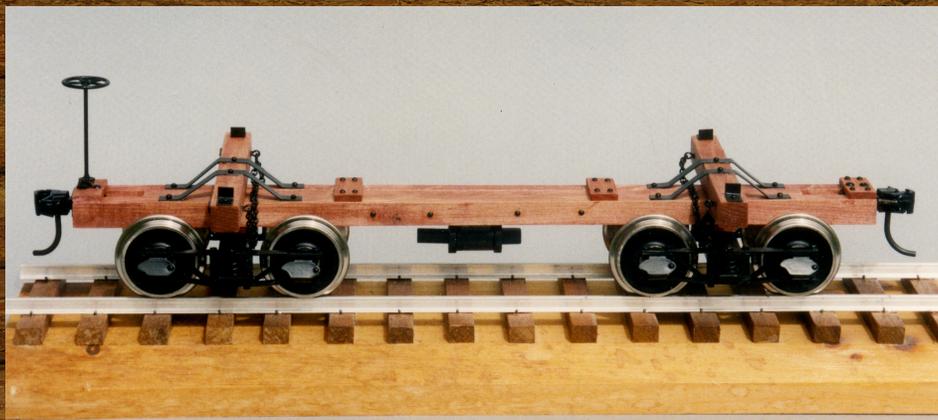


BUILD YOUR OWN ROLLING STOCK



HOW TO PRINT THE FULL-SIZE DRAWINGS:

- 1.** Using Adobe Reader, click on the printer icon at the top of the window. A box will appear with settings. Note the window at the right side of the box showing dotted lines (tiling) on the sheet to be printed.
- 2.** Under “Page Sizing & Handling,” make sure the “Poster” option is selected. This will tile the pages for printing.
- 3.** If you’d like your plans to print full size, make sure “Tile Scale” is set to 100%. If you’d like to print your plans to a different scale, then enter the percentage of enlargement or reduction in the “Tile Scale” box.
- 4.** “Overlap” should be set to 0.000 inches.
- 5.** Check the “Cut marks” box. This will print the cut marks onto the pages. With an X-acto knife and a straightedge, you can use these cut marks to trim off the excess paper. When the excess paper has been trimmed from all the sheets, the edges can be perfectly matched up and the sheets taped together into a single drawing.
- 6.** Click “Print.” The plan will be printed out on multiple sheets of 8-1/2” x 11” paper that you can then combine into single plan sheets.

Scale conversion chart

It can be frustrating and confusing when you're working in one scale but the plans from which you're working are in another. The chart below will tell you at what percentage the plans should be enlarged or reduced to suit your scale.

The scale in which you're working can be found in the top row. The scale the plans are in are listed in the left hand column. Simply find your scale and the scale of the plans. The box that intersects both will tell you the correct percentage. Yellow indicates a reduction in size, while green tells you to enlarge the plans to the specified percentage.

		The scale in which you're working							
		1:32 (3/8")	1:29	1:24 (1/2")	1:22.5 (G)	1:20.3	1:19 (16mm)	1:13.7 (7/8")	1:8 (1 1/2")
The scale of the plans	1:32 (3/8")	100%	110%	133%	142%	158%	168%	234%	400%
	1:29	90.6%	100%	124%	129%	143%	153%	212%	363%
	1:24 (1/2")	75%	83%	100%	107%	118%	126%	175%	300%
	1:22.5 (G)	70.3%	78%	94%	100%	111%	118%	164%	281%
	1:20.3	63.4%	70%	84.6%	90.2%	100%	107%	148%	254%
	1:19 (16mm)	59.3%	65.5%	79.1%	84.4%	93.6%	100%	139%	238%
	1:13.7 (7/8")	42.8%	47.2%	57.1%	60.9%	67.5%	72.1%	100%	171%
	1:8 (1 1/2")	25%	27.6%	33.3%	35.5%	39.4%	42.1%	58.4%	100%

7/8"-scale pulpwood car

by Ted Stinson | Wiscasset, Maine



This is a generic, 7/8"-scale pulpwood car. It is based on cars built for the S.D. Warren Company and has features found in those 2'-gauge cars. The model is 14 1/4" long x 5" wide. This scales out to a car that is 17' long, which is a typical dimension for cars used by industrial railroads.

Construction

This model can be built from materials available in many hobby shops and building-supply stores, or you can cut your own wood on a table saw. Begin construction with the wood parts. Pre-stain these with thinned, oxide-red paint before gluing them together. From 1/4" plywood, cut a piece 4" x 13 1/4". Cut 1/4" x 1/2" notches at each end where the stakes will fit.

