

# 1:20.3 scale railbus

by Ted Stinson | Wiscasset, Maine

This is a generic, 1:20.3-scale railbus. It closely follows the lines of a railbus that I built for an On30 railroad 35 years ago. That small, homemade bus was based loosely on an earlier HO<sub>n2</sub> 1/2 item that Dave Frary and Bob Hayden had published in *Railroad Model Craftsman* in 1970. This particular bus is powered by a NorthWest Short Line “Magic Carpet” drive. Construction is simple and much easier than the first, smaller-scale railbus.

## Construction

Begin construction with the floor. Use a 1/8" ply piece that is 4 1/4" x 14 5/16". On what will become the bottom side, add the stripwood framing per the drawing. This is best sealed with clear lacquer and painted flat black at this time.

Now make up the substructure for the main body of the car. Use 1/8"-thick plywood for the subsides and subends. Make the door and window frames from 1/16" stripwood. Though the detail drawing does not show it, make and fit the windows and doors in place before assembling the car body. Assemble the substructure with the sides outside of the ends. This should fit on the previously assembled floor. Locate the

roof beams inside this structure, about in the middle of the car body.

When the substructure is assembled to your satisfaction, add the 1/16"-thick fascia on each end and the 1/16" x 1/8" rails under the windows. Now surface the exterior with 1/32"-thick x 1/8"-spaced scribed wood. Fit and glue any stripwood trim around the windows and doors that you have not already done. Do not add the clear-plastic glazing until the car has been painted.

Add the roof using 1/16" sheet. The surface of the roof should be given a treatment to represent tar paper. Strips of tissue lacquered in place work well. Now make the hood and cowcatcher. Fit and glue these in place. Now seal with clear lacquer and paint the bus to suit.

When dry, fit the glazing in the windows and doors. Finally, fit the body over the floor. Use #2 x 3/8" screws, run through the sides, into the edge of the floor to hold the body to the floor.

All details added from this point should be prepainted before gluing in place. Finally, make up trucks of your choice. The plan shows #4B trucks of our manufacture ([www.northeastnarrowgauge.com](http://www.northeastnarrowgauge.com)), but other brands would serve as well. These should be fitted

with a NorthWest Short Line “Super Magic Carpet” drive (#8603-4), which will mate with our #4B trucks. (If you choose to order our trucks for this bus, let us know your purpose so that we can make the appropriate changes to the truck bolster). Using the “Magic Carpet” Drive leaves the whole interior open to your imagination.

\* \* \*

This is an online supplement to the April 2007 issue of *Garden Railways* magazine. To purchase previously published paper plans, visit [www.sidestreet.info](http://www.sidestreet.info)

A kit for the body of this railbus (#NNG286) is available from Northeast Narrow Gauge for \$75 + \$7.50 s&h. Trucks (#4B) are \$50/pr. + \$5.00 s&h. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578. Web site: [www.northeastnarrowgauge.com](http://www.northeastnarrowgauge.com)

The Magic Carpet drive (#8603-4) is available from NorthWest Short Line. Web site: [www.nwsl.com](http://www.nwsl.com)

