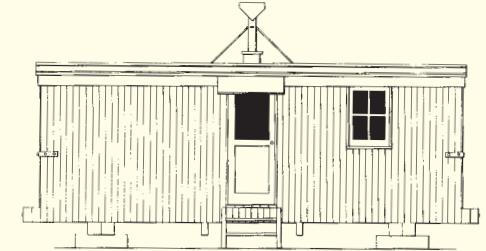


1:20.3 retired boxcar

by Ted Stinson | Wiscasset, Maine



This is a generic, 1:20.3 scale, retired boxcar. Most railroads had a surplus of old boxcars, as well as a need for section houses, storage sheds, and so forth. As a result, older equipment was often used to fill this need. This is such a car. It scales out to 22' in length and about 8' wide, with a door height of about 6'.

Construction

Begin construction with the floor. Cut a piece of $\frac{1}{4}$ " ply that is 4" x $12\frac{7}{16}$ ". On one side, add the stripwood framing, per the drawing. On the other side, add the $\frac{1}{16}$ " x $\frac{3}{16}$ " planking.

Now make the box substructure. Use $\frac{1}{8}$ " plywood for the subbases and subends. Cut the roof beams from $\frac{1}{8}$ " stock (balsa will work nicely). Assemble the substructure according to the detail. This should just fit over the previously assembled floor.

When the substructure is assembled to your satisfaction, surface the exterior with stripwood and scribed wood as shown in the drawings. Begin by adding the $\frac{1}{16}$ " fascia to the ends, followed by the $\frac{1}{16}$ " x $\frac{1}{16}$ " fascia on the sides. Now surface the ends and sides with $\frac{1}{2}$ "-thick x $\frac{1}{16}$ "-spaced scribed wood.

Add the roof using $\frac{1}{16}$ " sheet. Sand the roof smooth. Make the windows and the door (do not add the clear plastic glazing until after the car has been painted). Glue these into their openings and add the $\frac{1}{16}$ " x $\frac{1}{8}$ " stripwood that fits around the outside edge. At this point, seal the car body with clear lacquer, sanded lightly after it dries. Now, using Rustoleum, Krylon, or Ace house brand spray-can red primer, apply two light coats of paint. Allow to dry 48 hours before handling. The bottom of the car can be brush painted flat black.

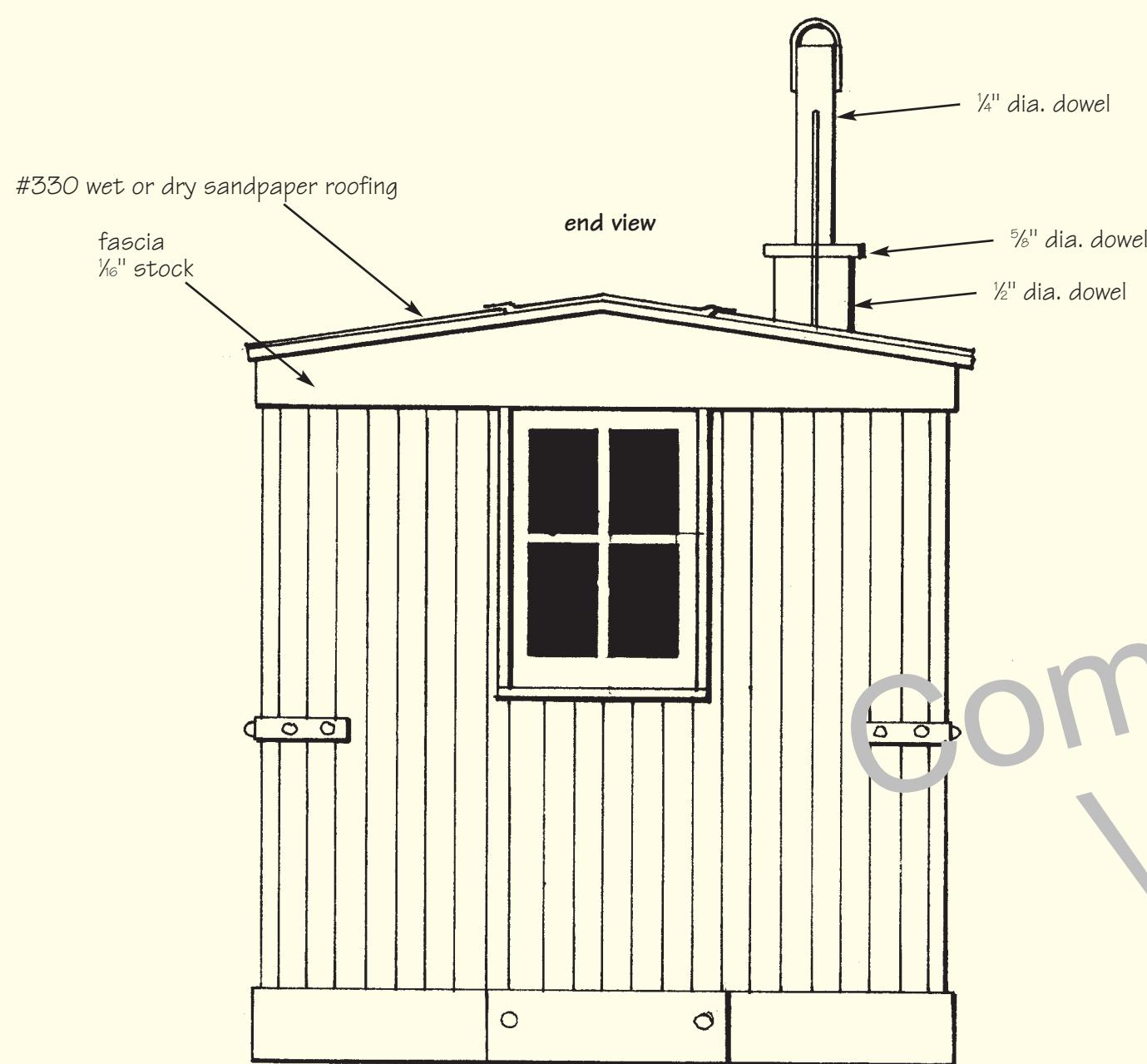
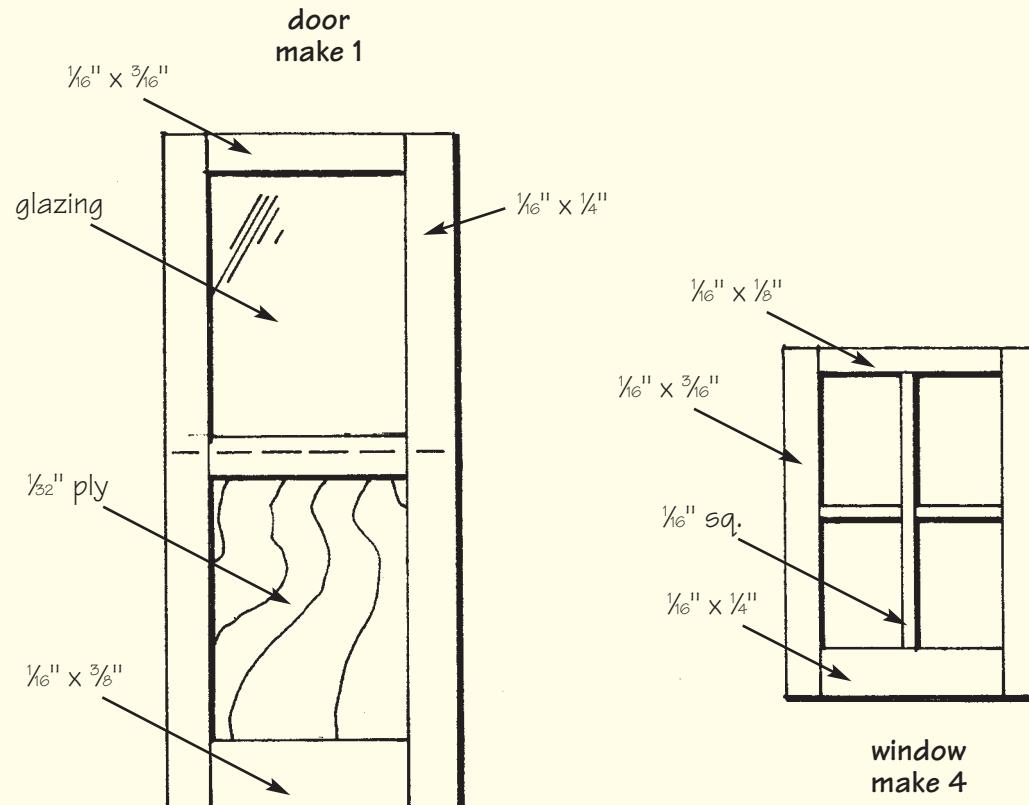
Now surface the roof with 3M #320 wet-or-dry Tri-M-Ite paper. All details added from this point should be repainted before gluing in place. Begin with the smokehead, then do the metal parts, such as brackets, grab irons, etc. Finally, add the steps and awning.

* * *

This sheet is a supplement to the August 2005 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. A complete list of available plans can be found at www.sidestreet.info, or send a stamped, self-addressed envelope to the above address.

