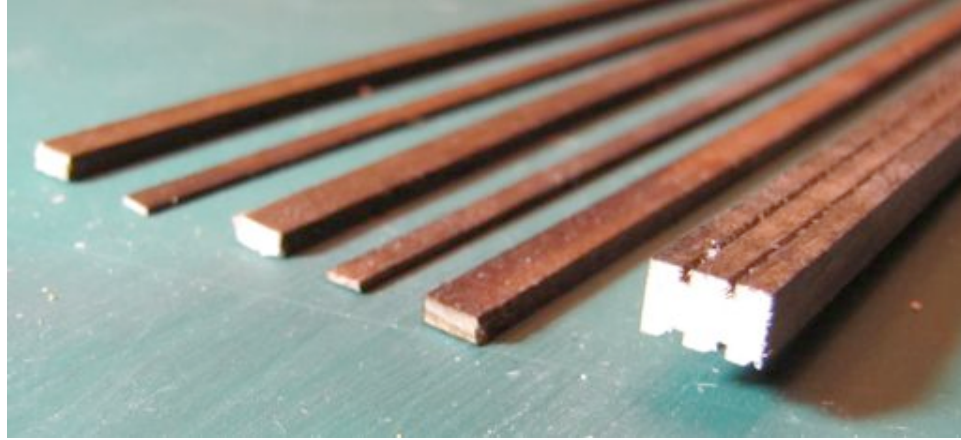
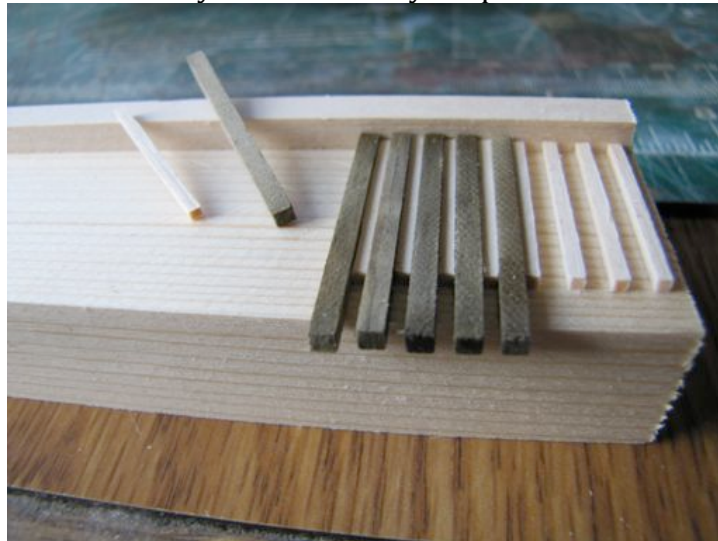


Building a Trestle in HO scale

1. Determine the length of your trestle. Use this measurement for the stringer length.
2. Stringers are built from (3) $1/16'' \times 3/16''$ strip-wood with (2) $1/32'' \times 1/8''$ spacers between. Construct 2 per the length of the trestle. Stain all your strip-wood first. I use brown & black shoe-leather dye thinned with alcohol.



3. Lay out ties in a tie jig per the trestle length. I built my jig with $1/16''$ spacers between ties. Run masking tape down the center of the ties and remove ties in one long strip. Notice how the ties overhang the jig. This was done so I could roll the jig against the table and the ties will pop out in one even line keeping the tape intact. Trestle ties are $3/32''$ square. You can cut them or buy them pre-cut to the correct length $1-3/8''$ long. There is a nifty company called Black Bear Construction Co. www.blackbearcc.com that sells bridge materials like this on-line. Of course you can always order the materials at your local hobby shop.

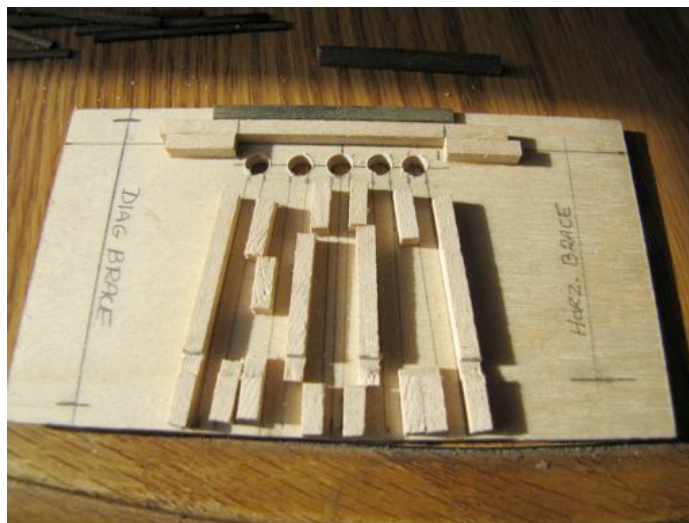


4. Glue ties to stringers with a $3/8''$ gap between stringers. Center the ties. Put this unit aside while glue sets. I also built a jig for this. Weigh down the ties with something heavy for good glue adhesion.