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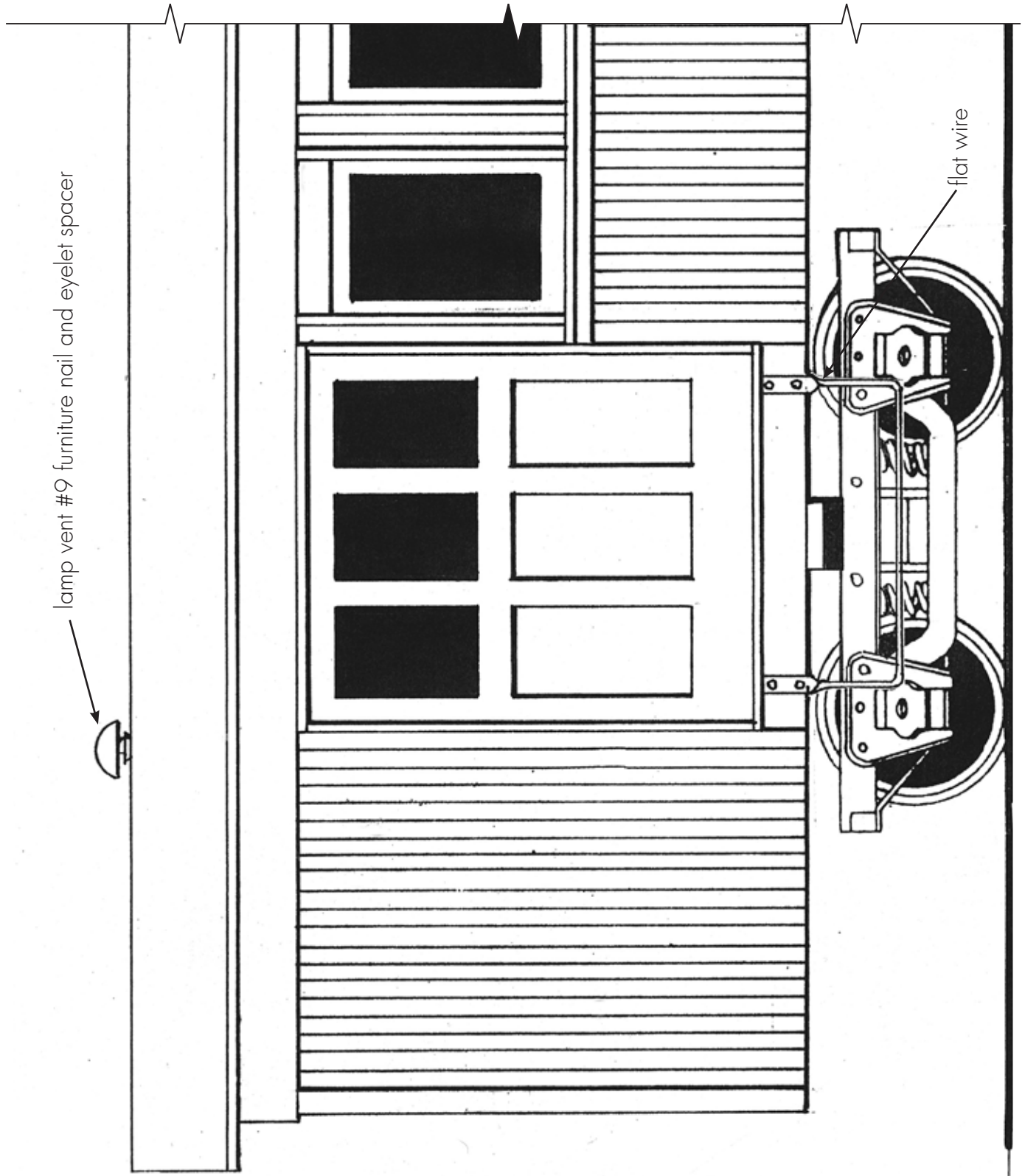
## Are you working in a different scale?