Northeast Narrow Gauge offers a kit for the retired boxcar for \$50 + \$6 s&h. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578. Web site: www.nemodel.com

© 2005 by *Garden Railways* and Northeast Narrow Gauge. These drawings may be photocopied by individual modelers for their own personal use. Copying for any commercial use or for distribution is prohibited without written consent from the publisher.



Are you working in a different scale?

If you are working in **1:32 scale**, reduce these drawings to 63%.

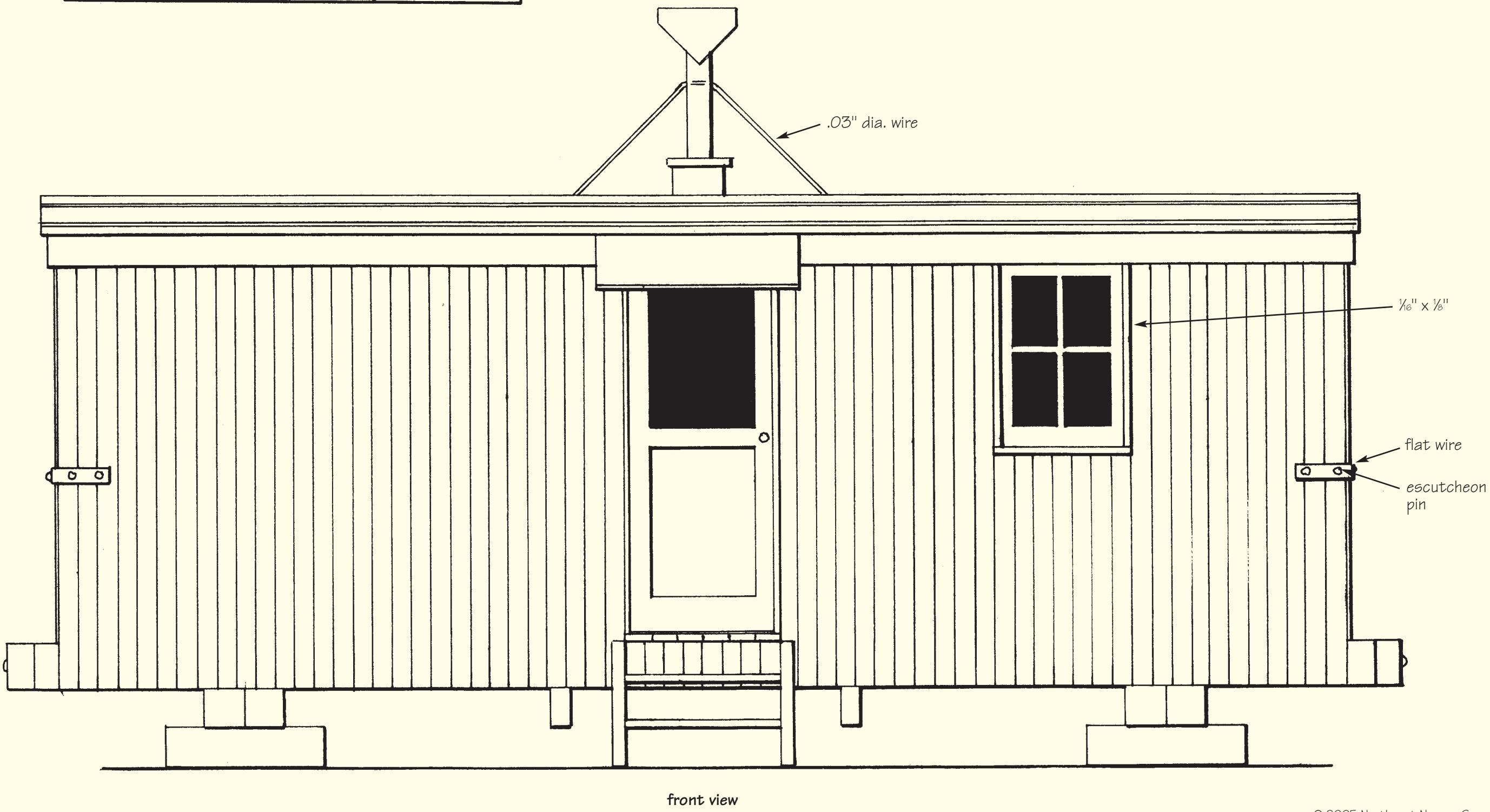
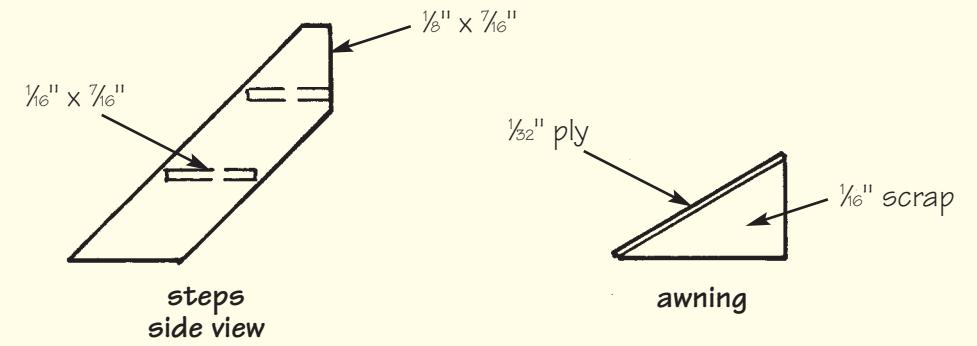
If you are working in **1:29 scale**, reduce these drawings to 70%.

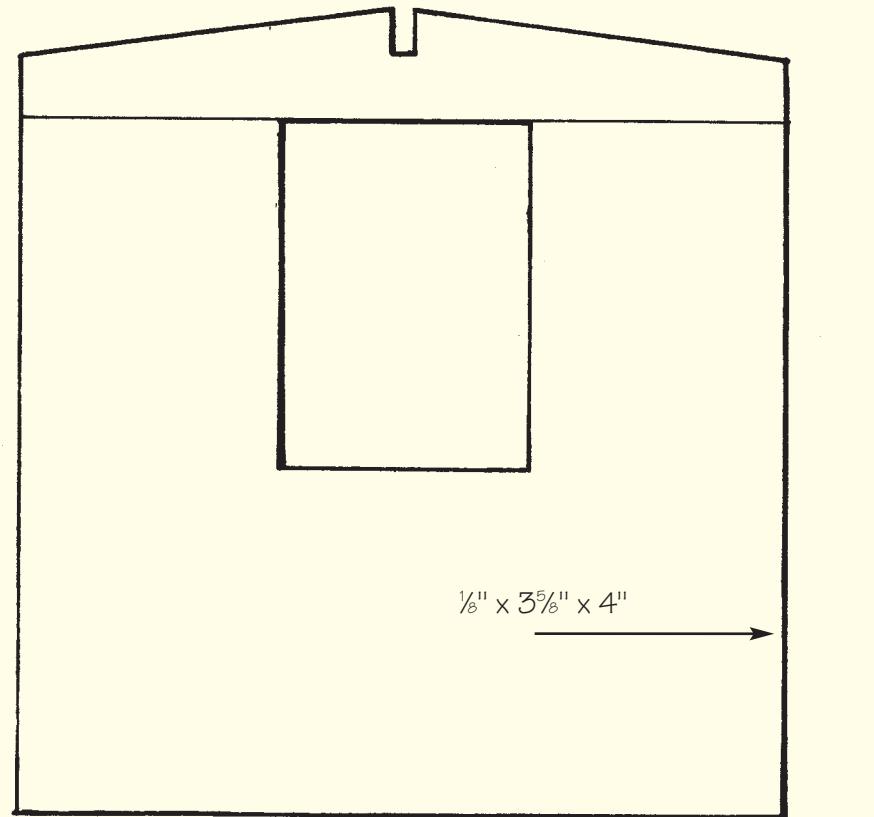
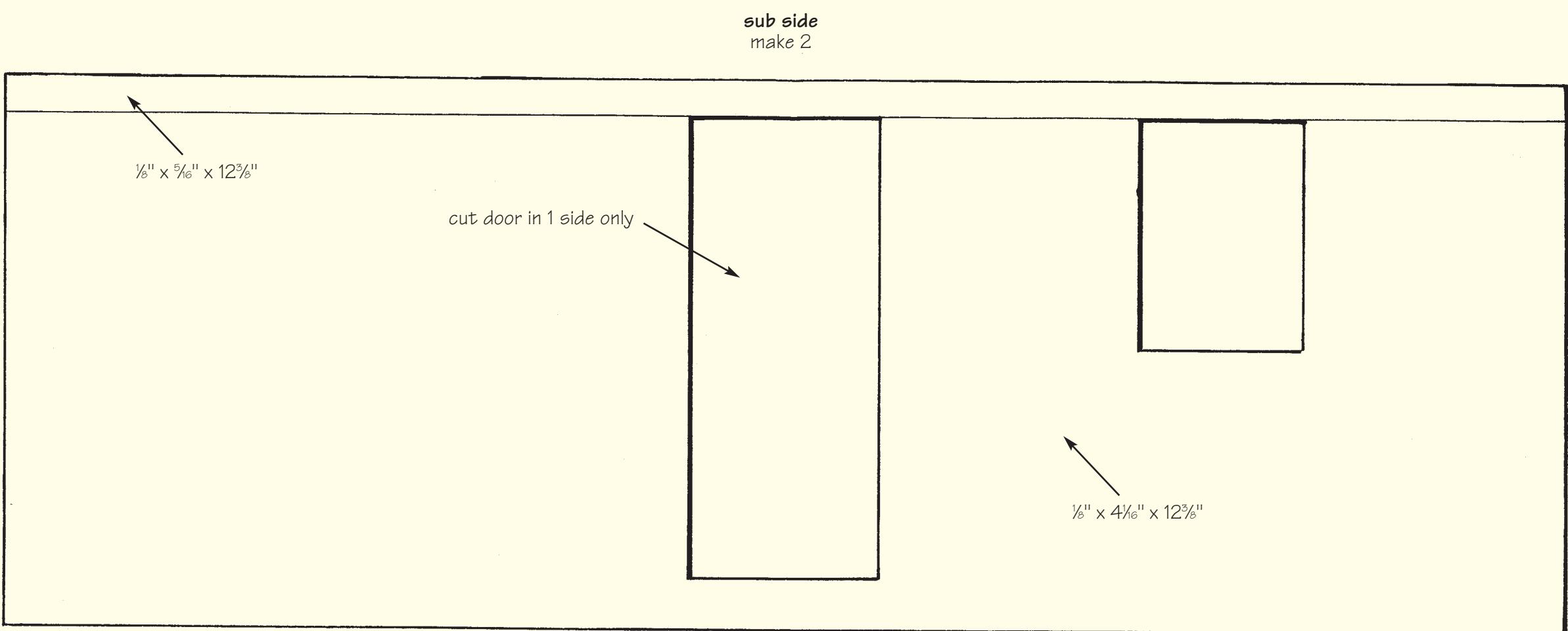
If you are working in **1:24 scale**, reduce these drawings to 88%.

