

# Build a 1:24-scale coach

Plan set #91

by Ted Stinson | Wiscasset, Maine

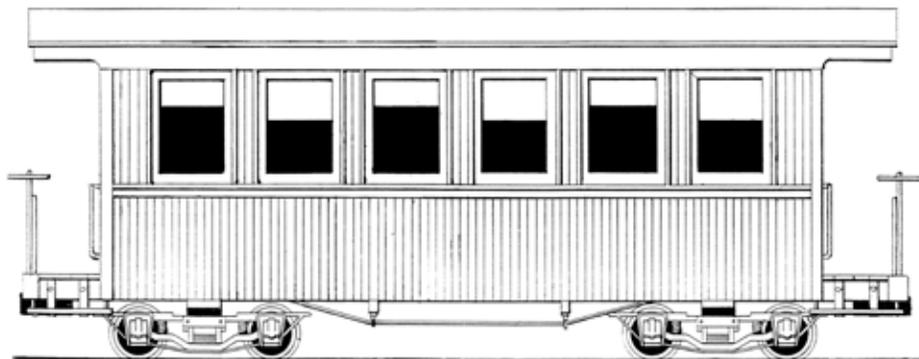
This is a generic, 1:24-scale coach. It is not based on a car from a railroad long gone. Instead, it is a car for the present. We need, and will soon get, light-rail transport. This will replace vehicles powered by expensive, inefficient internal-combustion engines. Short trips of around 15 miles will force us to use mass transit.

Here in Maine, where much of the population lives in semi-rural circumstances, a narrow-gauge railroad may be just the answer. It is with that thought in mind that I have developed the Wiscasset & Westport RR, a 30"-gauge short line that serves the transport needs of people living on Westport Island as well as Wiscasset. Since Westport is not heavily populated, it would attract some new industries.

This car would be one of many that would have to run on sharp curves and light rail. Many short lines and, in particular, narrow-gauge railroads with sharp curves, have a need for much shorter cars. This is such a car. It scales out to about 24' long and 7½' wide.

## Construction

Begin construction with the floor. Use a piece of ½" ply, 3½" x 12¾". Plank one side with ¼" a ¼" stripwood. On the other side, add the stripwood framing as per the drawing. Drill holes for the truss rods, which are made from ¼"-diameter rod. Finally, add the handrails at the ends. The chain can be added later, after the car is more complete.



Now make the car sides and ends. Use ¼"-thick sheet wood and the stripwood called out on the drawing for the sides and ends. Use ¼" scribed wood to represent the siding. Assemble the substructure according to the detail. (Although the detail does not show the scribed siding, it should be added before assembly.) This should just fit on the previously assembled floor. Don't glue it in place.

When the sides and ends have been assembled to your satisfaction, the roof can be cut and glued in place. At this point, seal the outside as well as the inside of the car with lacquer, sanded slightly after it dried. Stuff the car full of paper towels—enough to block the spray paint from reaching the inside. Now, using Krylon-brand spray paint (not the type labeled "Fusion"), apply two light coats of paint. Allow to dry 48 hours before handling. The bottom of the car can be brush-painted flat black.

The interior is very basic. Begin by building four bench seats as shown in the detail. If you stack 20 pieces of ¼" x 1" x 1½" basswood together, you can cut all the seat supports at once. The rest of the seats are made of stripwood, the sizes of which are called out on the plan.

All details added from this point should

be pre-painted before gluing in place. To complete the car, make the steps. Add the chains and brake wheels. You should be able to remove the body of the car from the floor. This will allow later additions to the inside. Add trucks (NENG #20 shown), couplers (Kadee #805 shown), and lettering of your choice.

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This is an online supplement to the April 2009 issue of *Garden Railways* magazine. To purchase previously published paper plans, see the list of those available at [www.sidestreet.info](http://www.sidestreet.info)

A kit for this coach (including interior) is available from Northeast Narrow Gauge for \$50 + \$7 s&h (to the US). Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578. Web site: [www.nemodel.com](http://www.nemodel.com) Figures in 1:24 scale are made by Preiser and are available at most hobby shops.

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## Are you working in a different scale?

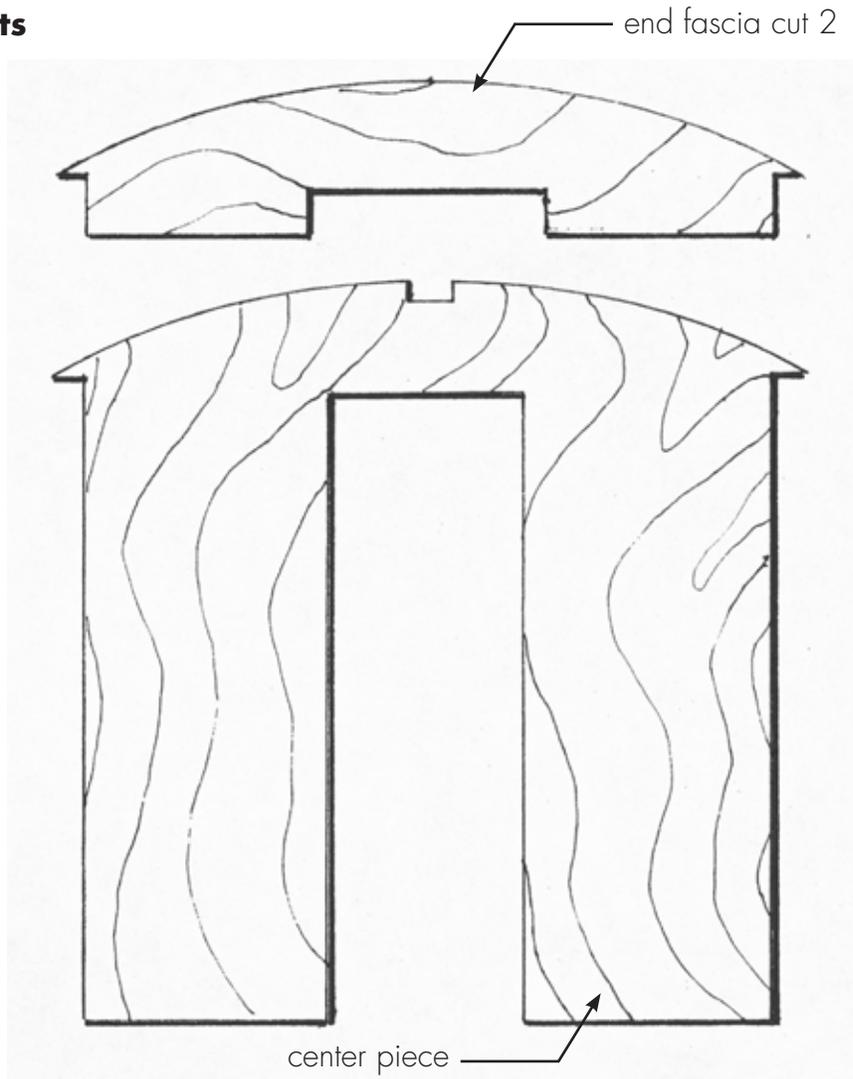
If you are working in 1:22.5 scale, enlarge these drawings to 107%.