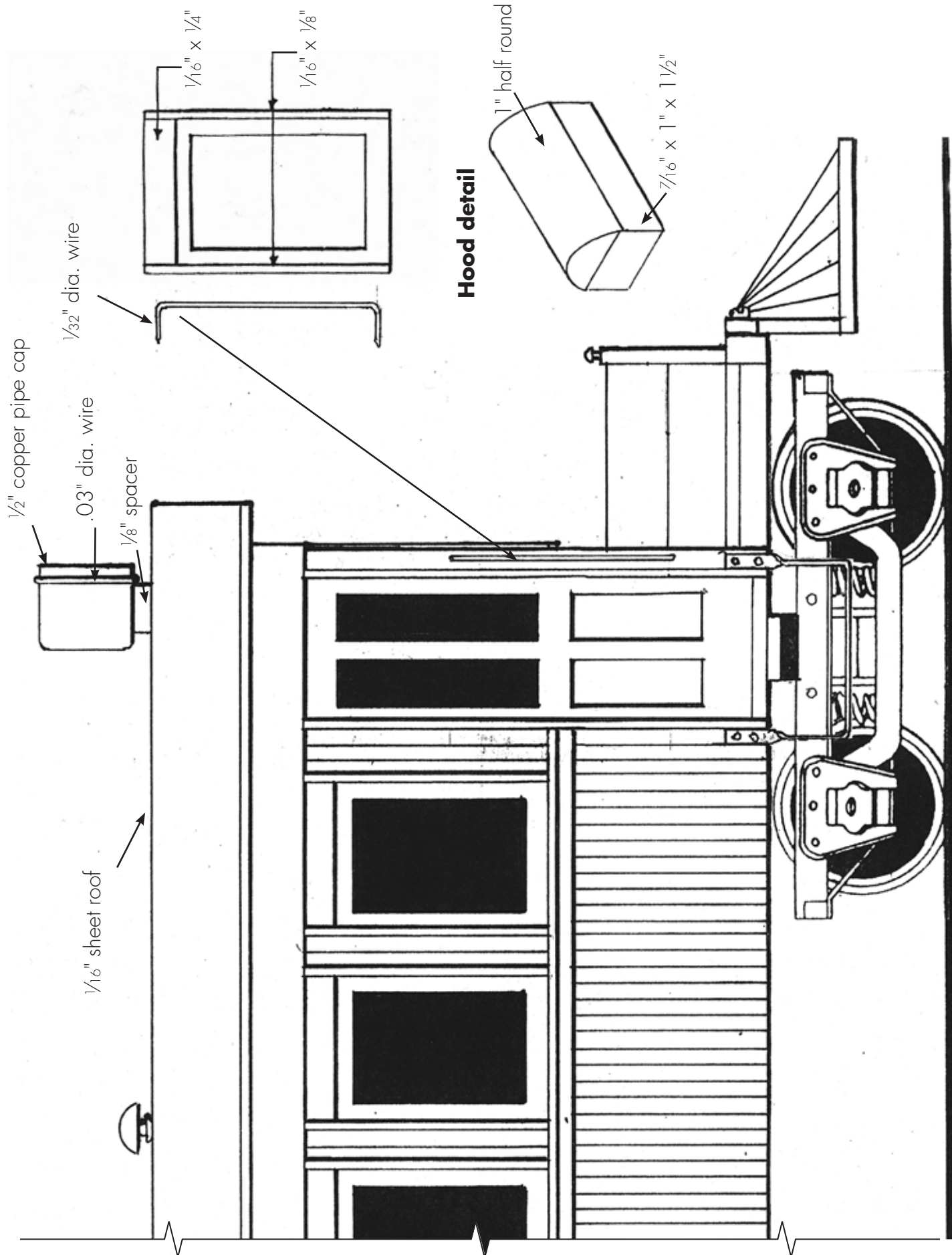
- If you are working in 1:32 scale, reduce these drawings to 63%.
- If you are working in 1:29 scale, reduce these drawings to 70%.
- If you are working in 1:24 scale, reduce these drawings to 88%.
- If you are working in 1:22.5 scale, reduce these drawings to 90%.
- If you are working in 16mm scale, enlarge these drawings to 107%.
- If you are working in 7/8" scale (1:13.7) enlarge these drawings to 148%.