If you are working in **1:22.5 scale**, reduce these drawings to 90%.

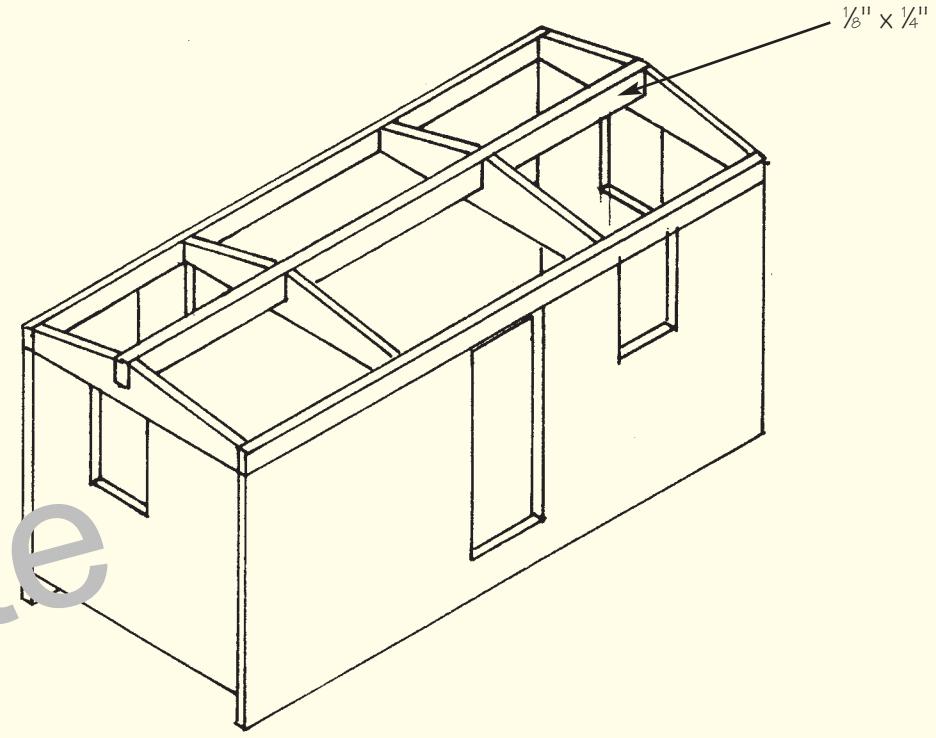
If you are working in **16mm scale**, enlarge these drawings to 107%.

If you are working in **1:13.7 (7/8") scale**, enlarge these drawings to 148%.

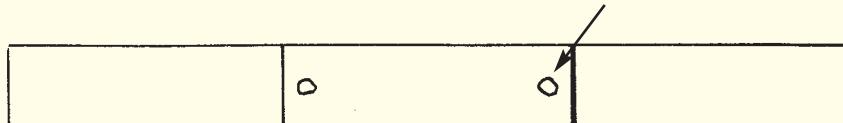




substructure detail



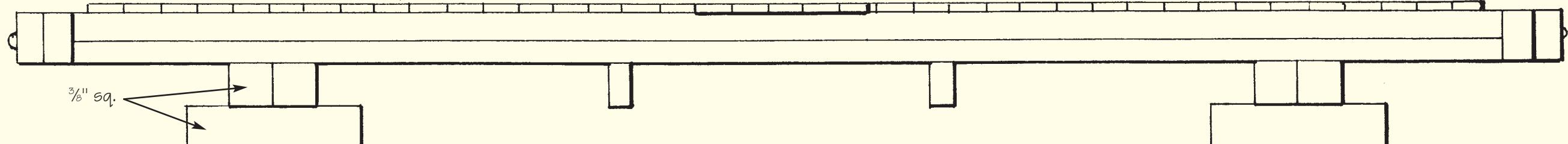
escutcheon pin



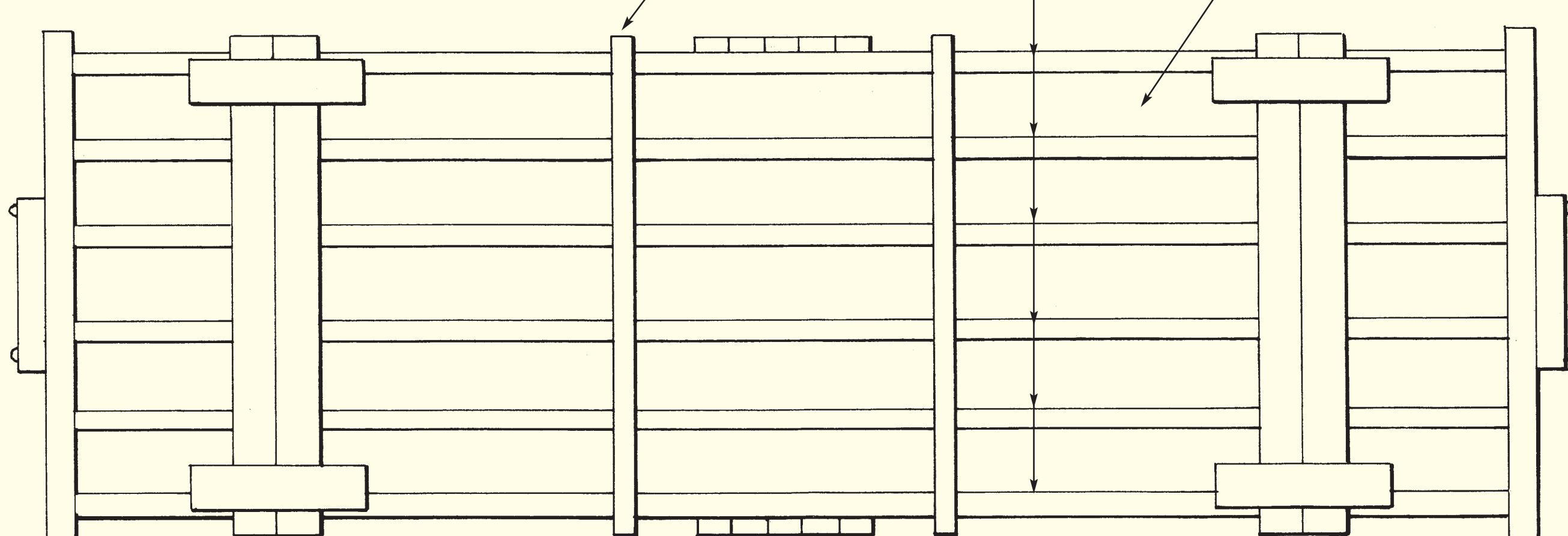
end beam
make 2 from $\frac{1}{4}'' \times \frac{7}{16}''$