Make the framing parts from stripwood. Glue these wood parts together over the plan (use the bottom view). Plank the top of the car with 3/8" x 3/4" x 5" strips. Cut the notches for the stakes before gluing the planks in place. Assemble the brake wheel, paint it black, and glue it in place. Drill 1/8"-diameter holes for the cotter pins, but do not fit the pins until the trucks are installed.

Now make the wood frames for a pair of trucks. Again, pre-stain these parts with thinned, red-oxide paint before gluing them together. Mark the location of the journals on the bottom of each frame. Drill out each journal with a 1/4"-diameter bit mounted in a pin vise. Paint the wheels oxide red. Fit the journals onto the ends of the axles. Locate and glue the journals in place with the wheels installed.

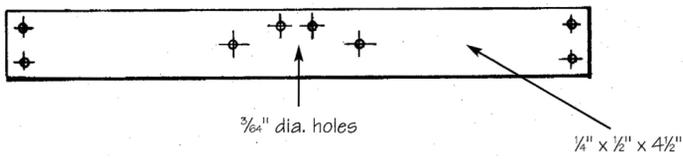
Cut eight pieces of chain, each 1" long, and fit a cotter pin at each end. Fit the cotter pins into the holes in the trucks and the frame. Mount the trucks with #6 x 1/4" screws. Finally, mount couplers of your choice (Kadee #789 are recommended).

This sheet is a supplement to the August 1999 issue of *Garden Railways* magazine. While supplies last, extra copies of these drawings can be had by sending \$1.50 per set (\$2.00 foreign) to: Sidestreet Bannerworks, PO Box 460222, Denver CO 80246 USA.

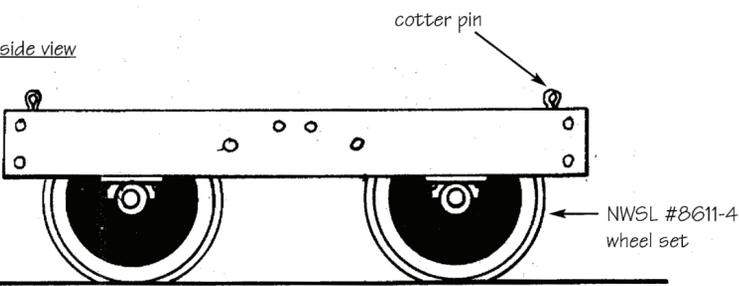
For those not possessed of the energy or equipment, a complete set of wood and metal parts (including wheelsets, but not couplers) for the pulpwood car is available for \$44.95 + \$5 s&h. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578.

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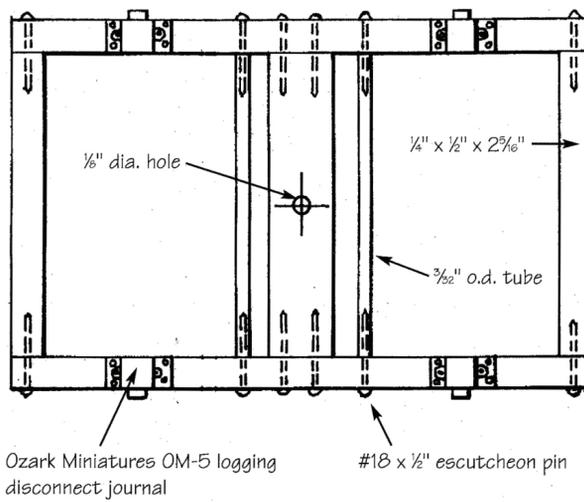
side beam - cut 4