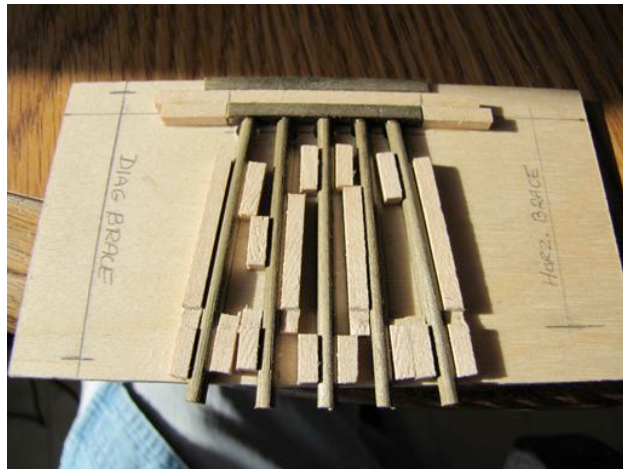


Building the Bents

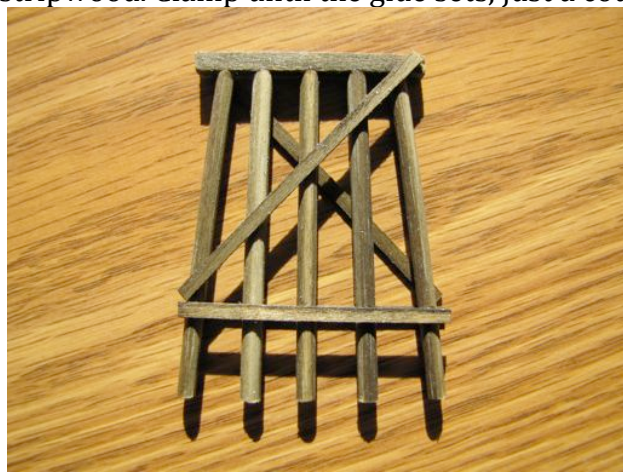
5. Calculate the number of trestle bents. $((\text{Trestle length} / 2) - 1)$
6. Determine the number of piles per bent: 4 – narrow gauge, 5 – standard gauge, 6 – heavy mainlines.
7. Determine the height of the bents. $\text{Piles} = \text{Height} - (\text{Stringers } 3/16" + \text{piling cap } 1/8")$.
8. Build a bent jig. I use mine over and over again for different trestles. I purchased a book on modeling bridges and trestles from my local hobby shop. It has plans for various trestles and bents, but you can build whatever looks good to you. Note the cutting guides on each side of the jig for the braces. This is handy. The holes are to keep from gluing the bent to the jig.



9. Build the bents. I use superglue for quick assembly if I have a number of them to build. Add nut & bolt castings if desired. The notches are for locating the horizontal brace.

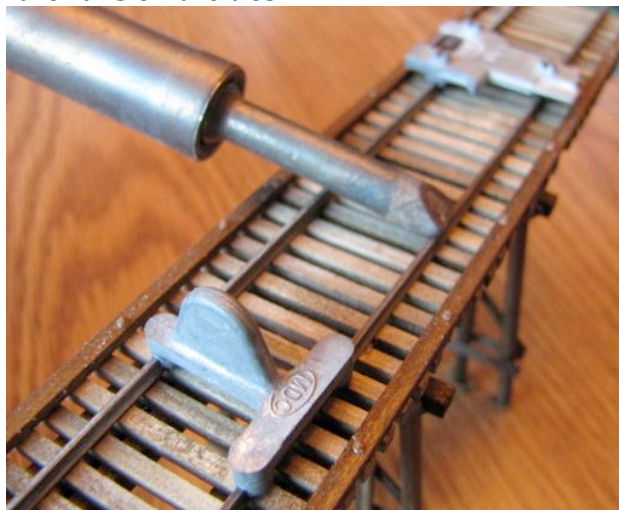


The pilings are 1/8" dowels. The pile cap is 1/8" square stripwood. The braces are 1/32" x 3/32" stripwood. Clamp until the glue sets, just a couple of minutes.



Pull the bent out of the jig, flip it over and add the back-side braces using the front braces as a guide.

10. Back to the trestle deck. Remove the tape. Glue the rails to the ties using rail gauges. I use Pliobond adhesive and a soldering iron to heat-cure the adhesive. The iron must produce a lot of heat and large enough to heat the rails and not cool down. Make sure to center the rails on the ties.



11. Glue the wooden rails to the outside edge on top of the ties.

12. Add nut & bolt castings to wooden rails if desired. I place them about every fifth tie.



13. Flip the deck over and glue the bents to the stringers. The spacing should be 2" or less. Center the bents on the stringers and make them square to the world.