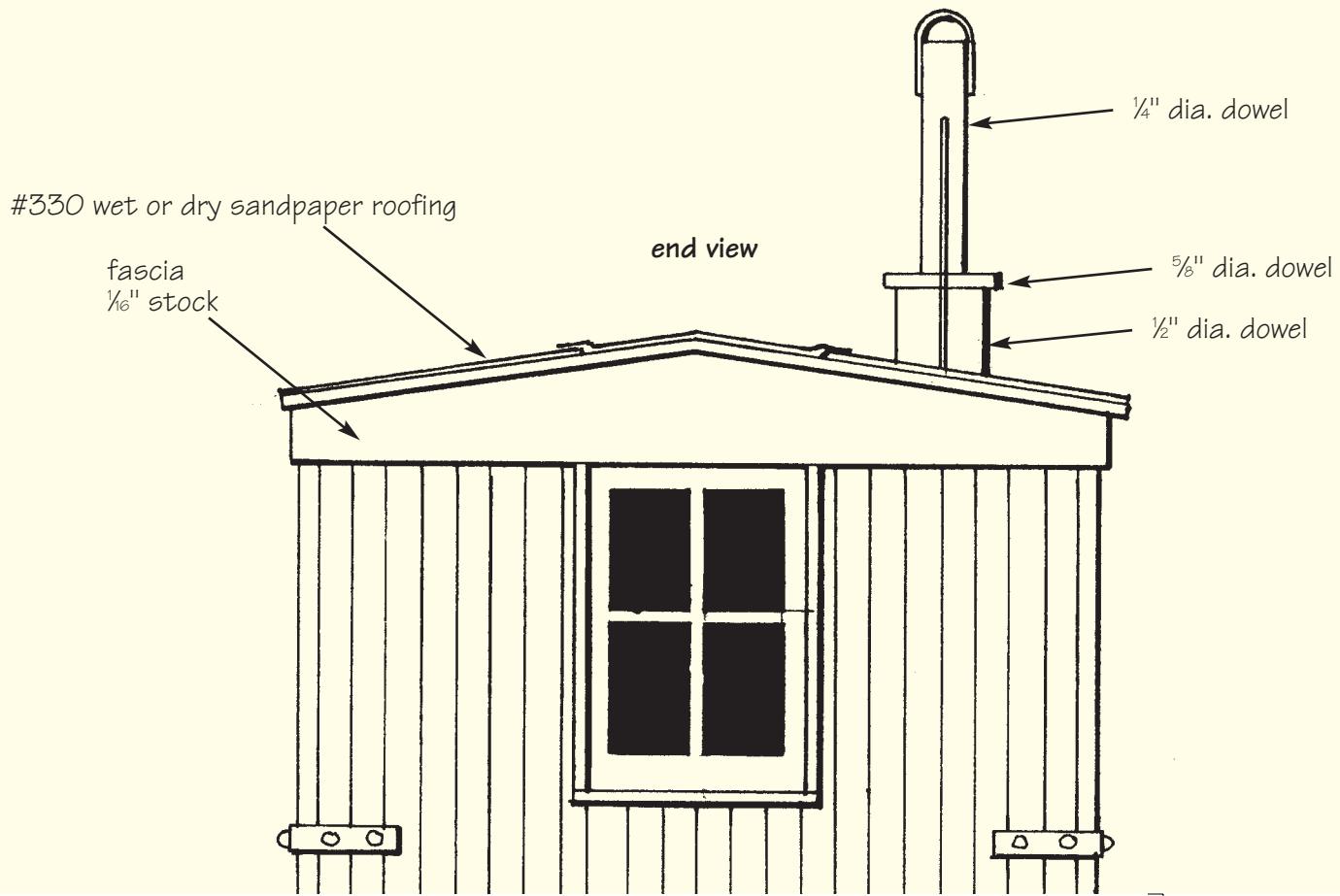
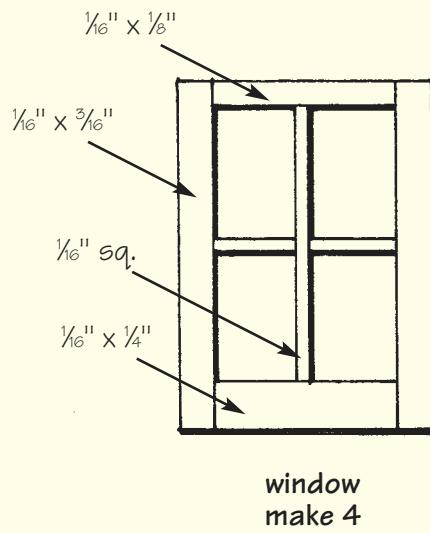
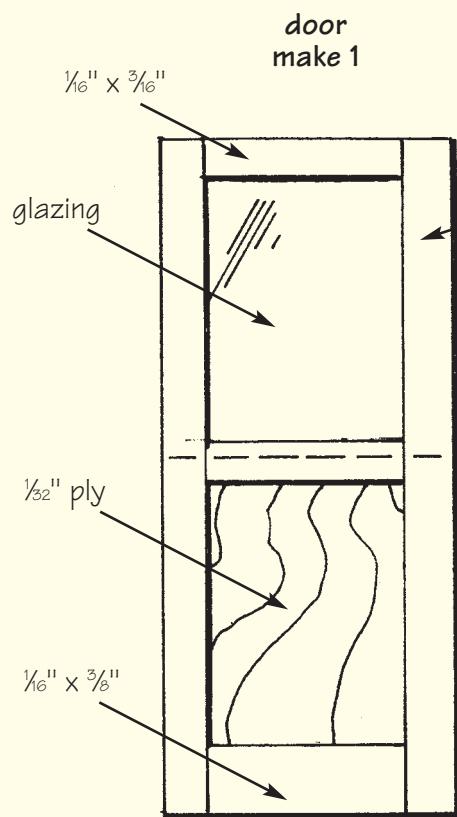
$\frac{1}{16}'' \times \frac{5}{16}''$ planking

side view



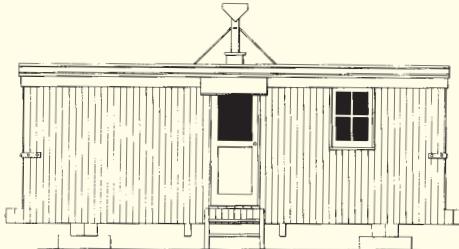
bottom view





1:20.3 retired boxcar

by Ted Stinson | Wiscasset, Maine



This is a generic, 1:20.3 scale, retired boxcar. Most railroads had a surplus of old boxcars, as well as a need for storage sheds, and so forth. As a result, older equipment was often used to fill this need. This is such a car. It is in length and about 8' wide, with a door height of about 6'.

Construction

Begin construction with the floor. Cut a piece of $\frac{1}{4}$ " ply that is 4" x $12\frac{7}{16}$ ". On one side, add the stripwood drawing. On the other side, add the $\frac{1}{16}$ " x $\frac{5}{16}$ " planking.

Now make the box substructure. Use $\frac{1}{8}$ " plywood for the subsides and subends. Cut the roof beams from $\frac{1}{8}$ " work nicely). Assemble the substructure according to the detail. This should just fit over the previously assembled

When the substructure is assembled to your satisfaction, surface the exterior with stripwood and scribed wood drawings. Begin by adding the $\frac{1}{16}$ " fascia to the ends, followed by the $\frac{1}{16}$ " x $\frac{5}{16}$ " fascia on the sides. Now surface the sides with $\frac{1}{32}$ "-thick x $\frac{3}{16}$ "-spaced scribed wood.

Add the roof using $\frac{1}{16}$ " sheet. Sand the roof smooth. Make the windows and the door (do not add the clear plastic after the car has been painted). Glue these into their openings and add the $\frac{1}{16}$ " x $\frac{1}{8}$ " stripwood that fits around the this point, seal the car body with clear lacquer, sanded lightly after it dries. Now, using Rustoleum, Krylon, or Ace hardware can red primer, apply two light coats of paint. Allow to dry 48 hours before handling. The bottom of the car can be flat black.

Now surface the roof with 3M #320 wet-or-dry Tri-M-Ite paper. All details added from this point should be glued in place. Begin with the smokehead, then do the metal parts, such as brackets, grab irons, etc. Finally, add the smokestack.

* * *

This sheet is a supplement to the August 2005 issue of *Garden Railways* magazine. While supplies last, extra drawings can be had by sending \$1.50 per set (\$2.00 foreign) to: Sidestreet Bannerworks, PO Box 460222, Denver, CO 80246. A complete list of available plans can be found at www.sidestreet.info, or send a stamped, self-addressed envelope to the above address.

Northeast Narrow Gauge offers a kit for the retired boxcar for \$50 + \$6 s&h. Order from Northeast Narrow Gauge, Wiscasset ME 04578. Web site: www.nemodel.com

© 2005 by *Garden Railways* and Northeast Narrow Gauge. These drawings may be photocopied by individual for their own personal use. Copying for any commercial use or for distribution is prohibited without written consent from the author.

$\frac{5}{8}$ " dia. dowel

$\frac{1}{2}$ " dia. dowel

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%.

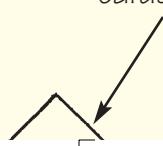
If you are working in **1:24 scale**, reduce these drawings to 88%.

If you are working in **1:22.5 scale**, reduce these drawings to 90%.

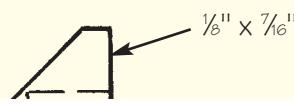
If you are working in **16mm scale**, enlarge these drawings to 107%.

If you are working in **1:13.7 ($\frac{7}{8}$ ") scale**, enlarge these drawings to 148%.