If you are working in 1:20.3 scale, enlarge these drawings to 118%.

If you are working in 16mm scale (1:19), enlarge these drawings to 126%.

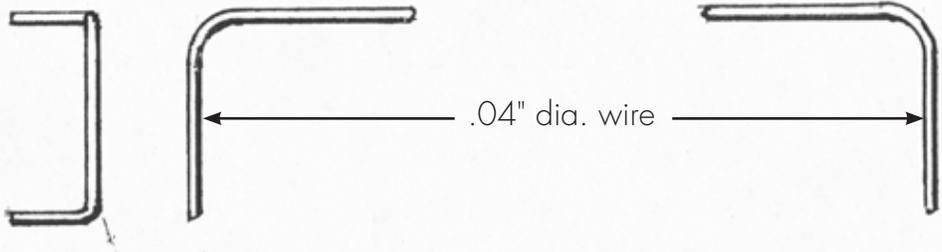
If you are working in ⅞" scale (1:13.7) enlarge these drawings to 175%.

**1/8" plywood parts**

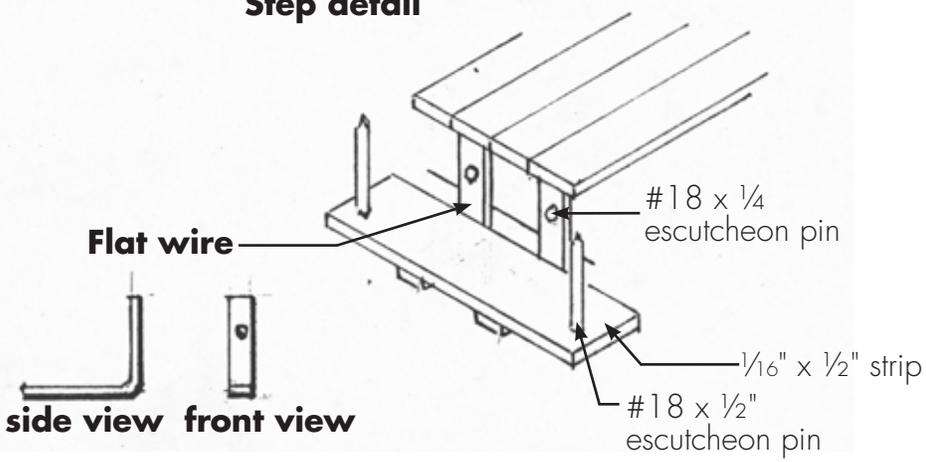


**Side view**

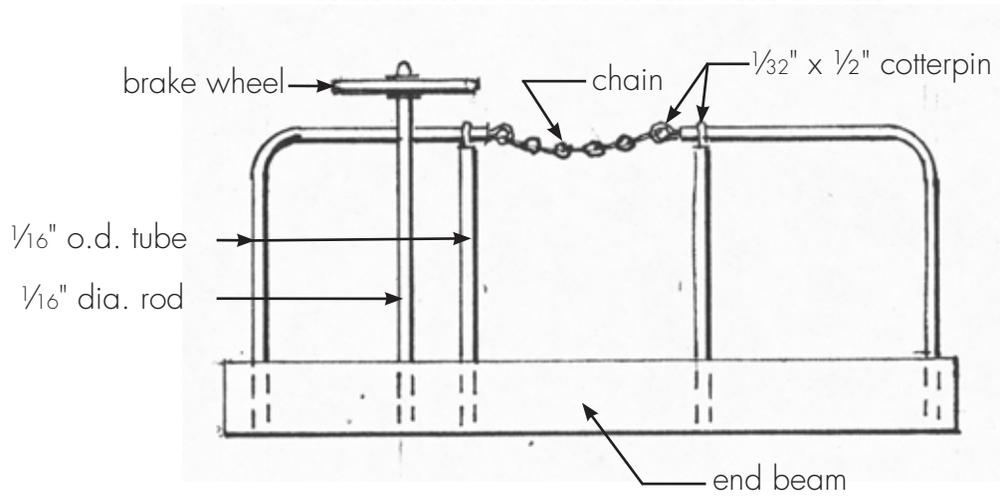
**Handrail located on car end**



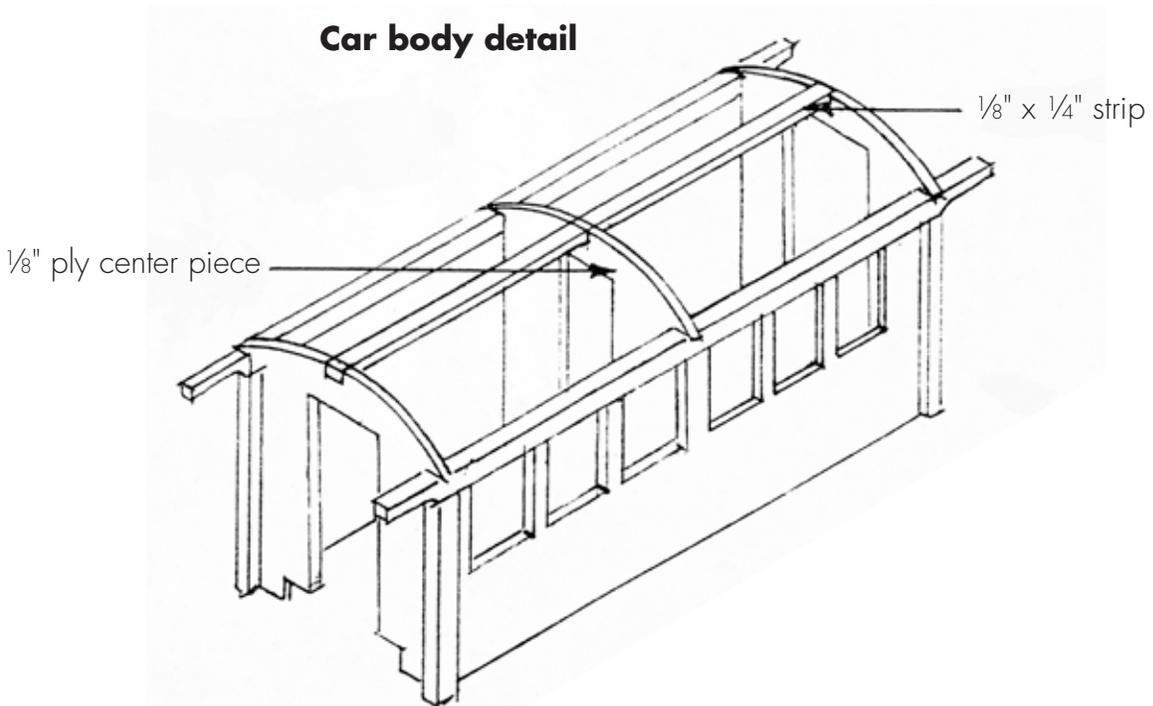
