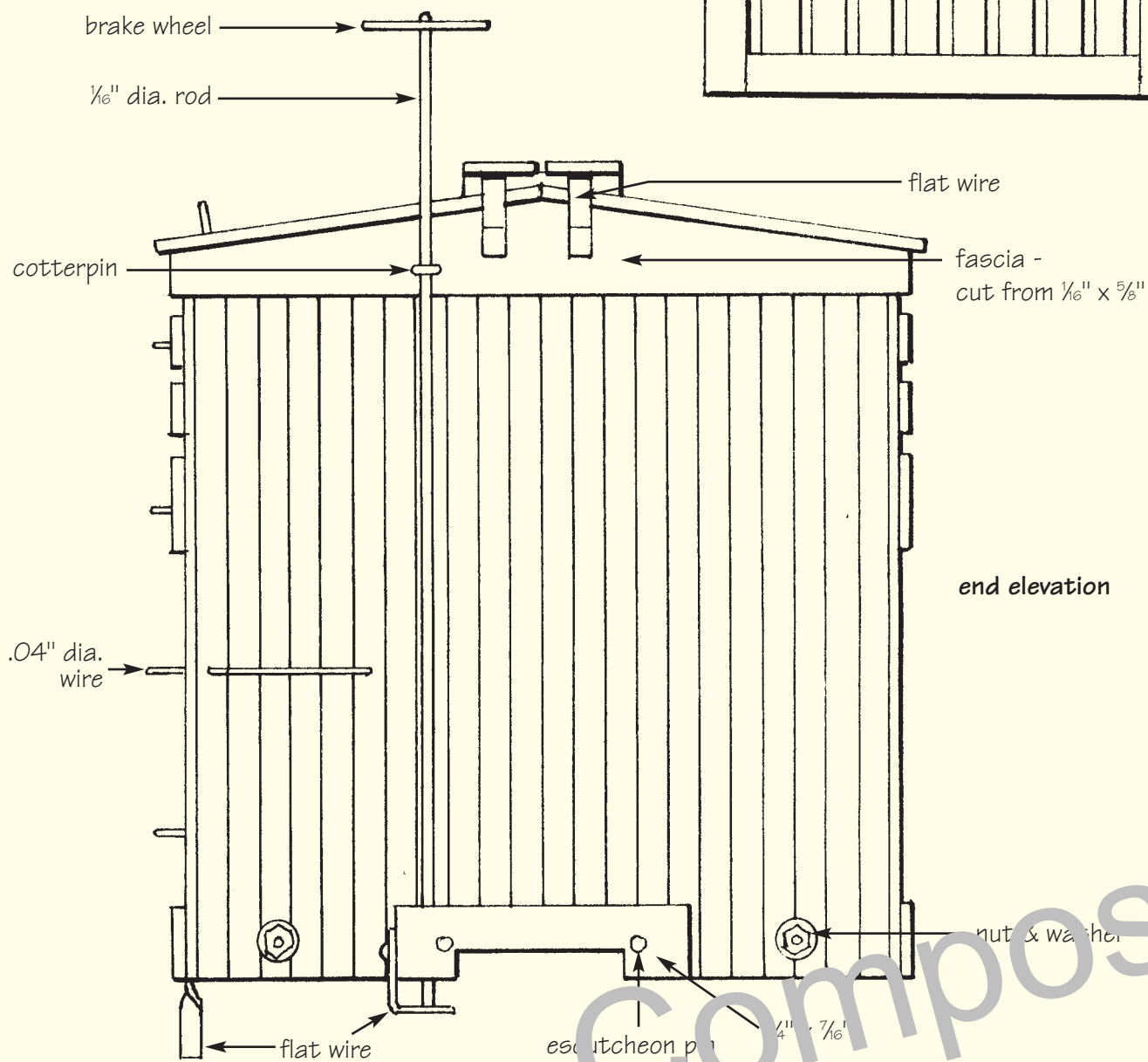
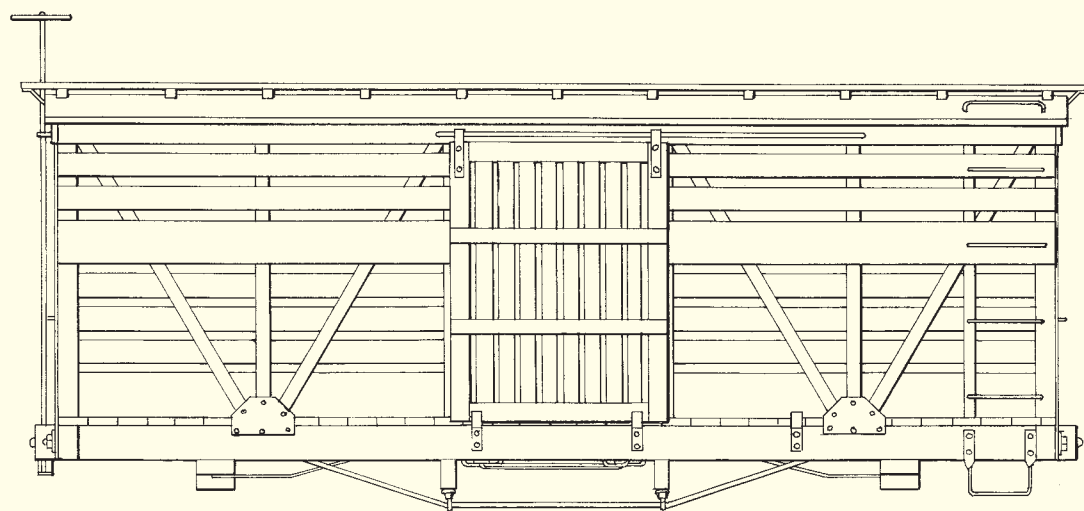