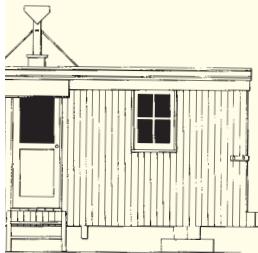
cardstock smokehead



$1\frac{1}{2}$ " x $7\frac{1}{2}$ "



$\frac{1}{8}$ " x $\frac{7}{16}$ "



Plan set #72

oxcars, as well as a need for section houses, s need. This is such a car. It scales out to 22'

ne side, add the stripwood framing, per the

Cut the roof beams from $\frac{1}{8}$ " stock (balsa will over the previously assembled floor.

stripwood and scribed wood as shown in the cia on the sides. Now surface the ends and

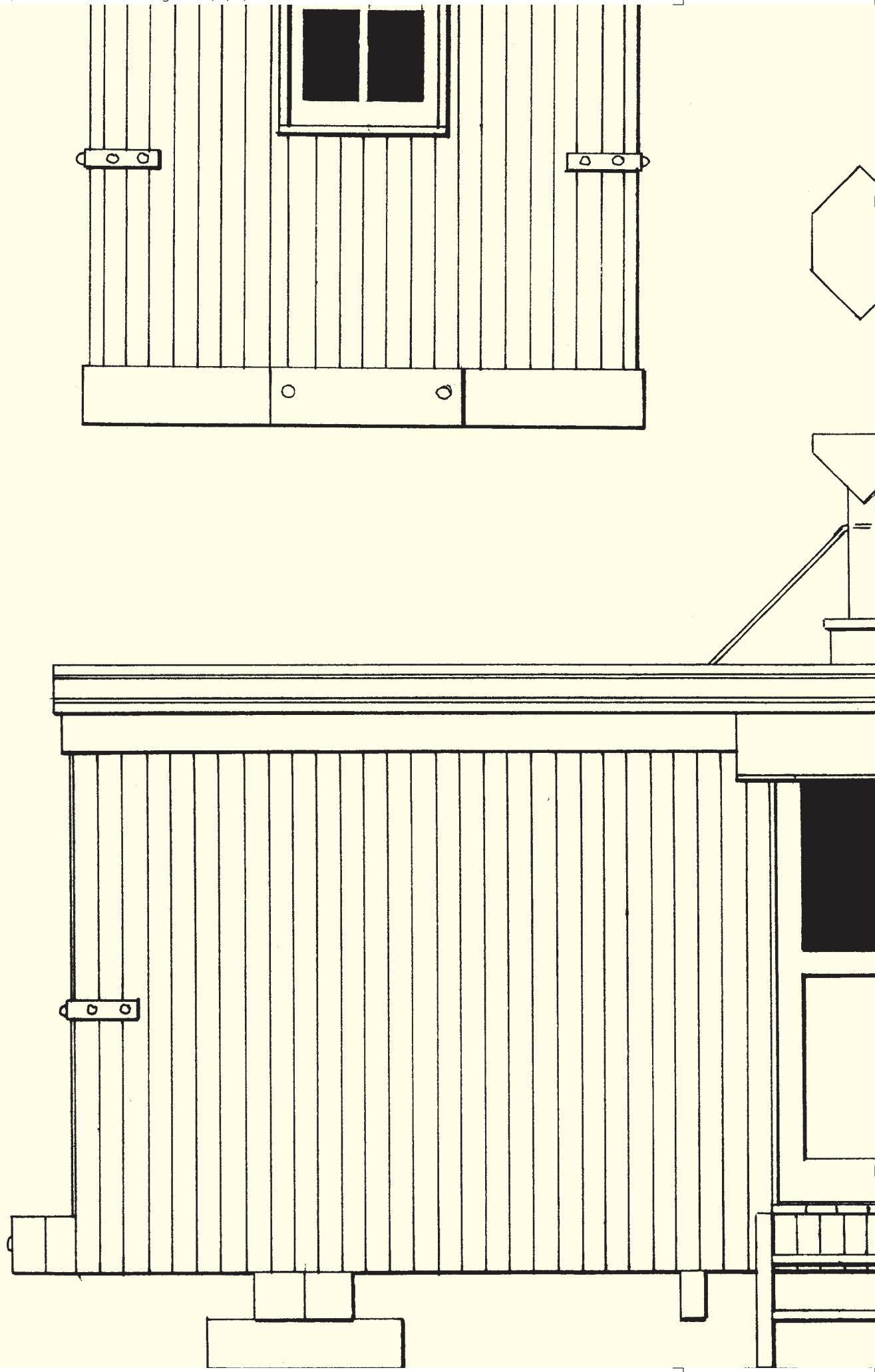
or (do not add the clear plastic glazing until ripwood that fits around the outside edge. At Rustoleum, Krylon, or Ace house brand spray- The bottom of the car can be brush painted

from this point should be prepainted before o irons, etc. Finally, add the steps and awning.

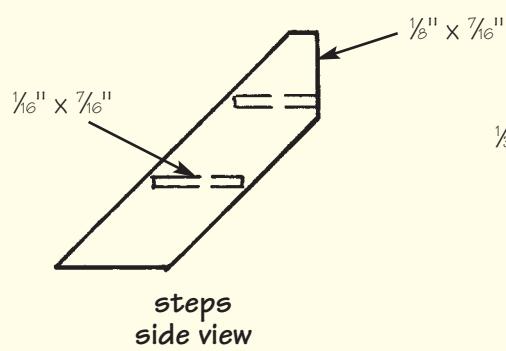
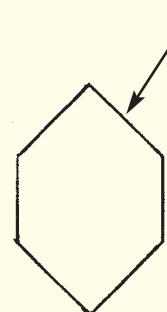
e. While supplies last, extra copies of these rks, PO Box 460222, Denver CO 80246 USA. mped, self-addressed envelope to the above

from Northeast Narrow Gauge, PO Box 191,

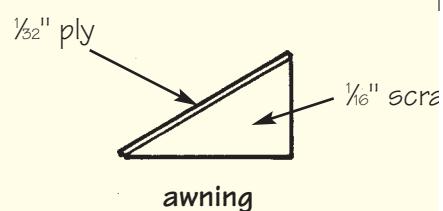
photocopied by individual modelers for their ithout written consent from the publisher.