**Step detail**



### Handrail located on the end beam

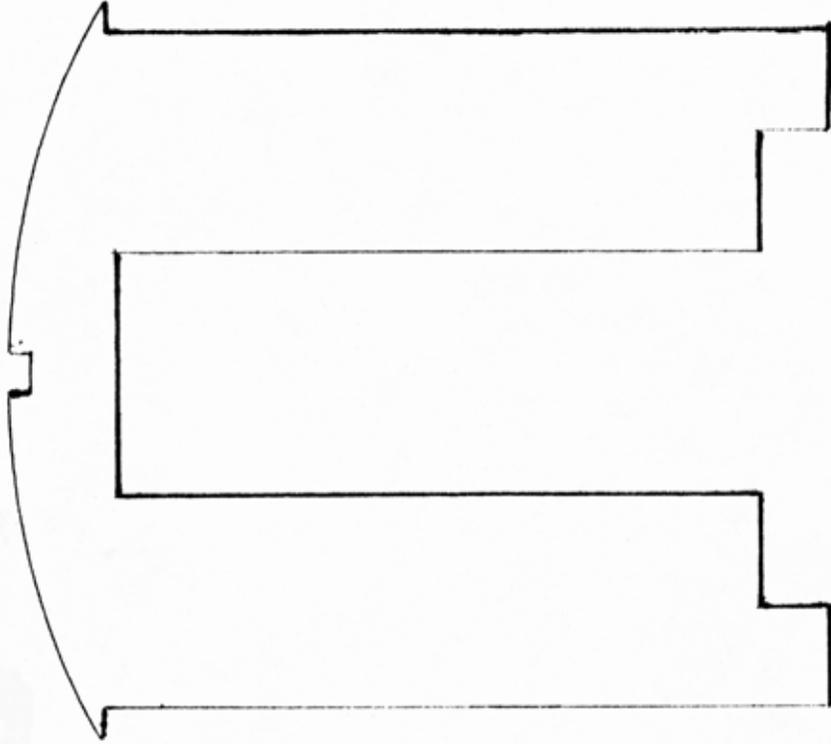


### Car body detail



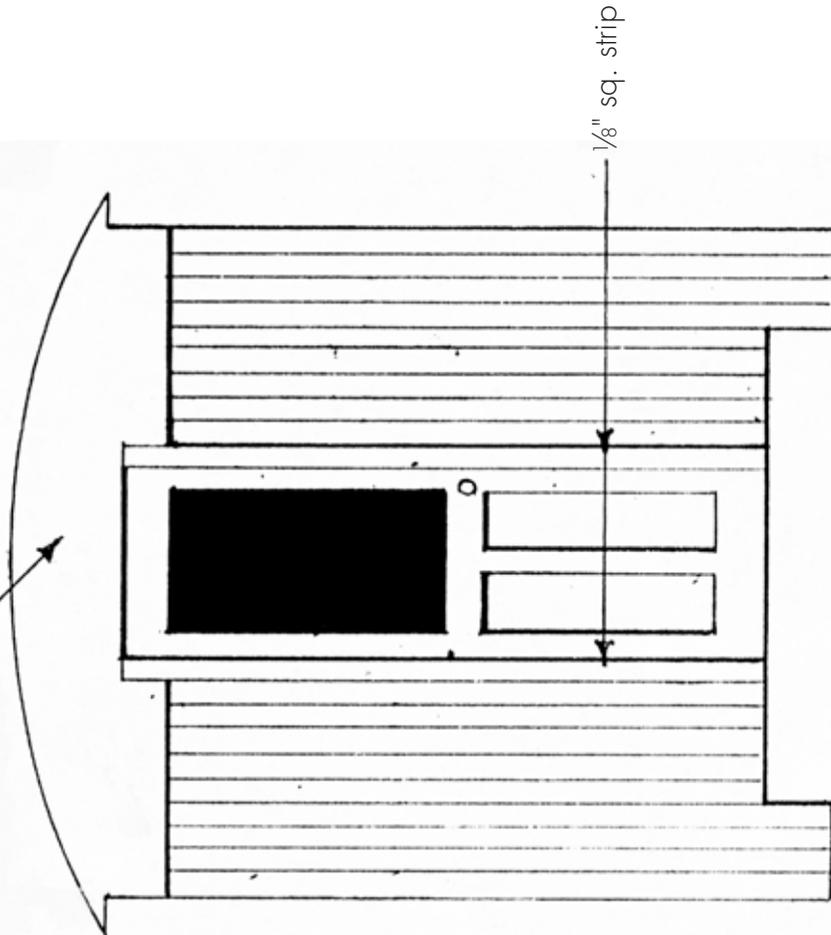
**Sub end**

Cut two from 1/16" sheet