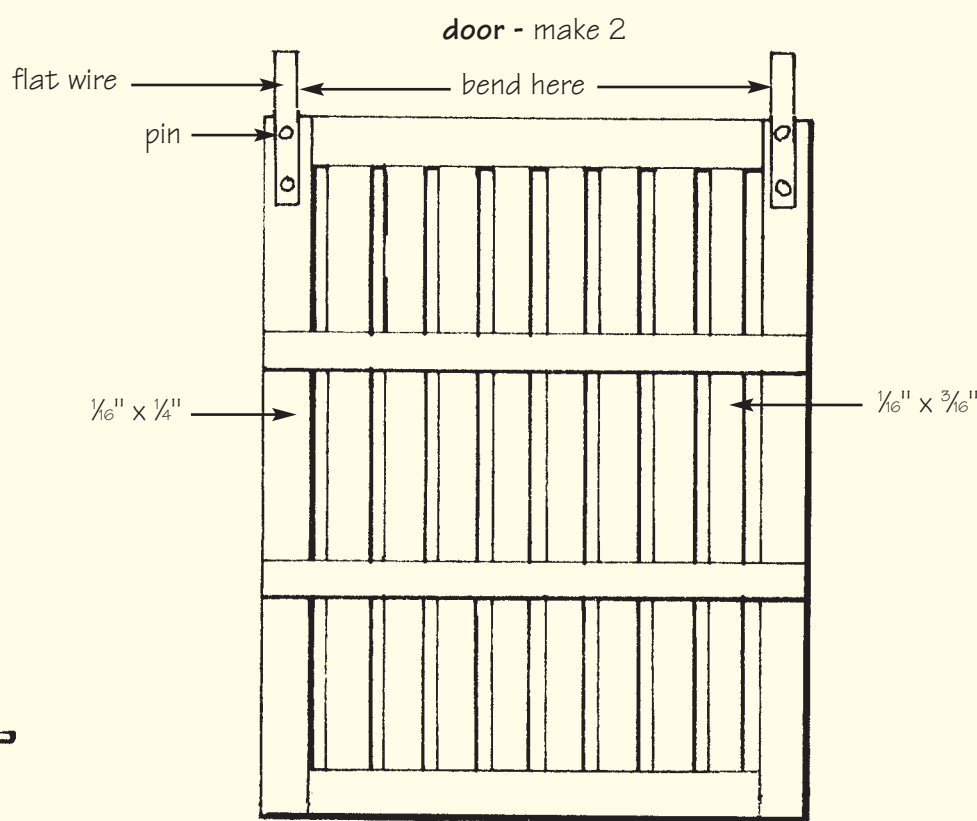