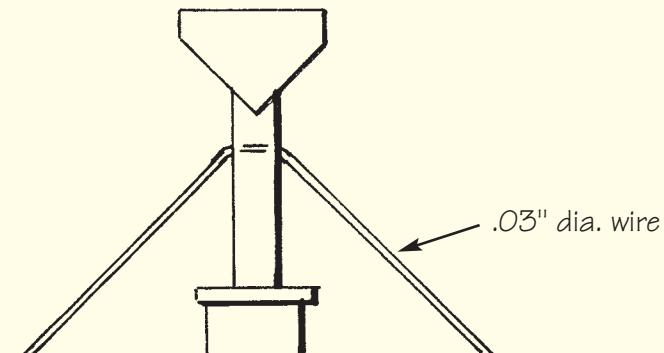
cardstock smokehead

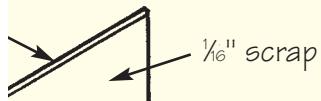


steps
side view

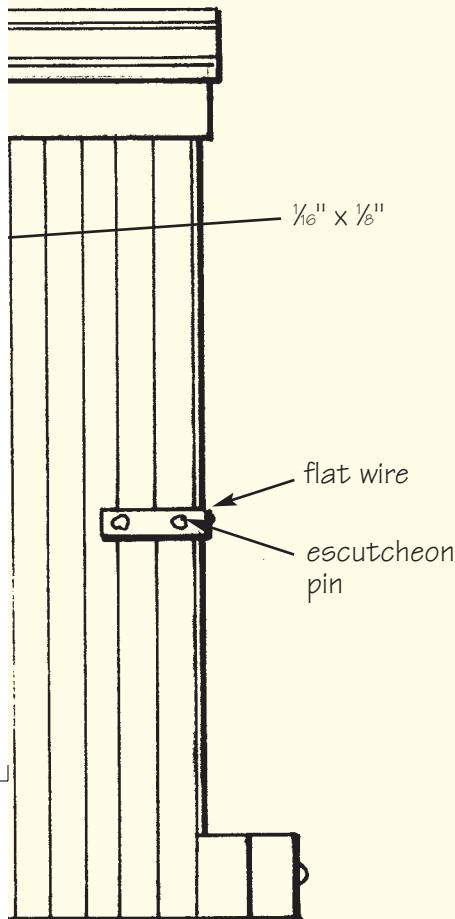


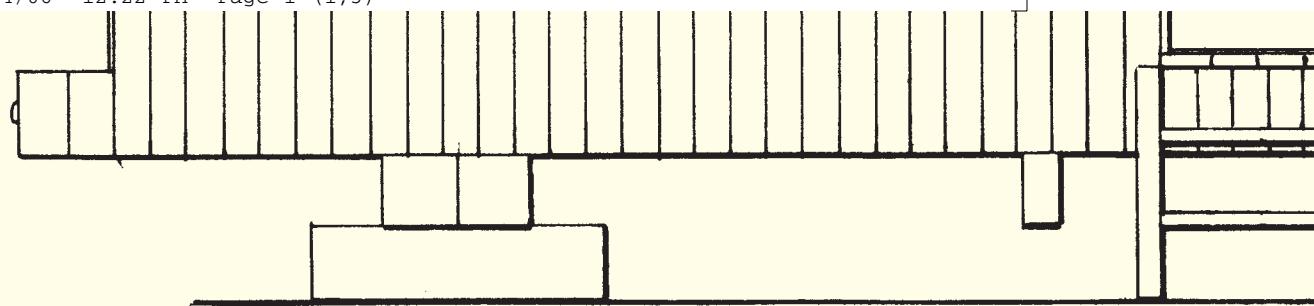
awning

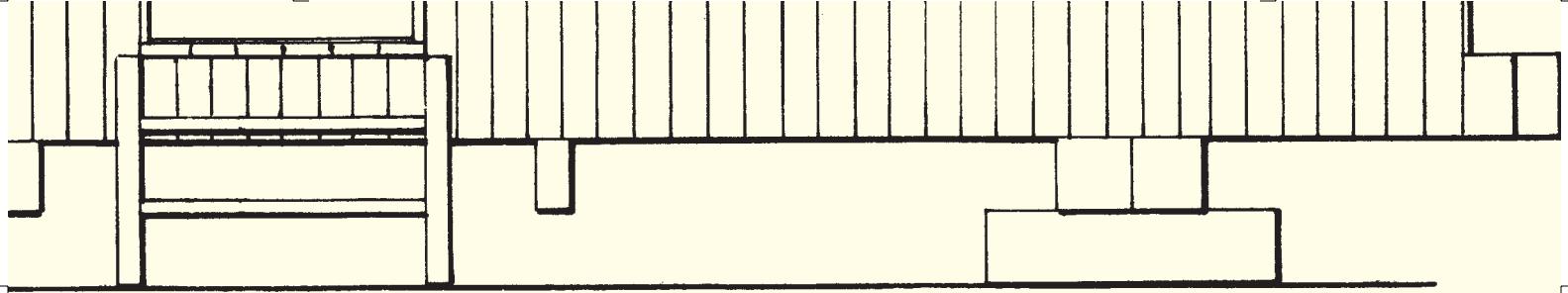




awning





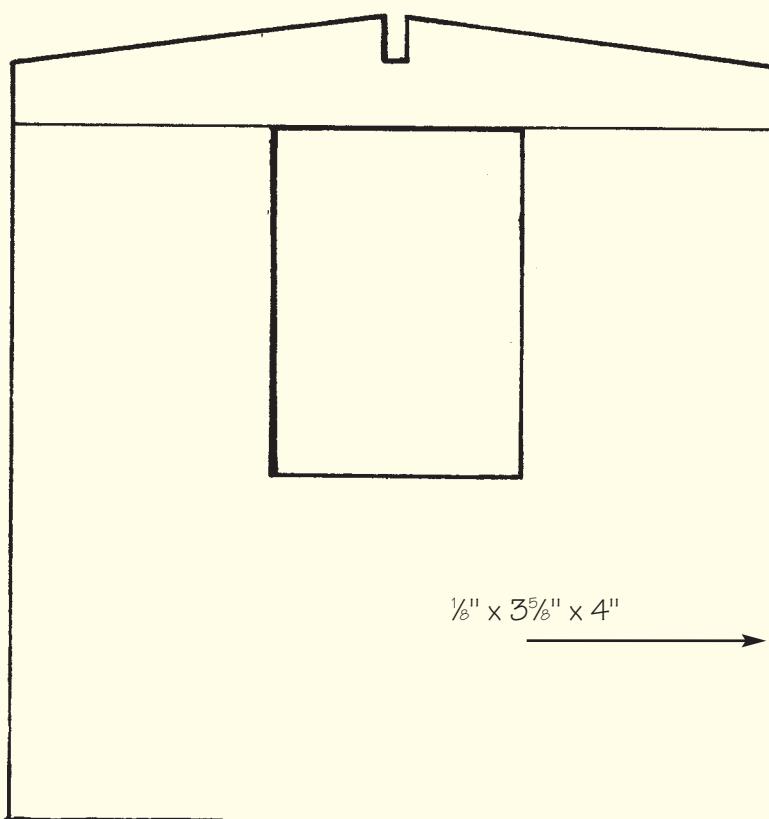
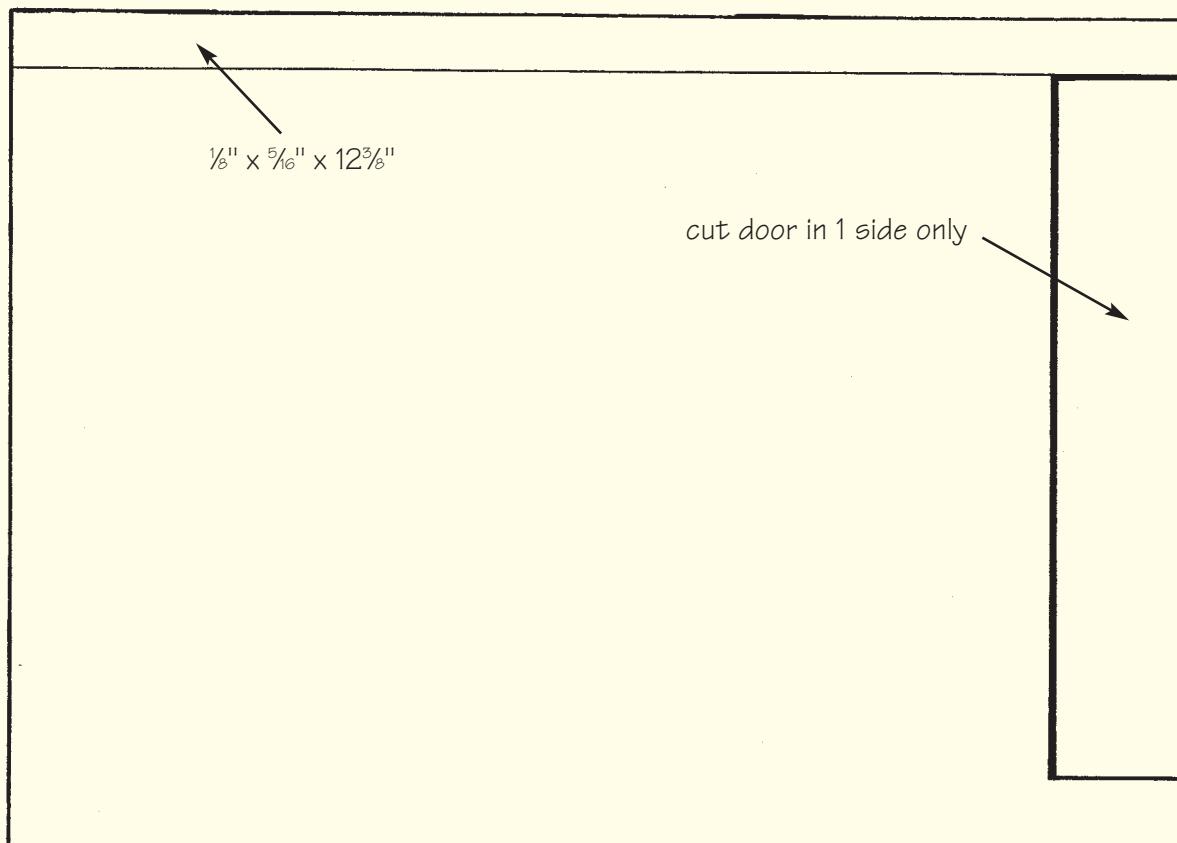


front view

© 2005 Northeas

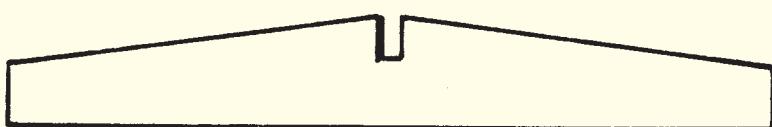
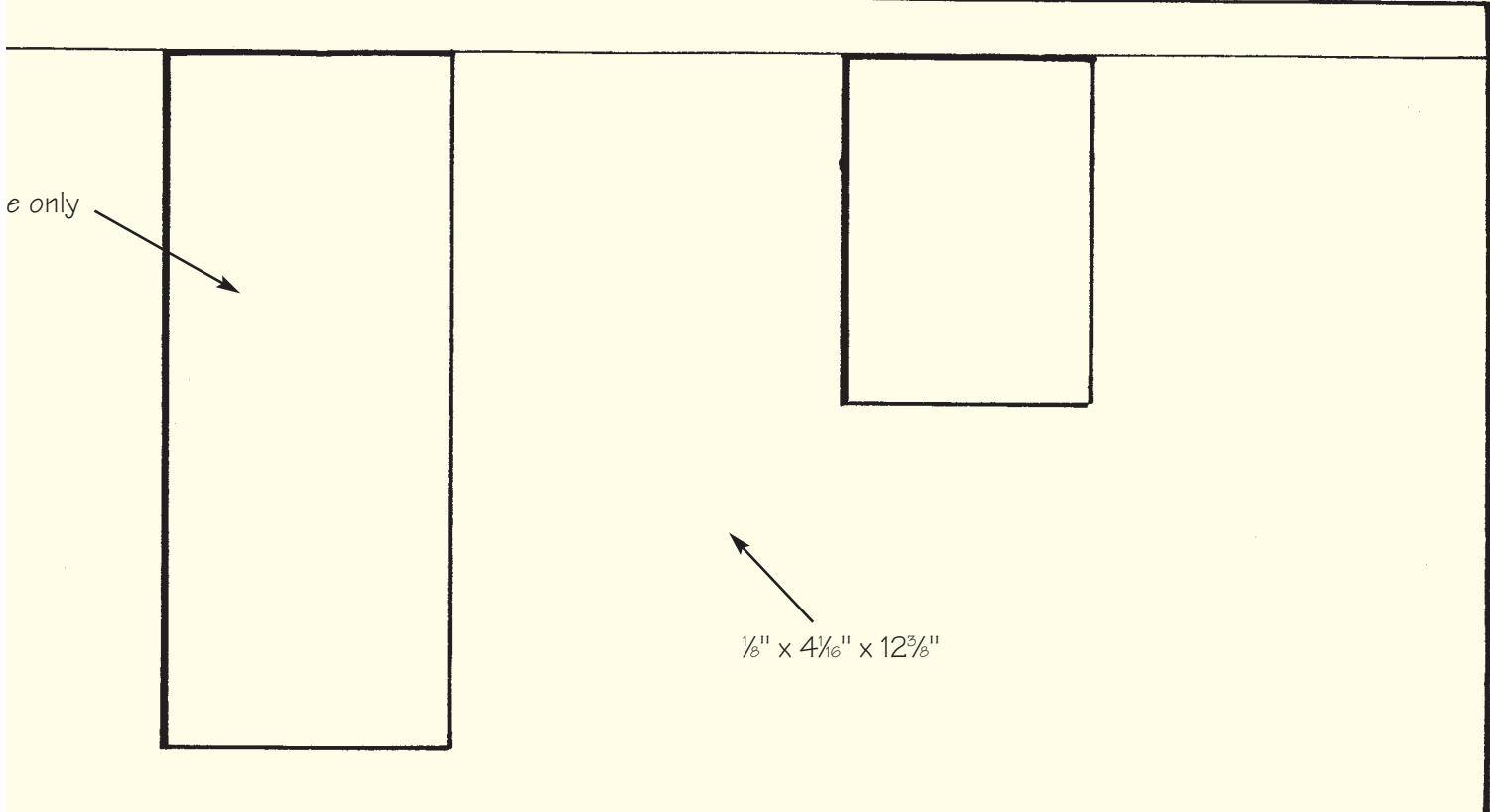
© 2005 Northeast Narrow Gauge