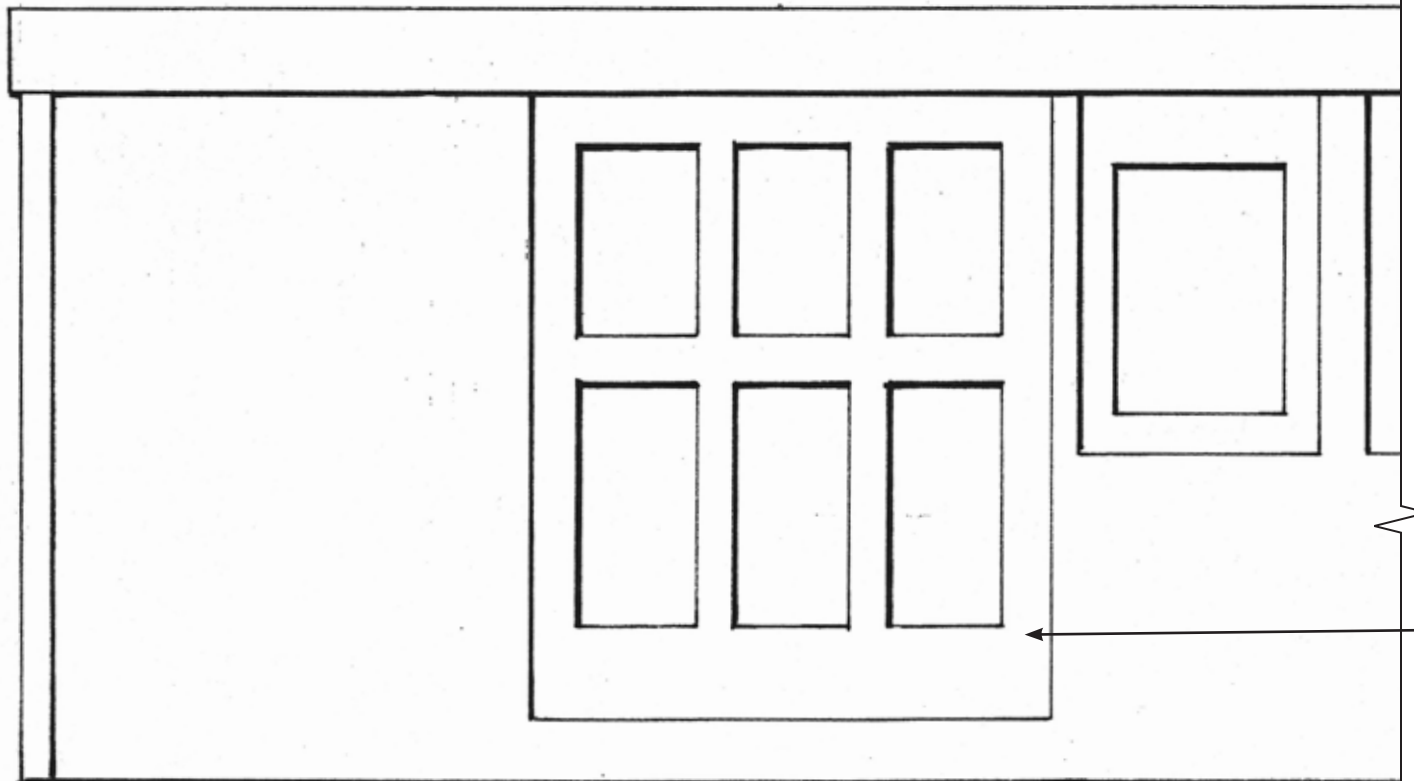
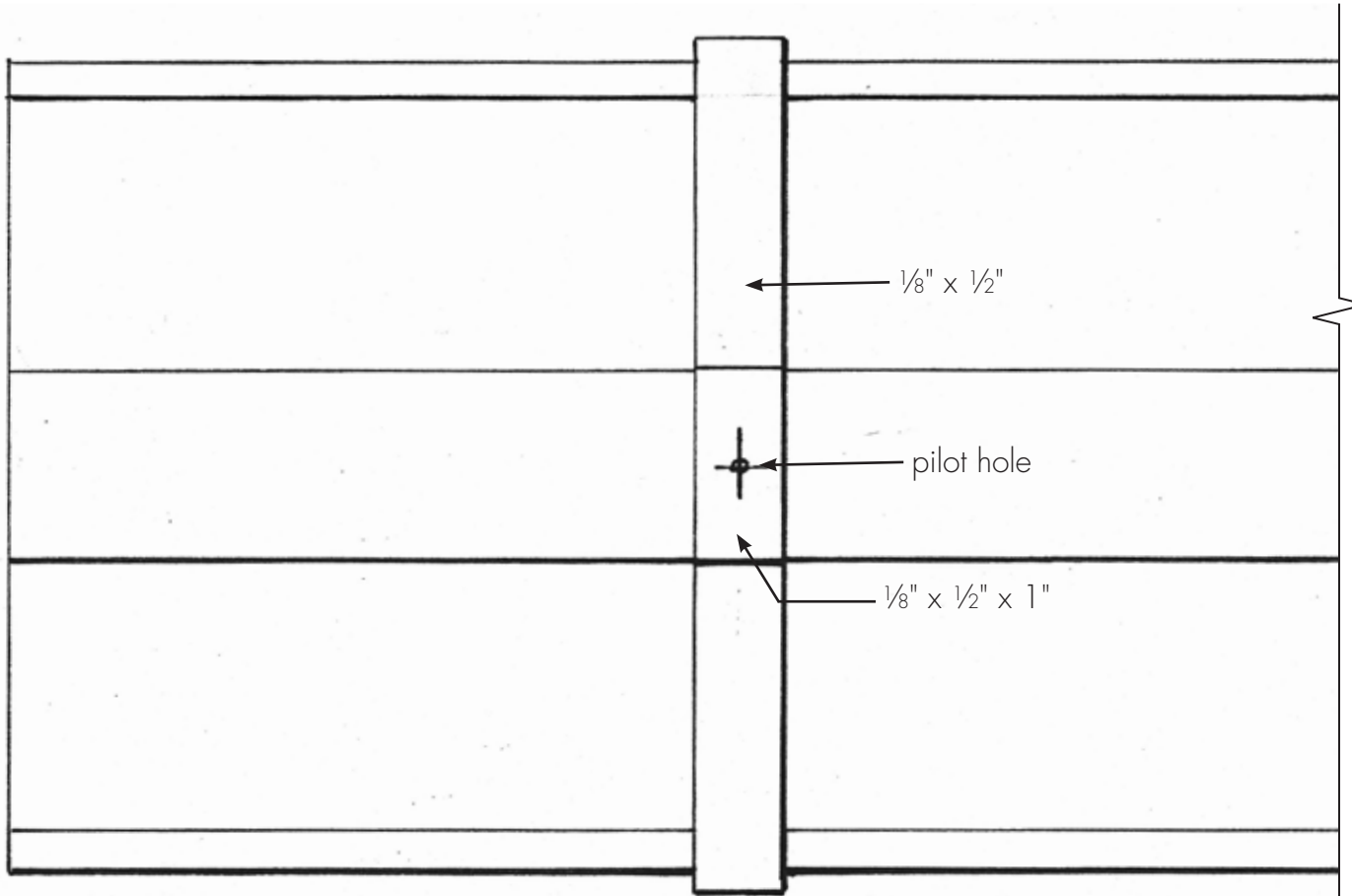
lamp vent #9 furniture nail and eyelet spacer