1:20.3 scale, short stock car

by Ted Stinson | Wiscasset, Maine



This is a generic, 1:20.3-scale, short, stock car. Many short lines and, in particular, narrow-gauge railroads with sharp curves, had a need for shorter cars like this one. It scales out to 22' in length and about 8' wide.

All details added from this point should be preprepared before gluing in place. To complete the car, make working doors. Dry-fit these in place, making sure that they slide freely. When satisfied, paint the doors and fix them in place permanently with the three Z-brackets at the bottom. Add lettering of your choice, then trucks and couplers, and you are finished.

Construction

Begin construction with the frame. Cut a piece of $\frac{1}{4}''$ ply, $3\frac{1}{4}'' \times 12\frac{1}{2}''$. Plank one side with $\frac{3}{16}'' \times \frac{1}{4}''$ stripwood. On the other side, add the stripwood framing as per the drawing. Drill holes for the truss rods, which are made from $\frac{1}{16}''$ -diameter rod. Finally, add the underbody details. The chain can be added later, after the car is more complete.

This sheet is a supplement to the February 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.

Now make the stock-car sides from stripwood. Use $\frac{1}{8}''$ plywood for the ends. Cut the roof beams from $\frac{1}{8}''$ stock (balsa will work nicely). Assemble the substructure according to the detail. This should just fit on the previously assembled frame.