sub
ma



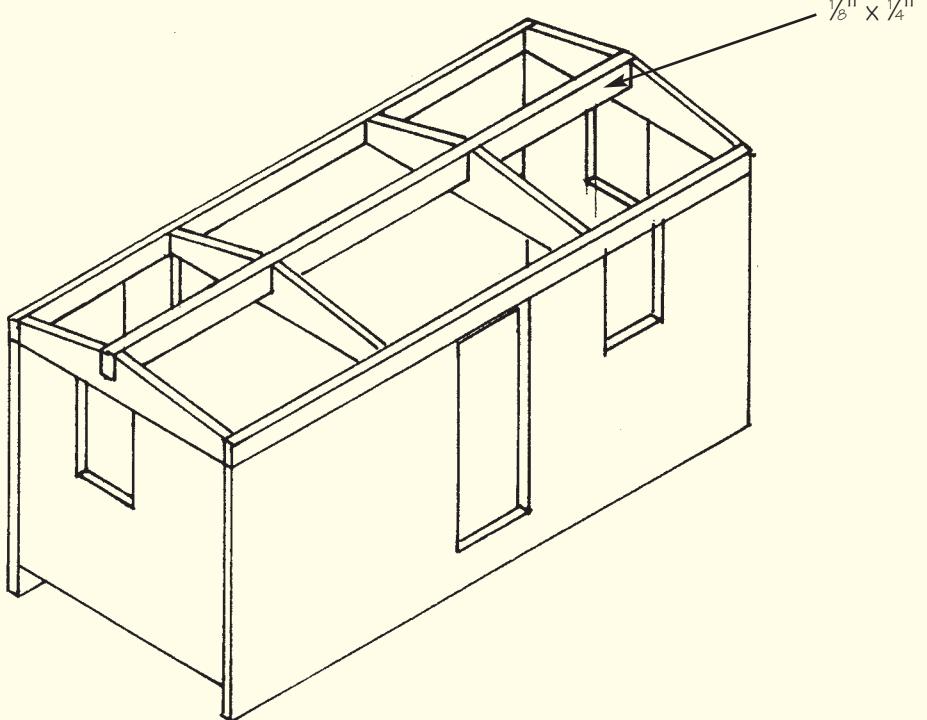
sub end
make 2

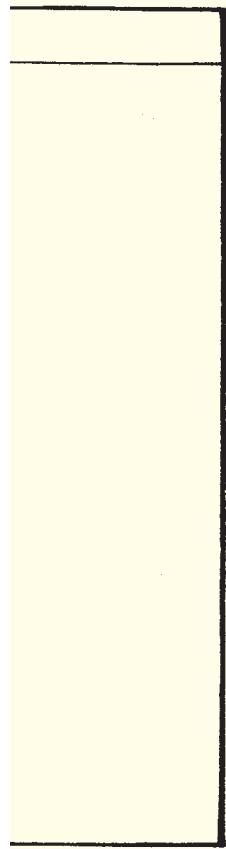
sub side
make 2



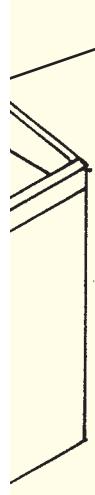
roof beam
cut 4 from $\frac{1}{8}$ " stock

substructure detail





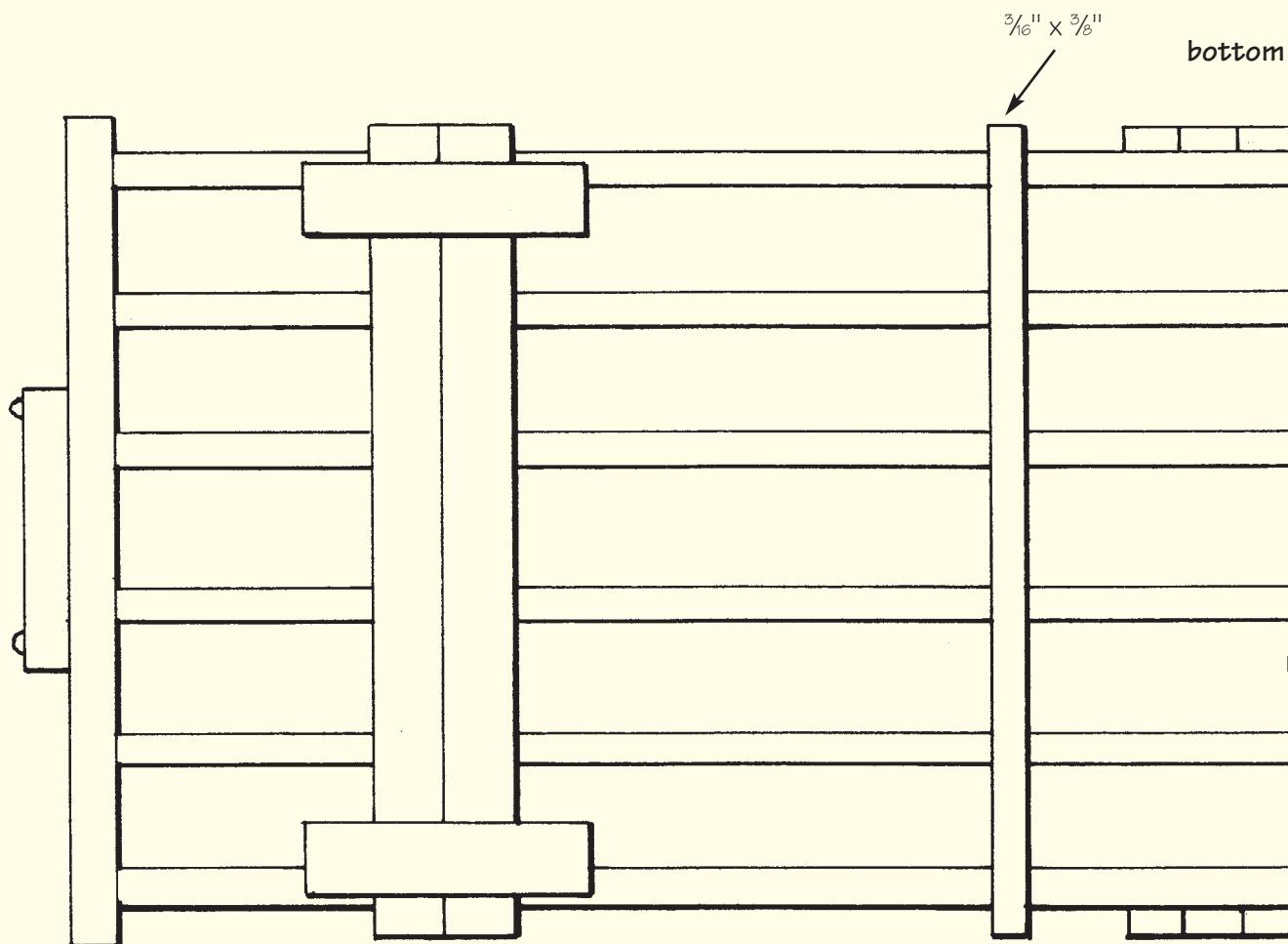
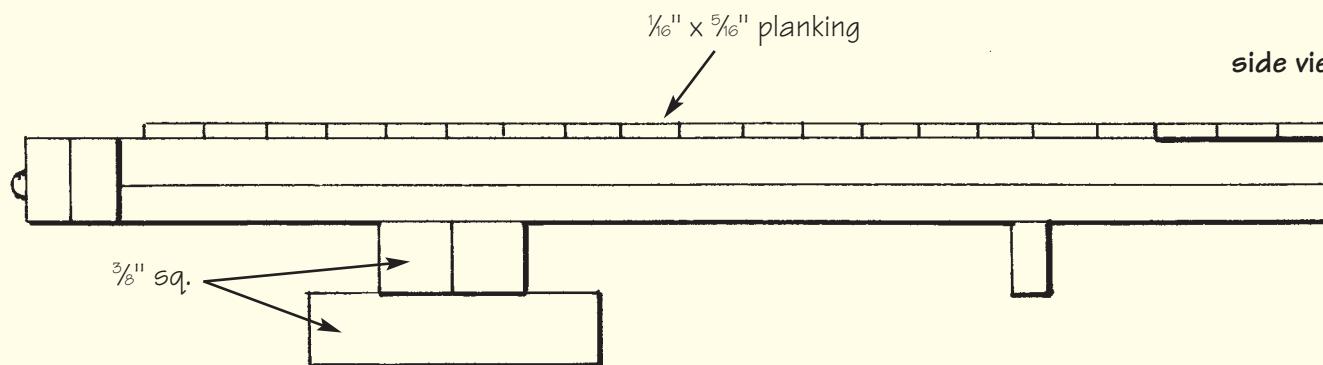
$\frac{1}{6}'' \times \frac{1}{4}''$