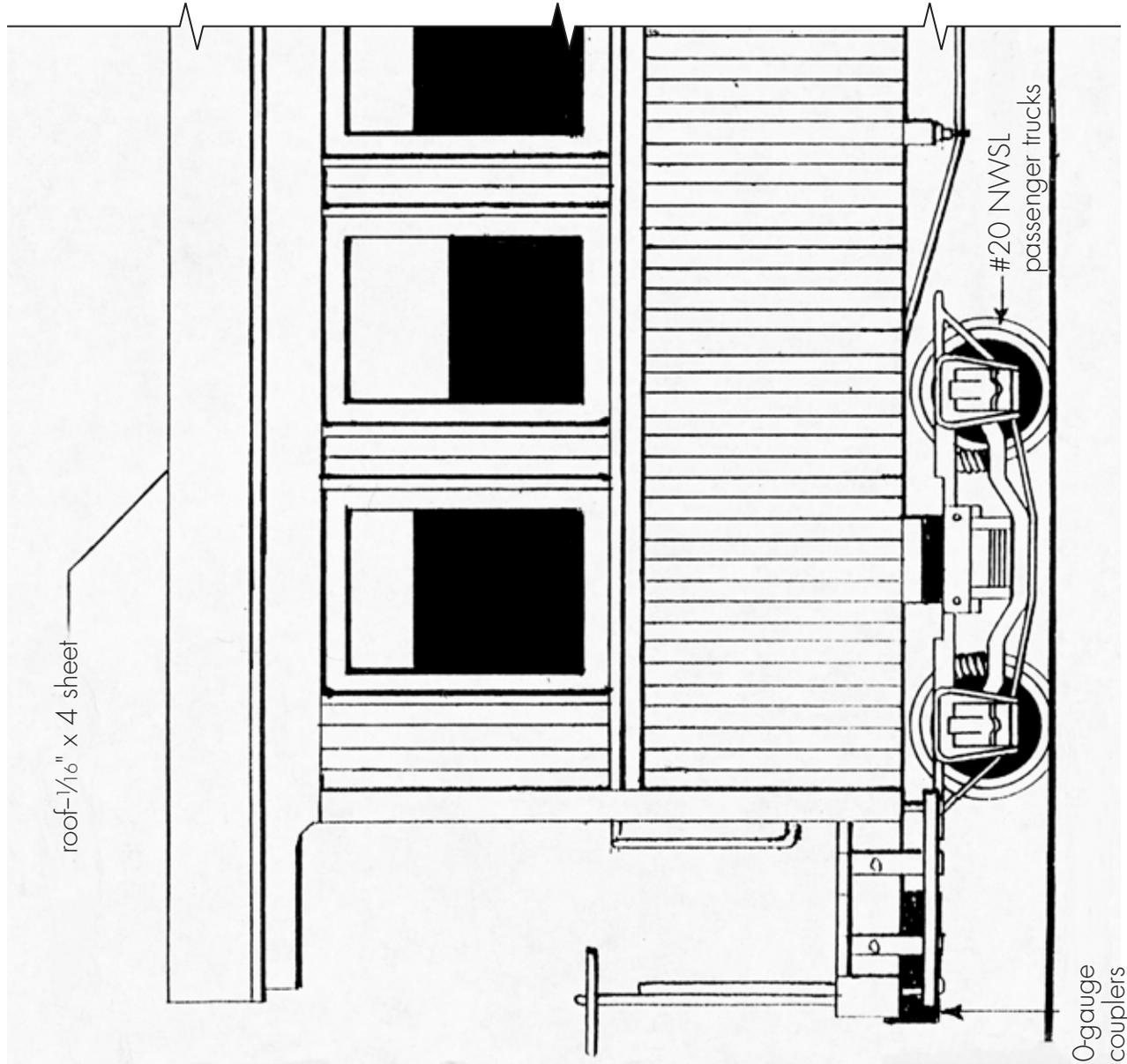


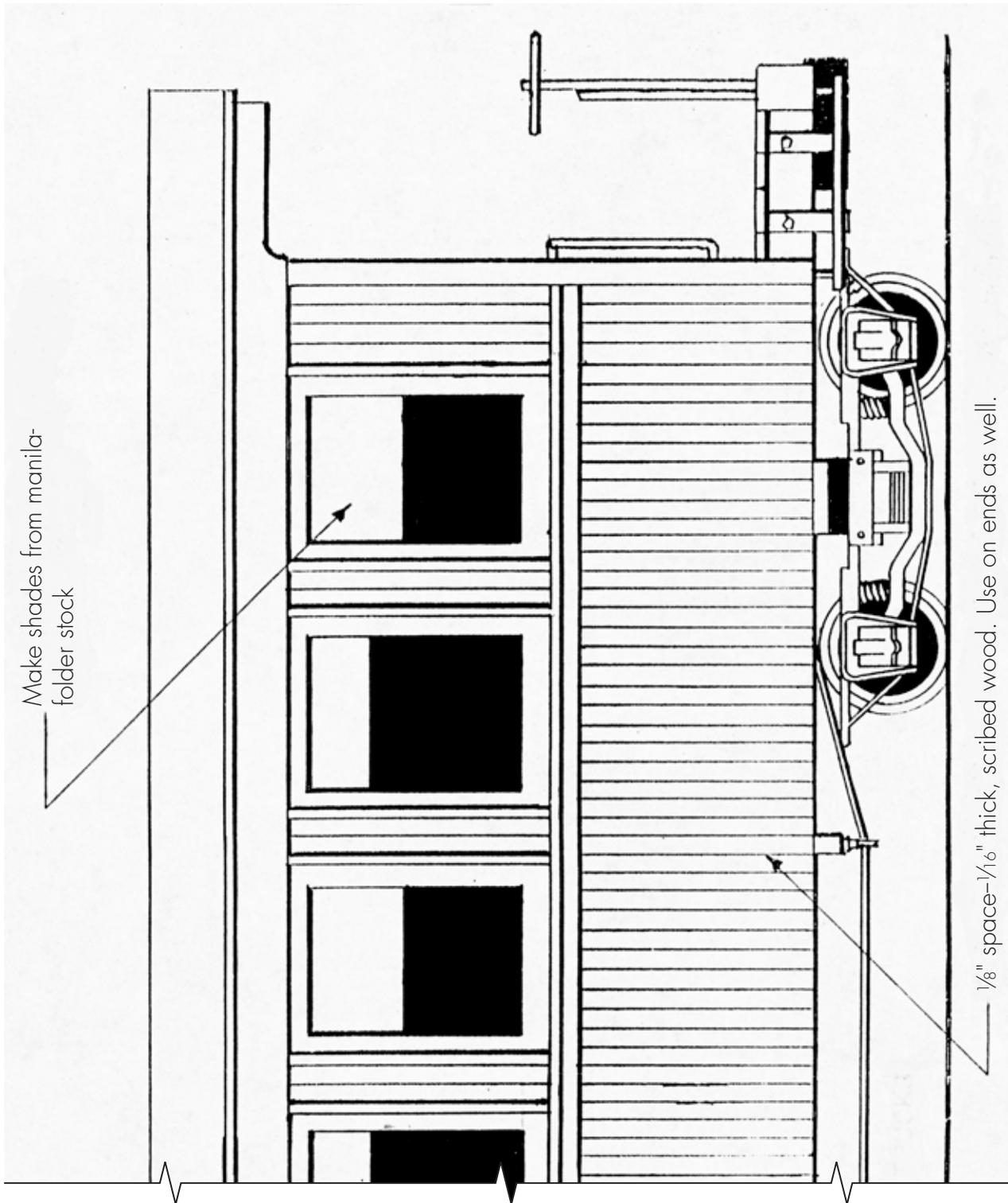
**Finished end**

1/8" ply fascia

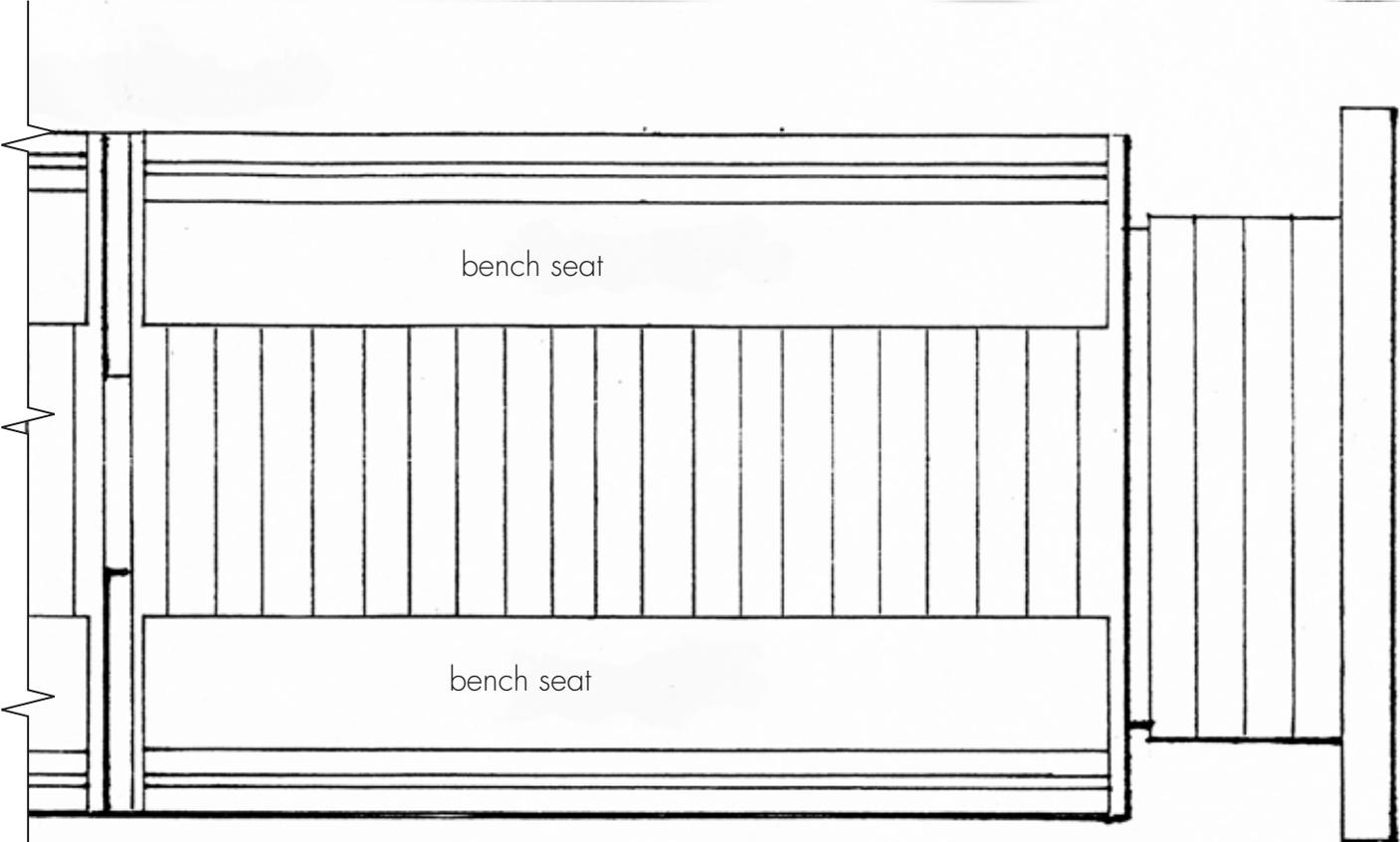
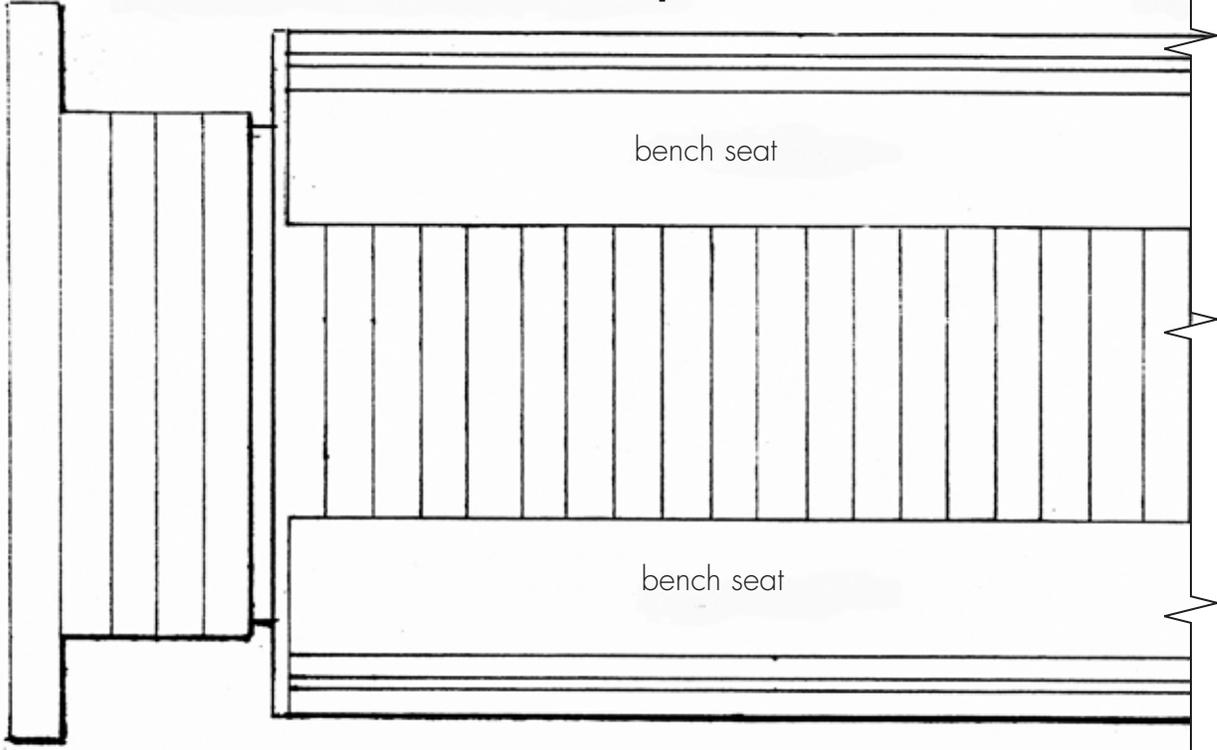