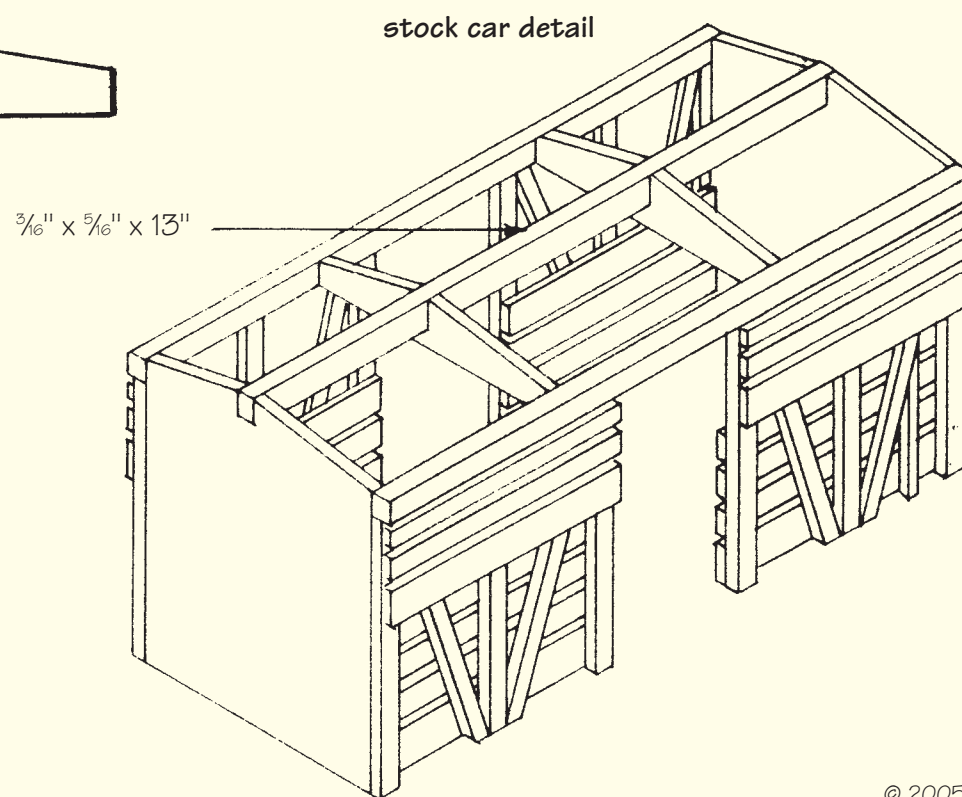
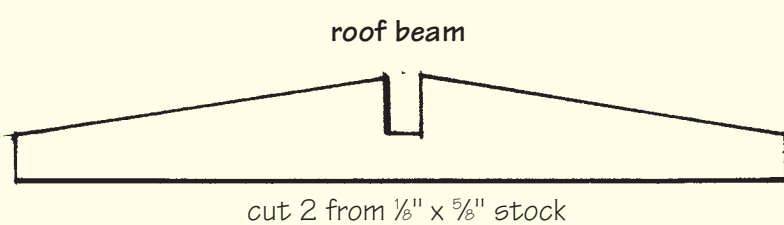
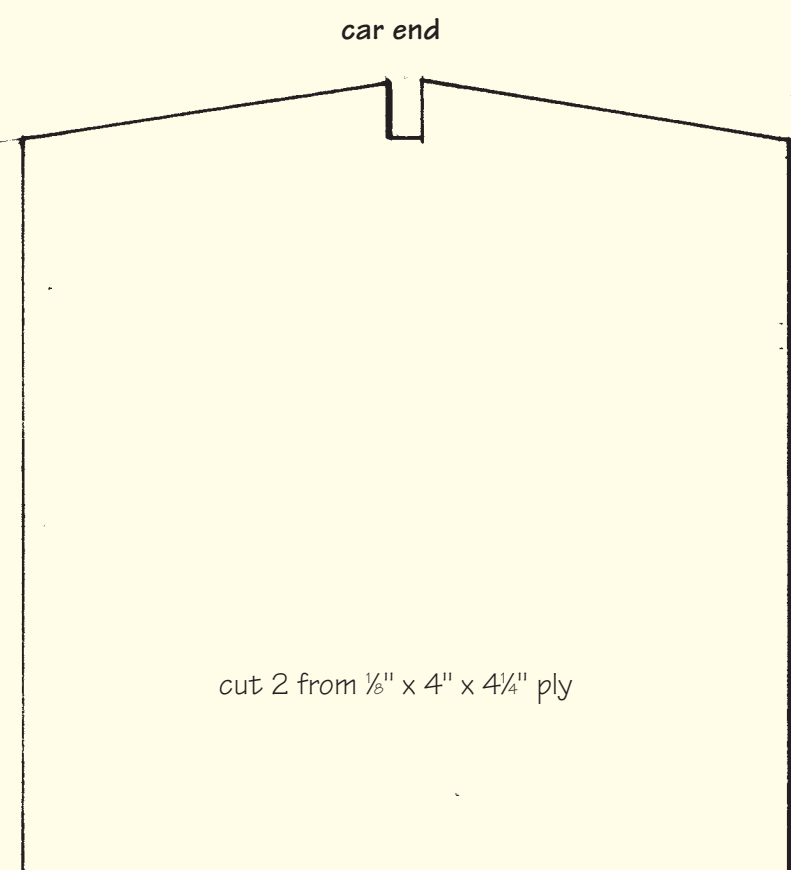
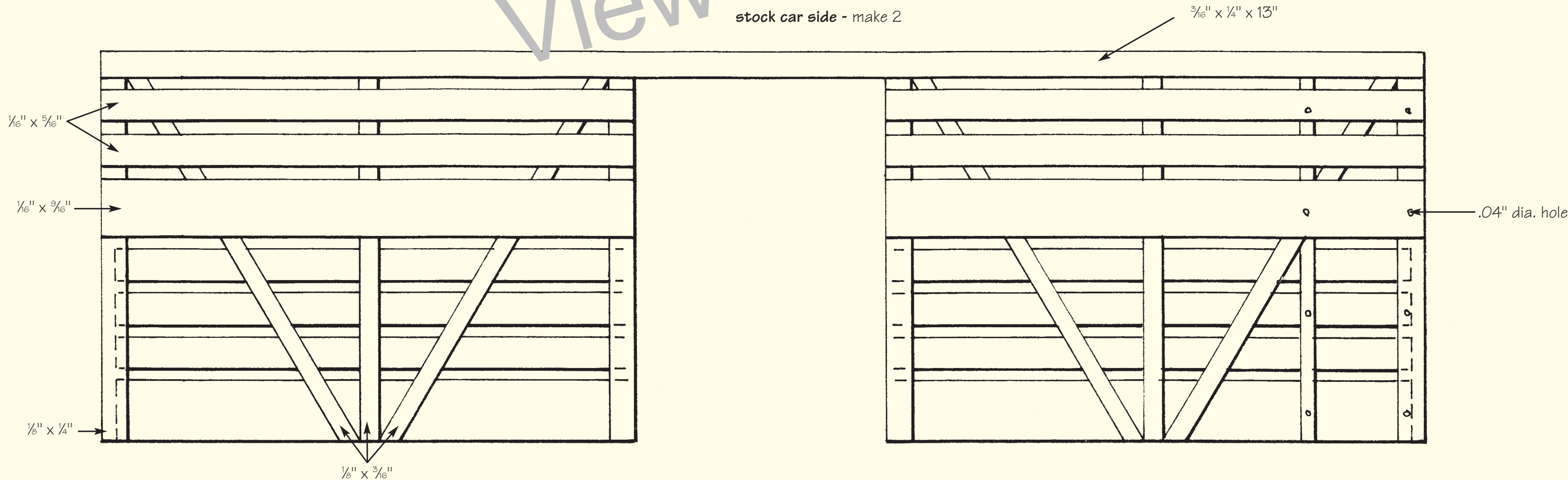
Northeast Narrow Gauge offers a kit for the stock car for \$60 + \$6 s&h. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578. Web site: www.nemodel.com