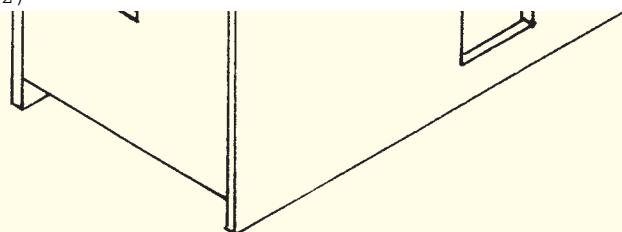


sub end
make 2

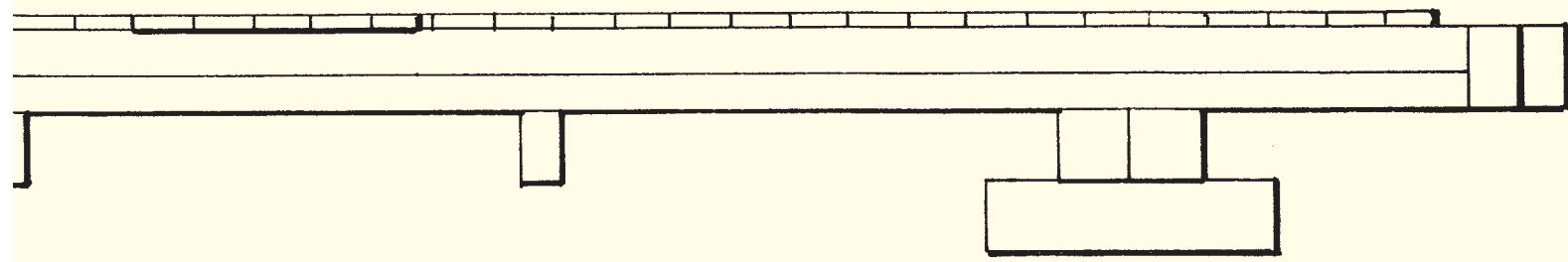


end beam
make 2 from $\frac{1}{4}'' \times \frac{7}{16}''$

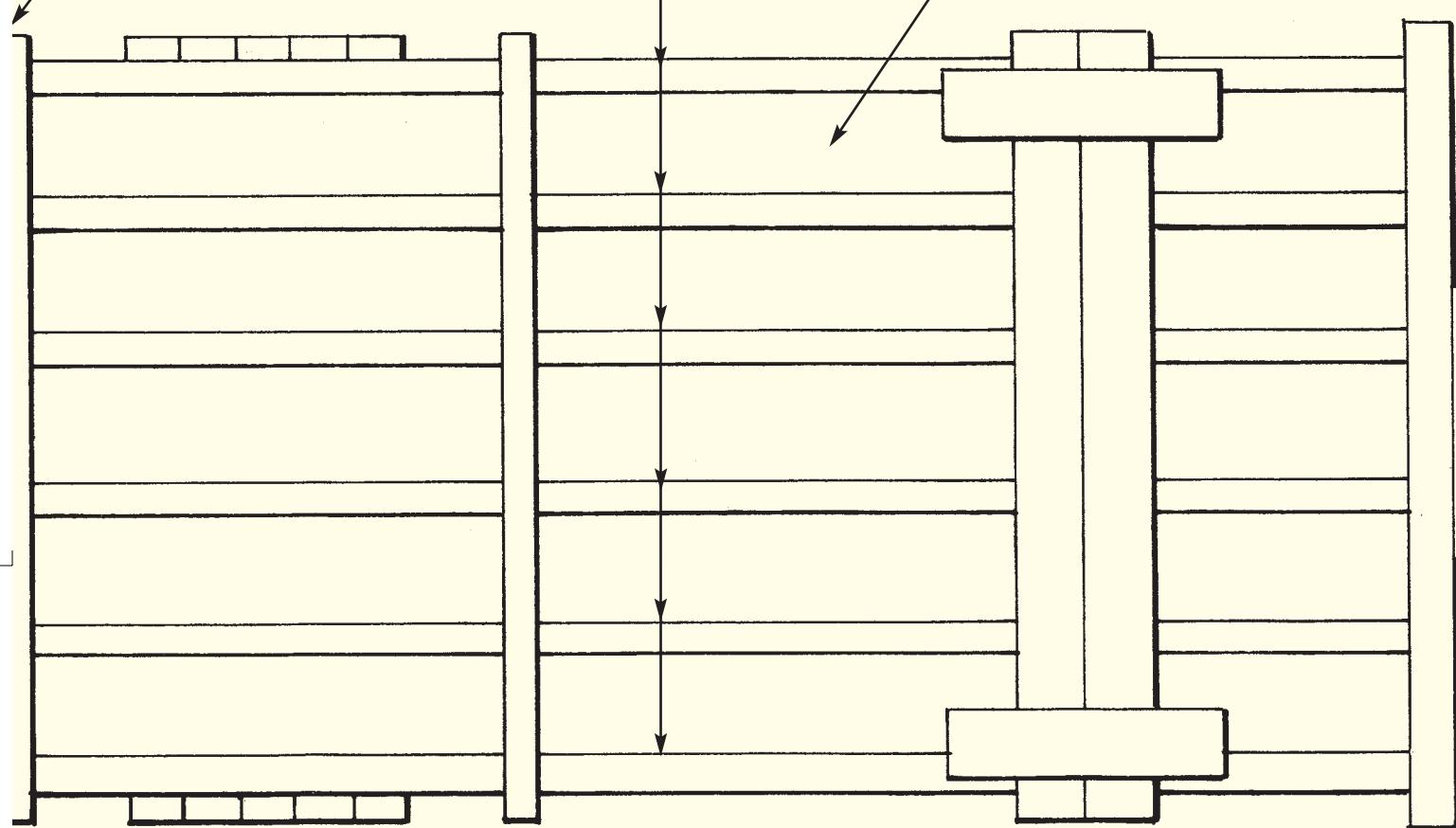


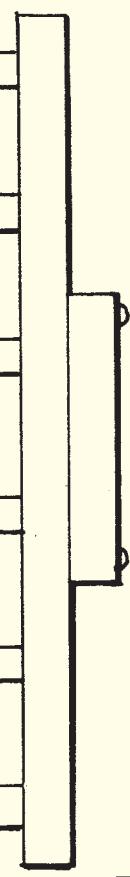
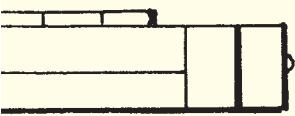


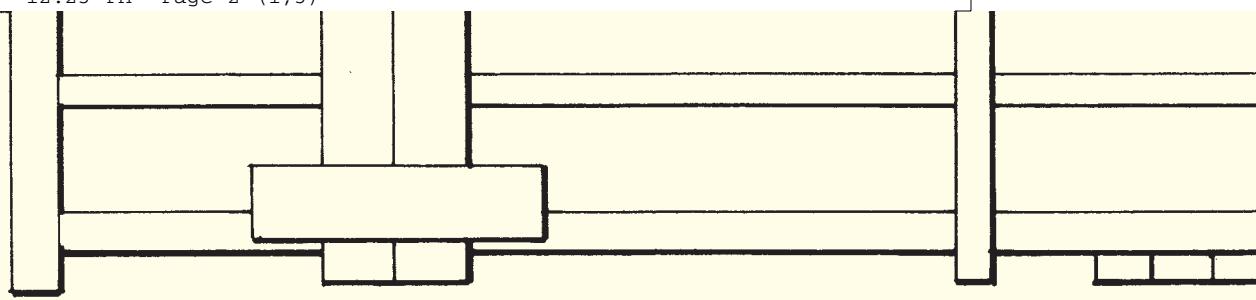
side view



3/16" X 3/8"
bottom view







© 2005 Northeast Narrow Gauge