**Side view**

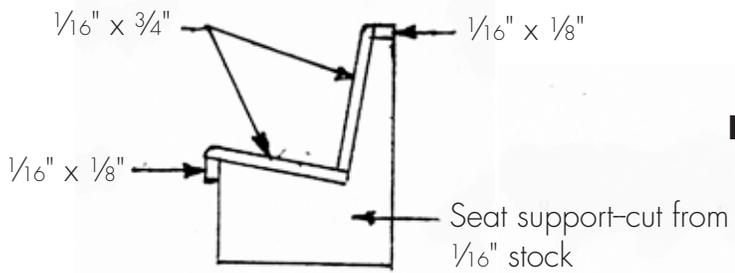




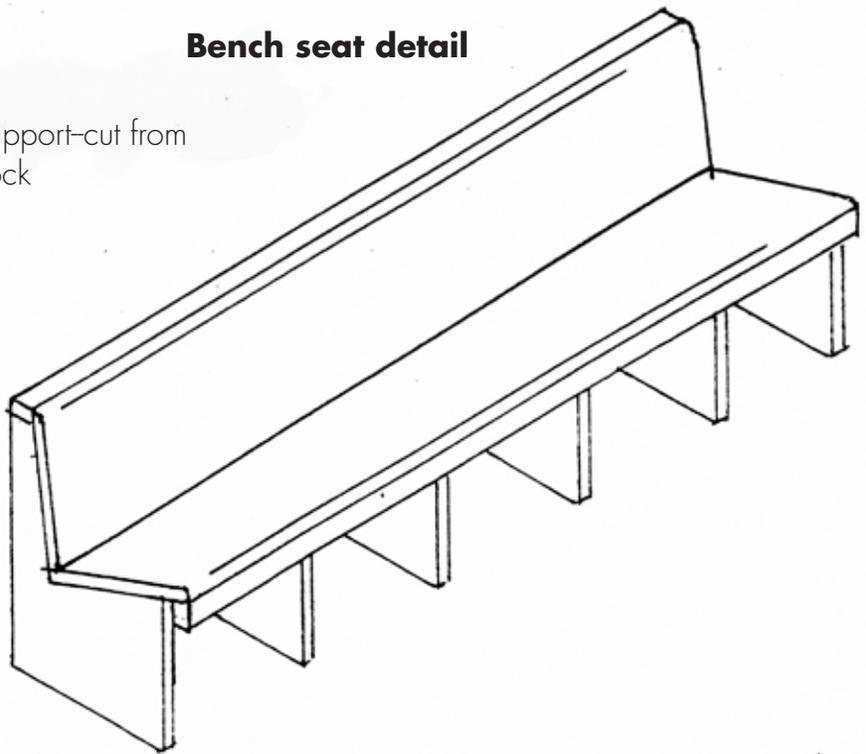
**Interior top view**



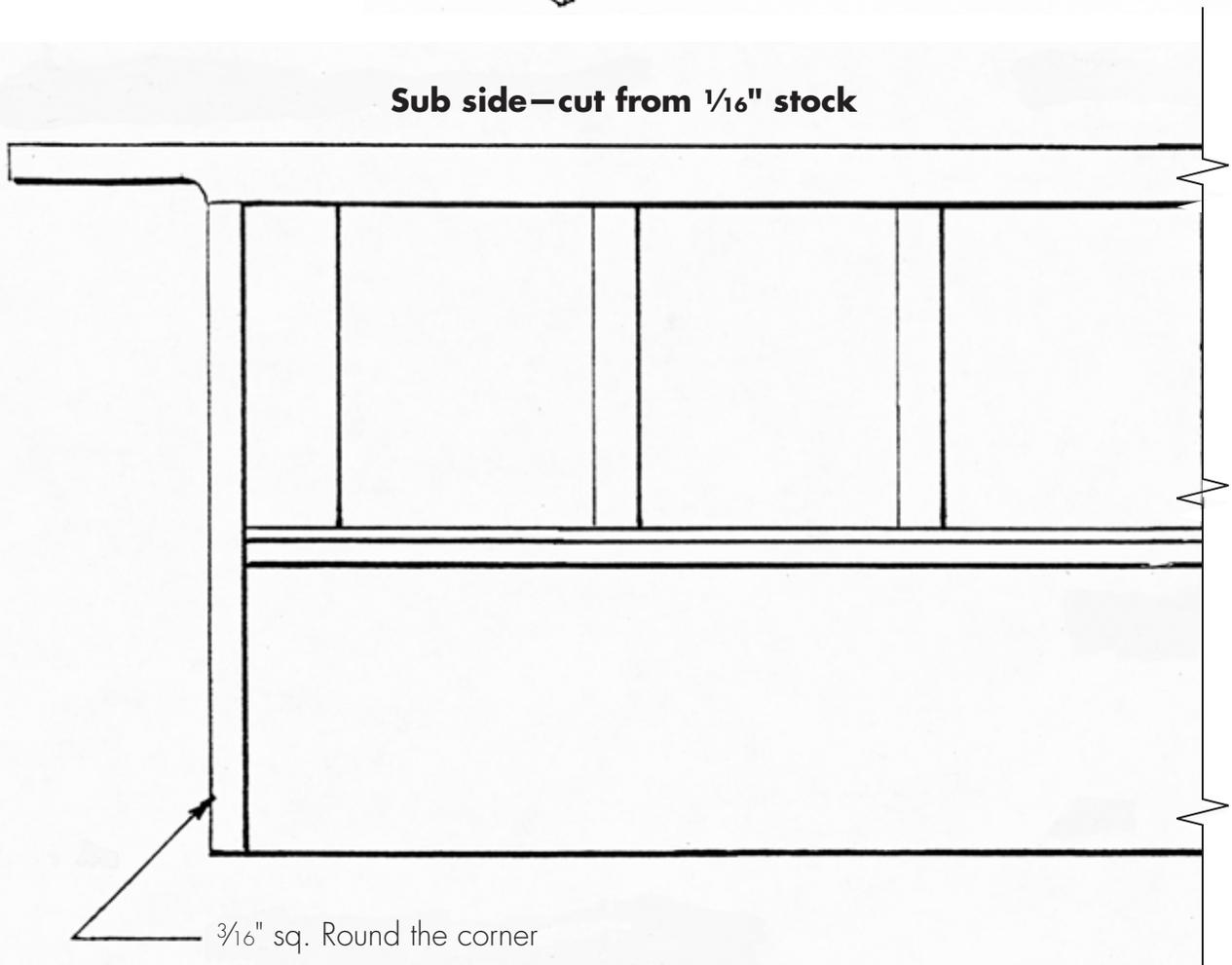