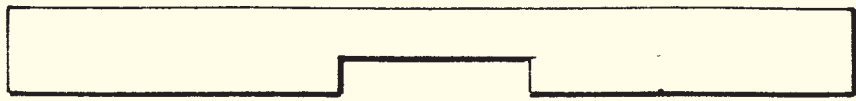
When the sides and ends are assembled to your satisfaction, surface the ends with stripwood and scribed wood as shown on the drawings. Begin by adding the $\frac{1}{16}''$ fascias to the ends. Now surface the ends with $\frac{1}{16}''$ -thick $\times \frac{3}{16}''$ -spaced scribed wood. Cut, fit, and glue the $\frac{1}{4}'' \times \frac{3}{16}''$ end beams in place. When done, drill .04"-diameter pilot holes and add the escutcheon pins.

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Add the roof using $\frac{1}{16}''$ sheet. Sand the roof smooth and add the $\frac{1}{8}''$ -square roof braces, followed by the roofwalk. Now add the cardstock "metal" plates. These should be sealed with thin CA cement before pinning and gluing in place.

At this point, seal the car body with clear lacquer, sanding it lightly after it dries. Stuff the car full of paper towels, enough to block the spray from reaching the interior of the car. Now, using Rustoleum, Krylon, or Ace house-brand spray red primer, apply two light coats of paint. Allow 48 hours to dry before handling. The bottom of the car can be brush painted flat black.



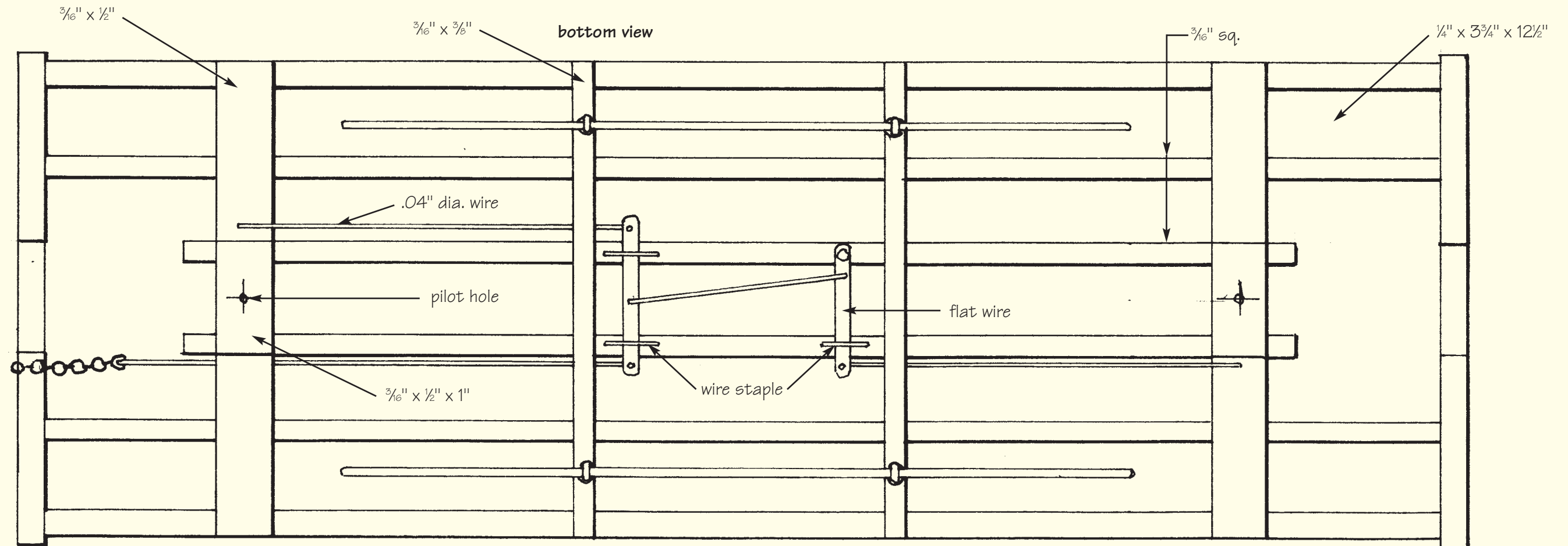
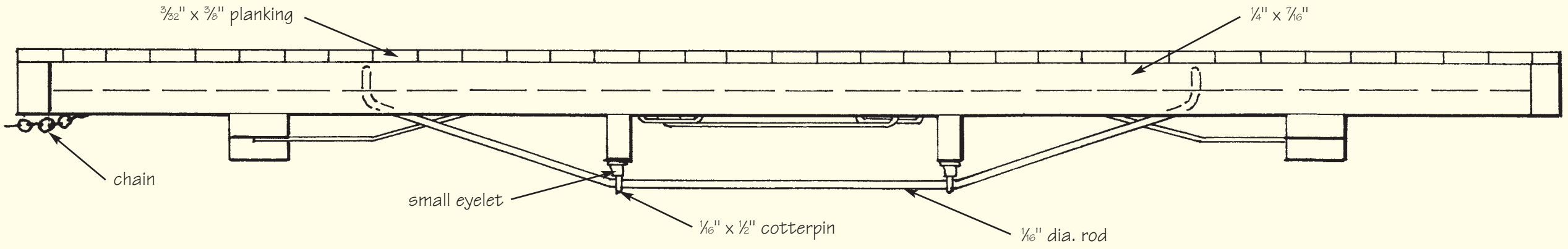