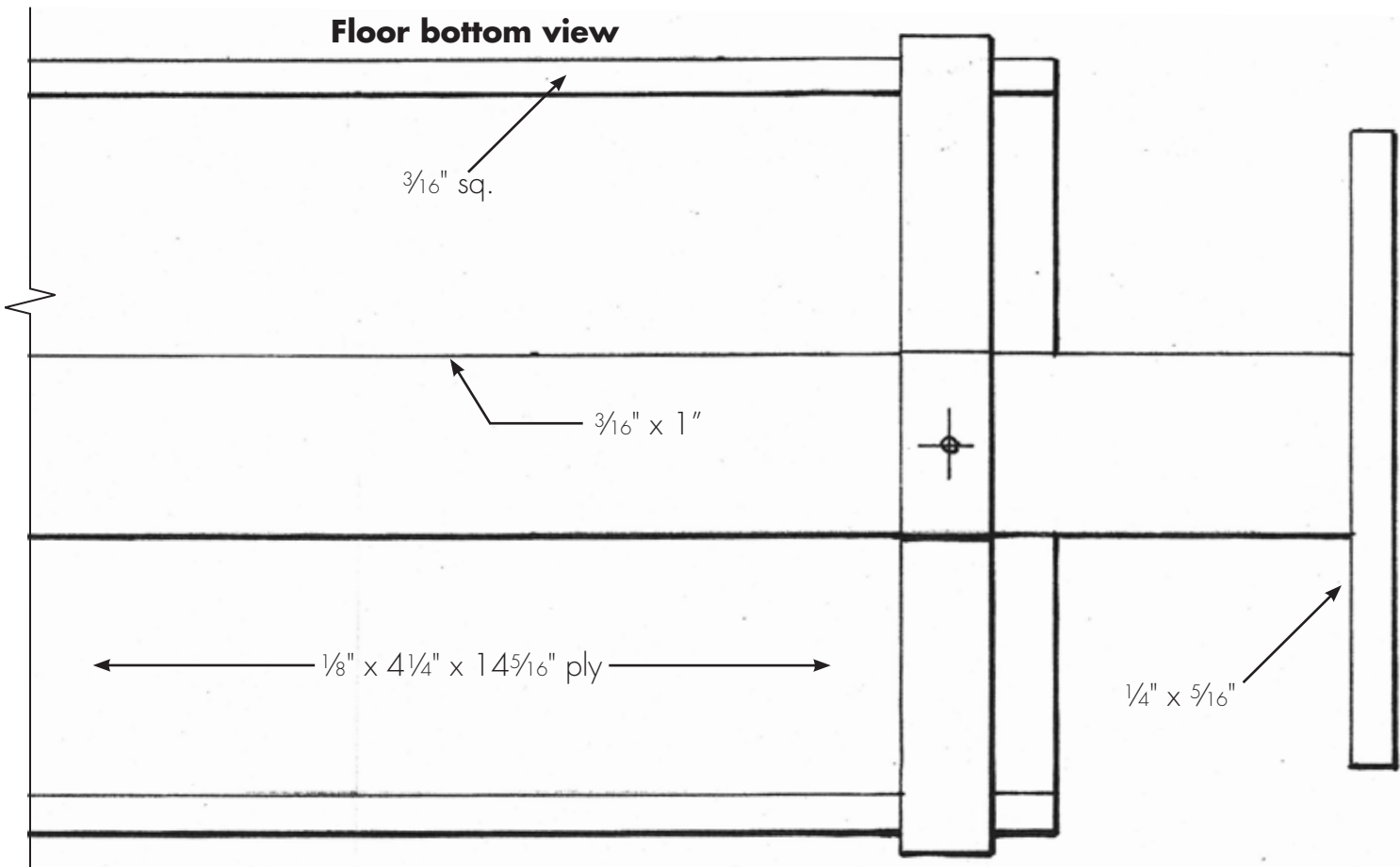
flat wire



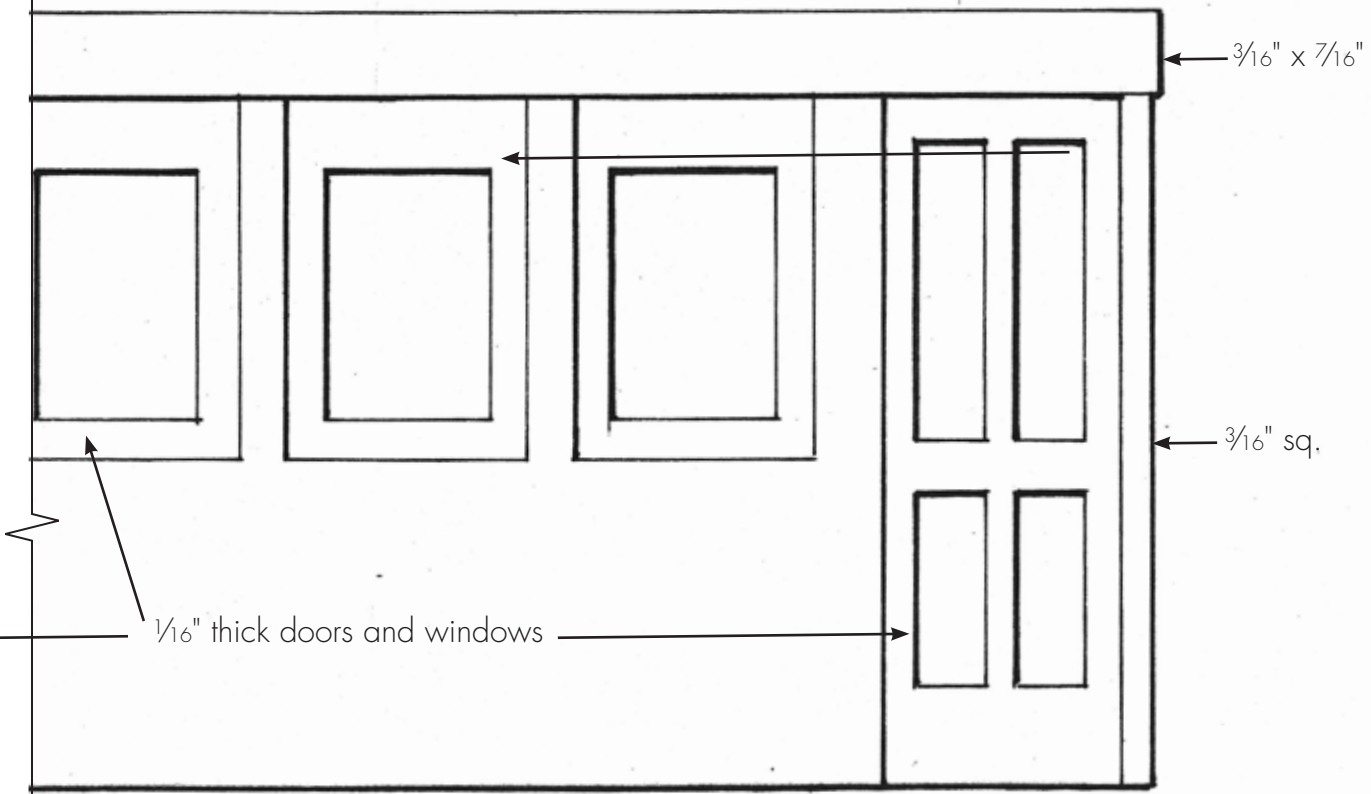