### Bench seat end view

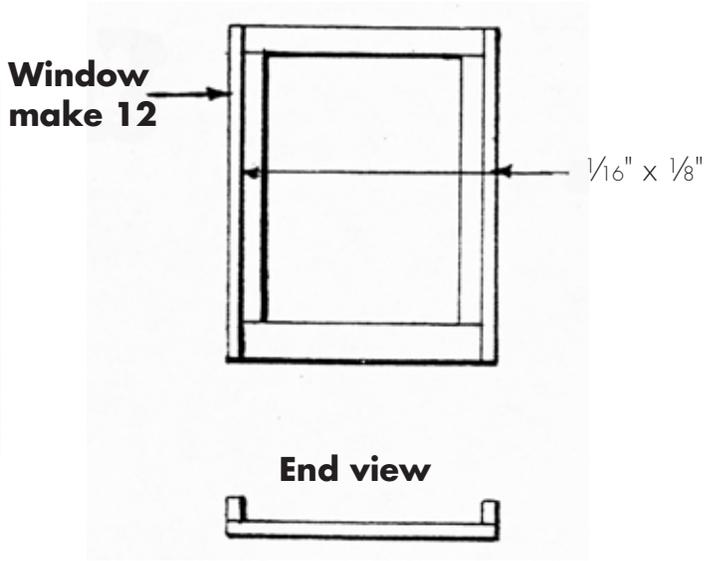
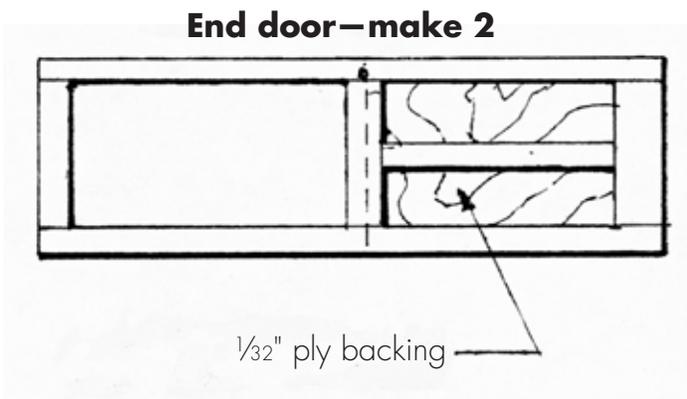
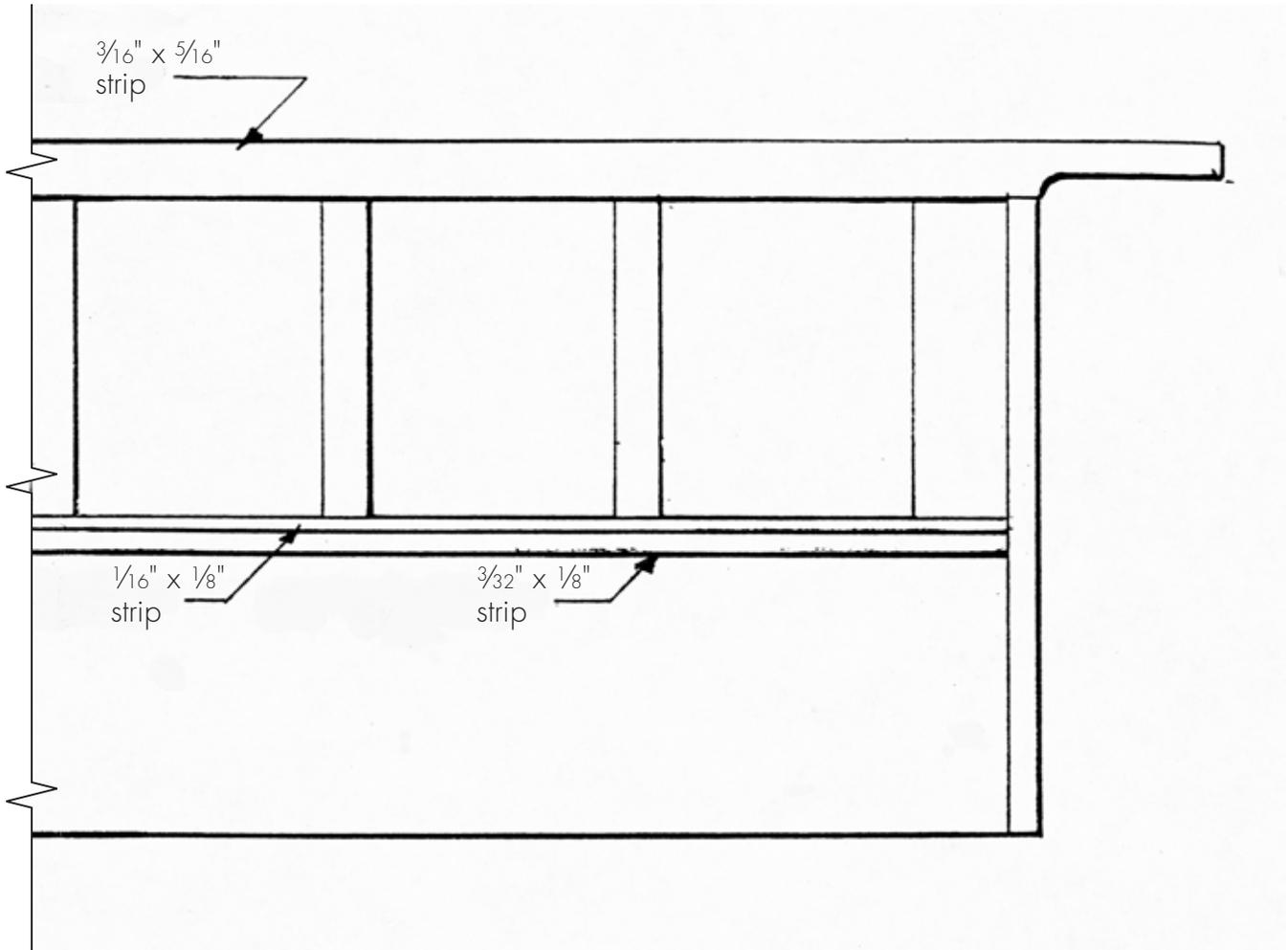