end beam
make from 1/4" x 7/16"

Are you working in a different scale?

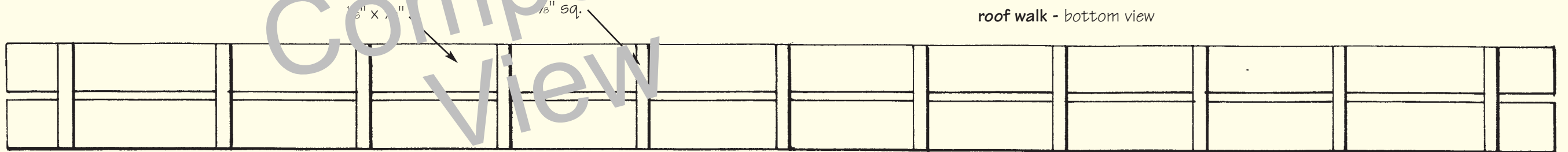
If you are working in 1:24 scale, reduce these drawings to 88%.
If you are working in 1:22.5 scale, reduce these drawings to 90%.
If you are working in 16mm scale, enlarge these drawings to 107%.
If you are working in 1:13.7 (1/72") scale, enlarge these drawings to 148%.

side view



Composite View

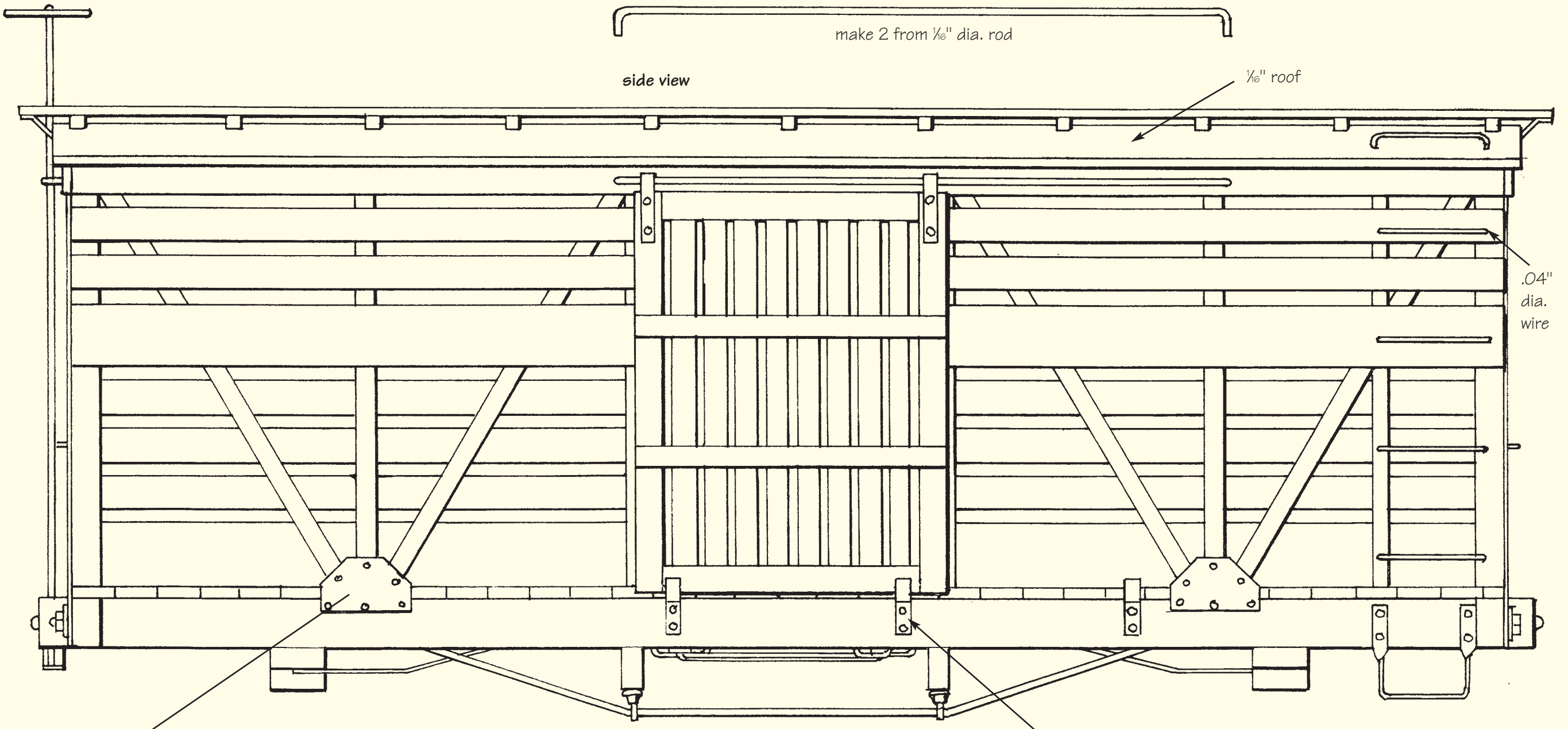
roof walk - bottom view