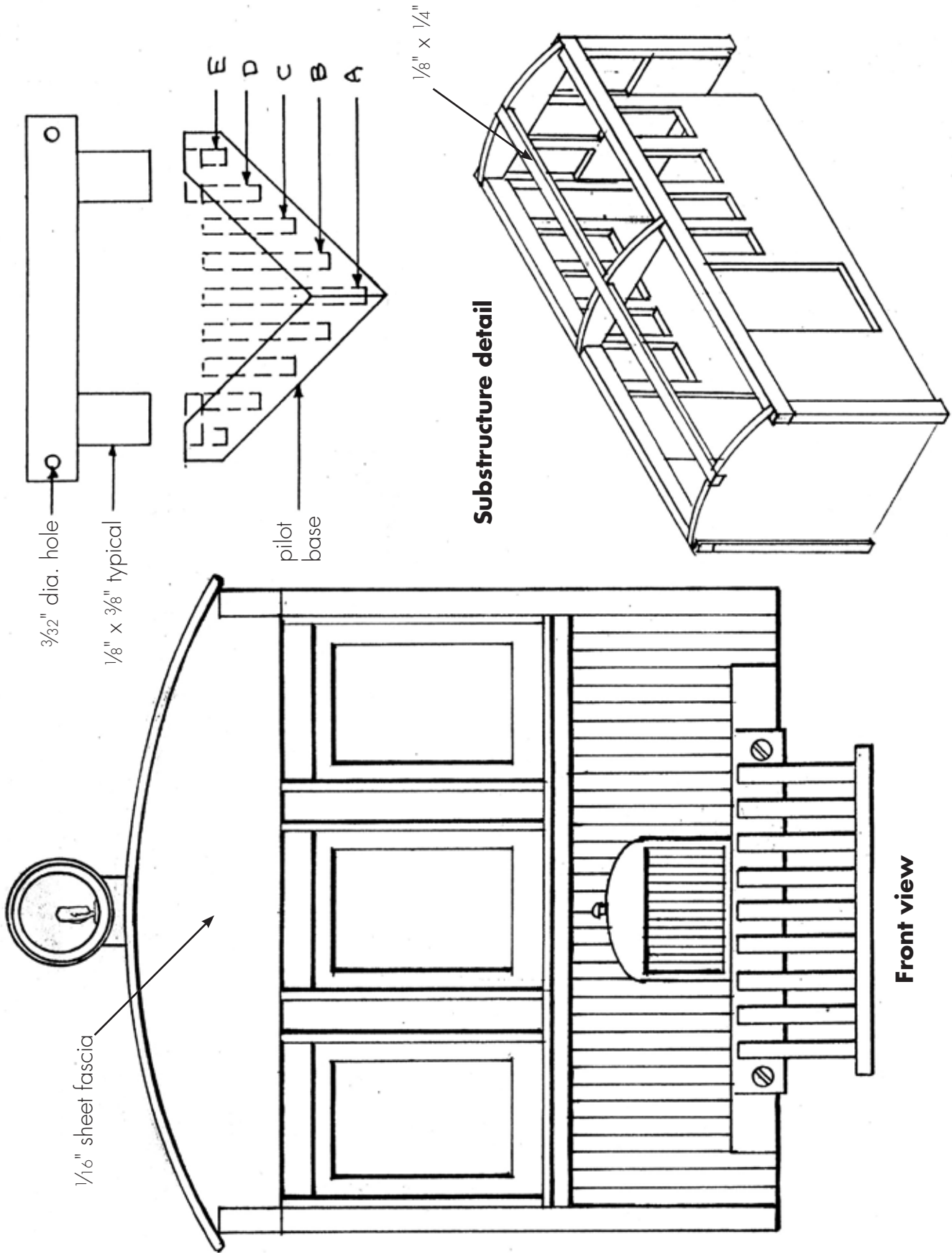


**Floor bottom view**

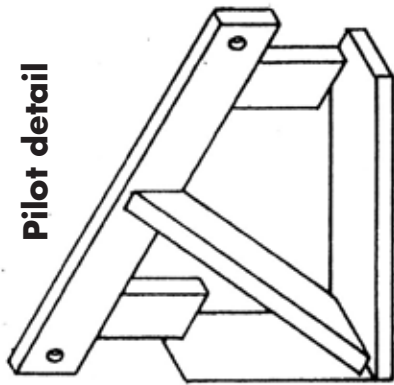


**Right side