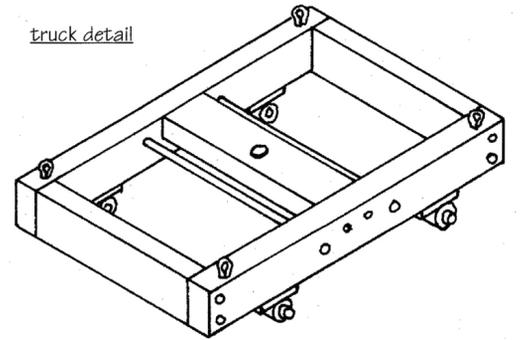
side view



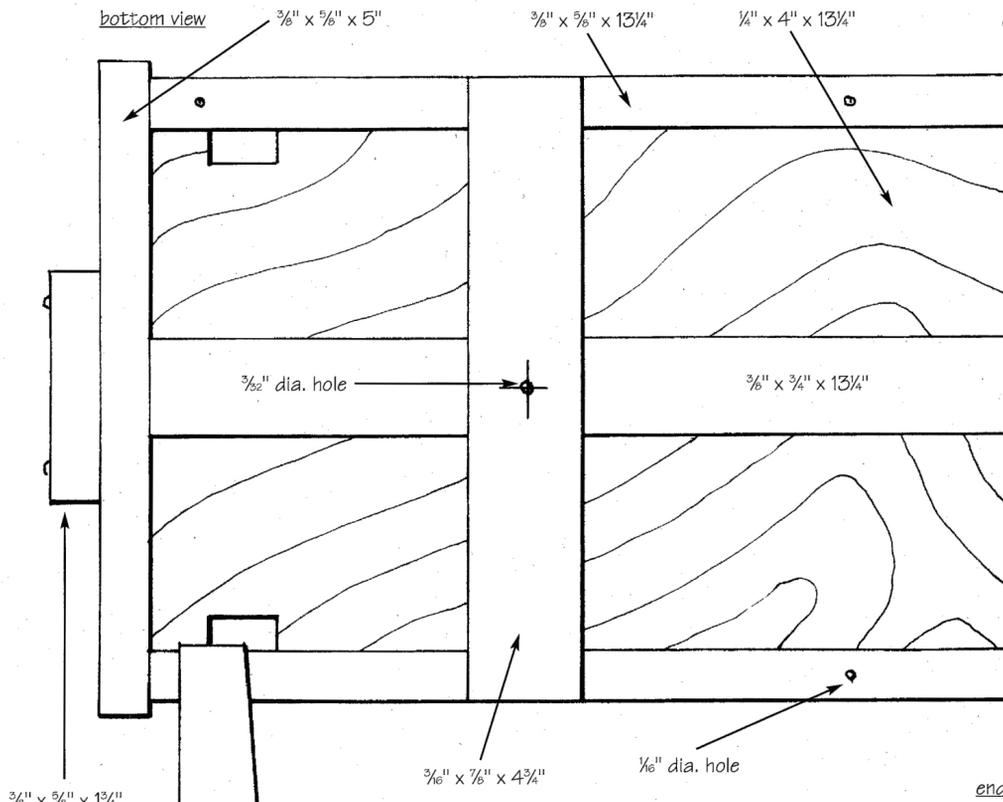
bottom view



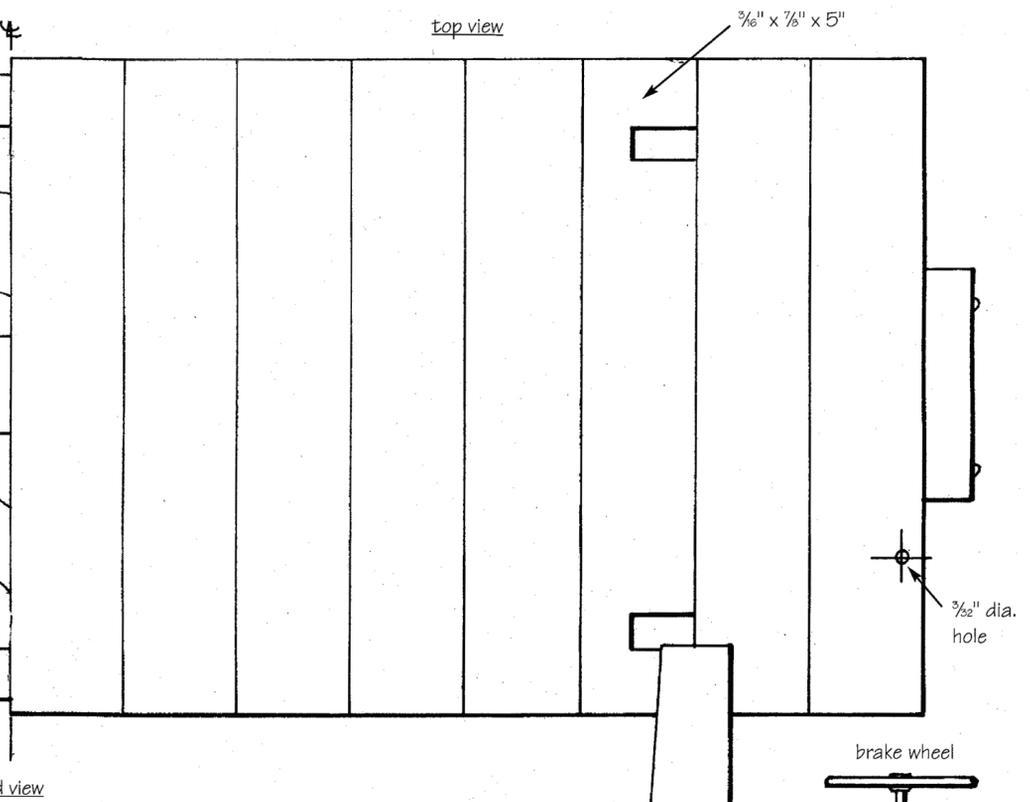
truck detail



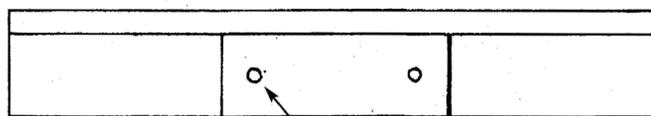
bottom view



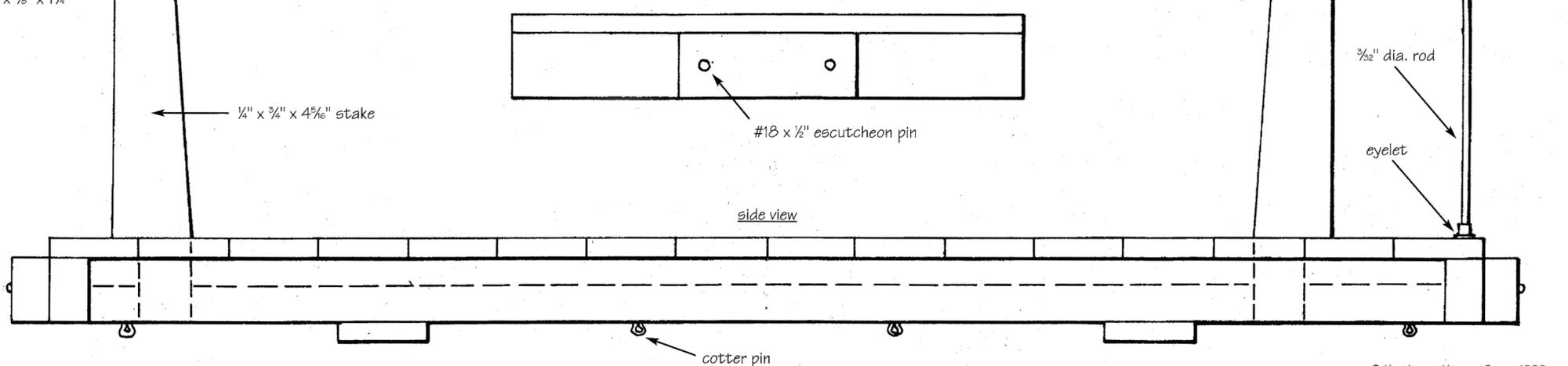
top view



end view

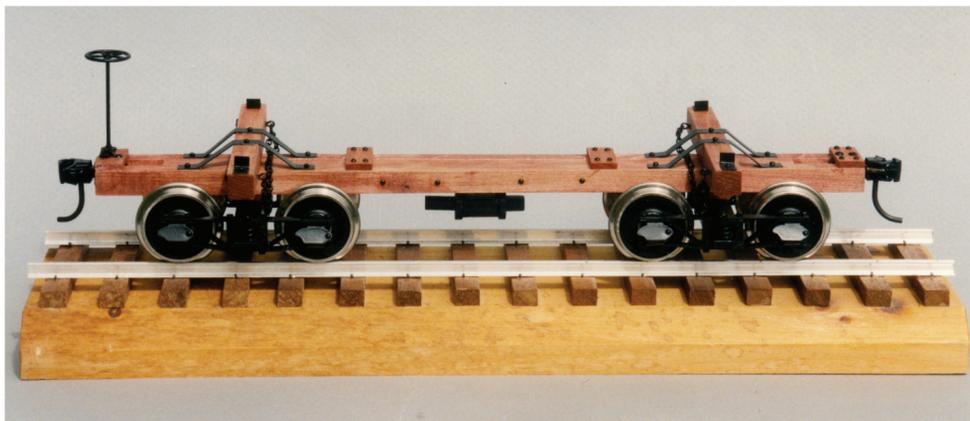


side view



1:20-scale skeleton log car

by Ted Stinson | Wiscasset, Maine



This is a generic, 1:20-scale, skeleton log car. It has features commonly found in many narrow-gauge cars of this type. The model is 13 1/4" long x 4 1/2" wide. This scales out to a car that is 22' long, which is typical for these cars.

Construction

This model can be built from materials available in many hobby shops and building-supply stores. Alternatively, the stripwood can be cut on a table saw. Begin construction by cutting out the wood parts. Pre-stain these parts with thinned, oxide-red paint. Glue the wood parts together over the plan. Drill 1/16" and 1/8" diameter holes where indicated. Assemble the brake cylinder, paint it black, and glue it in place.

Now add the metal details. These should be pre-painted before gluing them in place. Use .016" x 1/4" brass strip for the metal straps. Cotter pins are the 1/8" x 1/2" variety and the nuts are #2-56. Finish the log car with trucks and couplers of your choice, painted oxide red.

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For those not possessed of the energy or equipment, a complete set of wood and metal parts (less trucks and couplers) for the log car is available for \$24.95 + \$5 s&h. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578.

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