### Bench seat detail

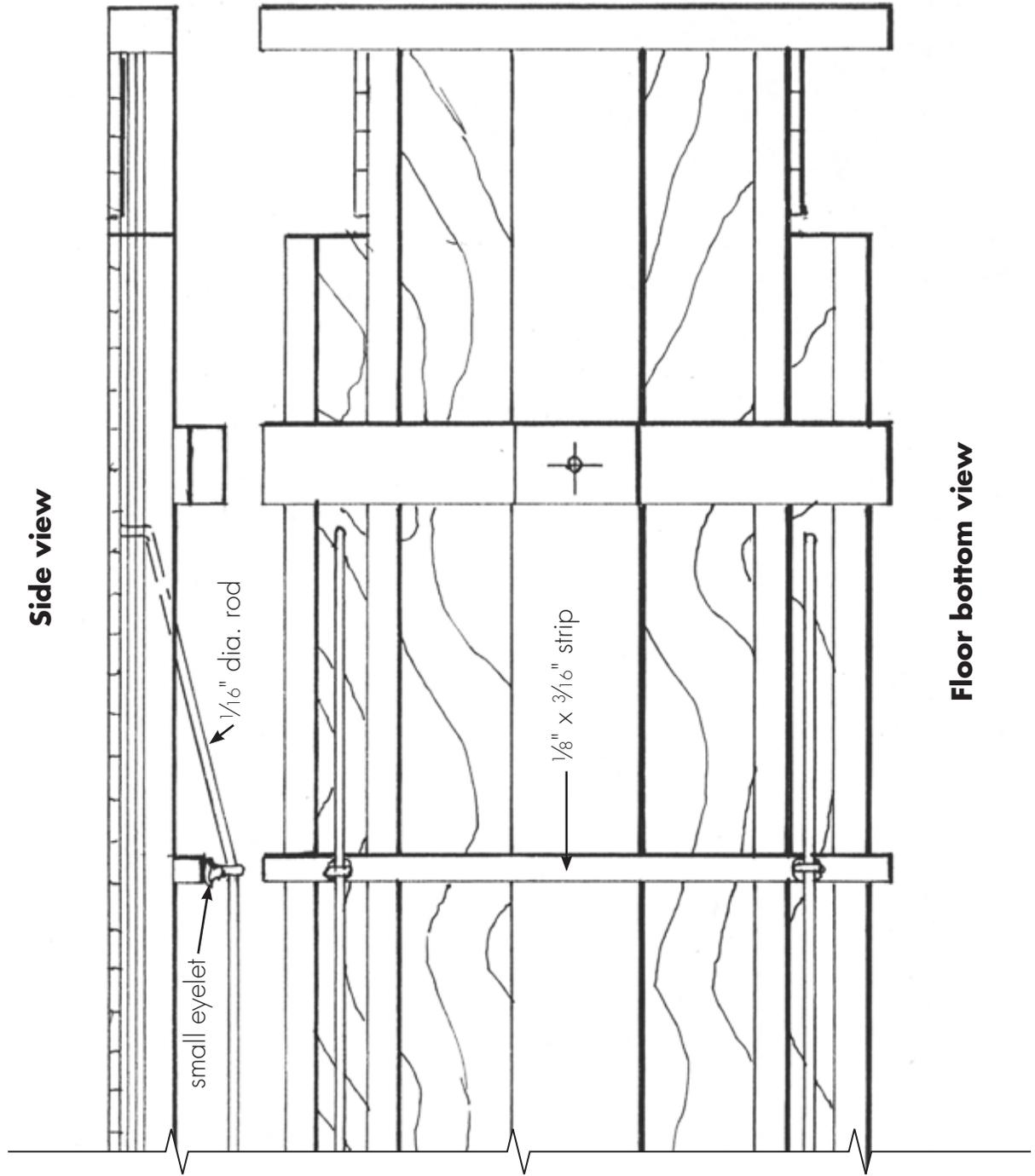


### Sub side-cut from $\frac{1}{16}$ " stock



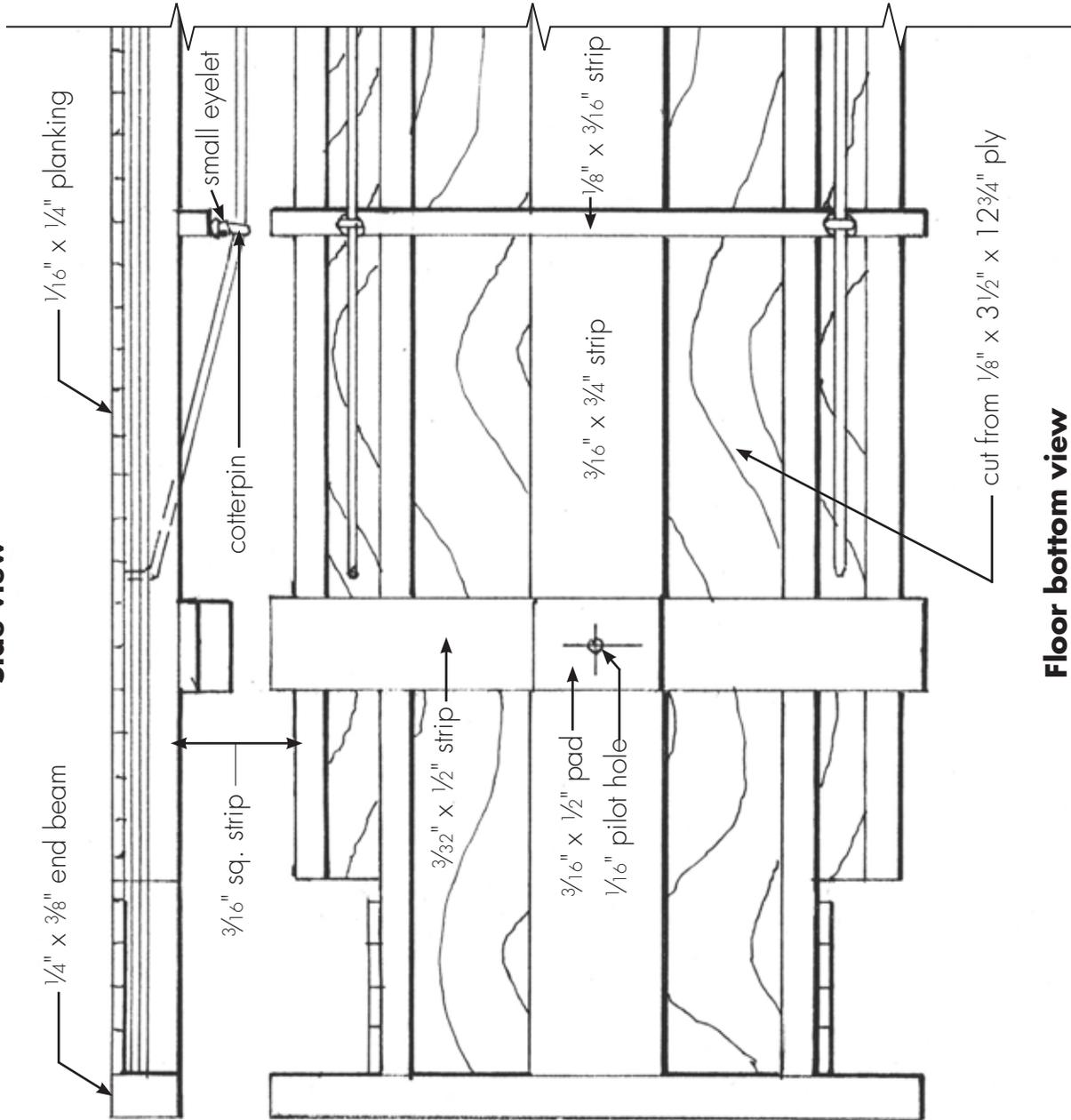


Side view



Floor bottom view

**Side view**



**Floor bottom view**