substructure**

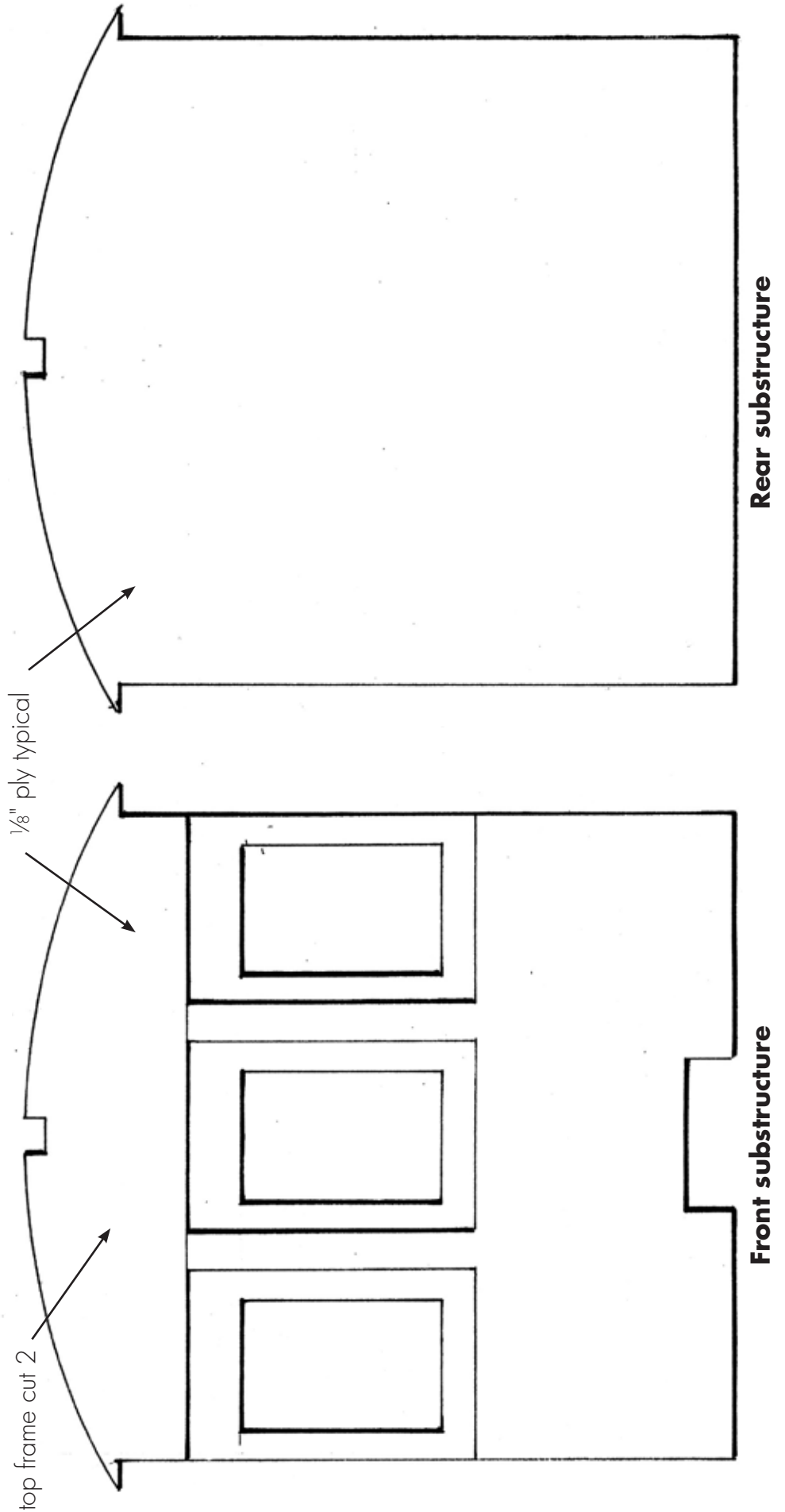
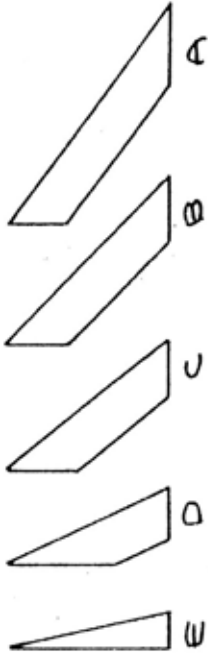




**Pilot detail**



Make from 1/8" x 1/4"



top frame cut 2

1/8" pty typical

**Front substructure**

**Rear substructure**