door slide

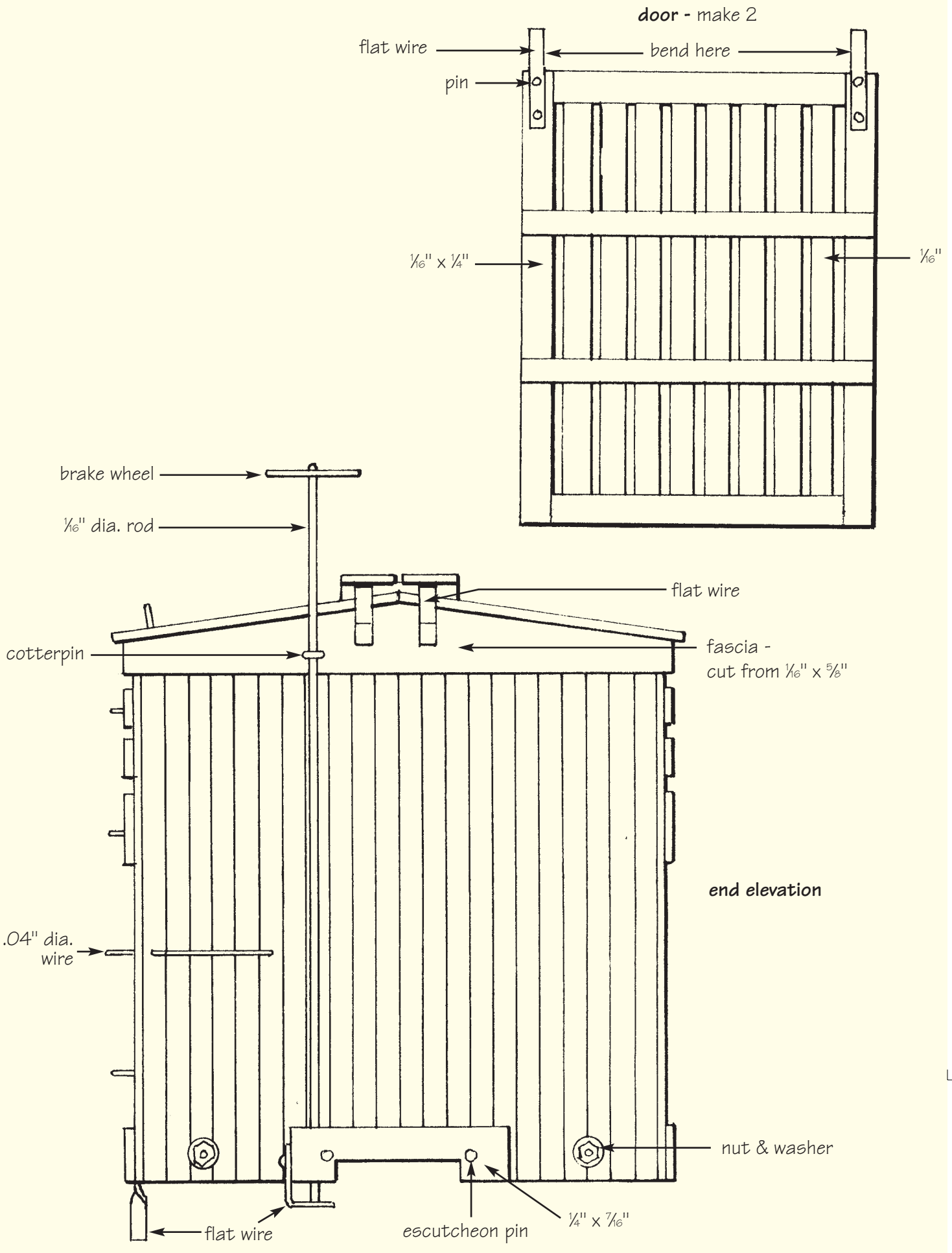
make 2 from 1/16" dia. rod

side view



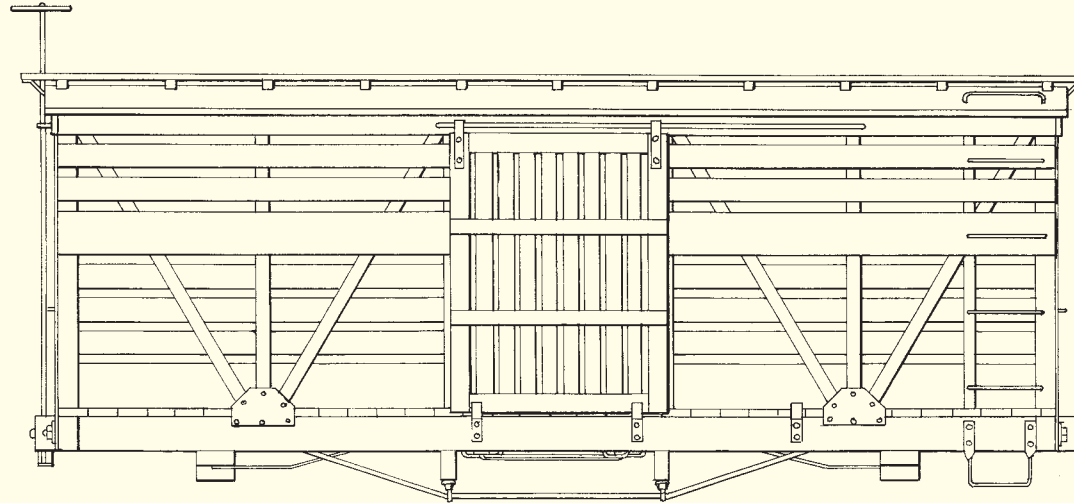
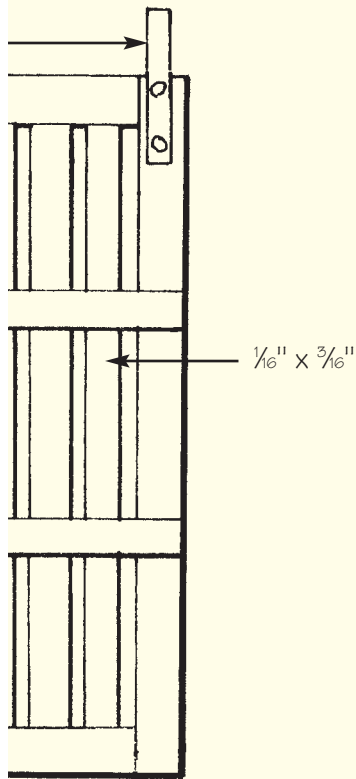
metal plate
make from cardstock
& pins

flat wire bracket



1:20.3 scale, short stock car

by Ted Stinson | Wiscasset, Maine



This is a generic, 1:20.3-scale, short, stock car. Many short lines and, in particular, narrow-gauge railroads with sharp curves, had a need for shorter cars like this one. It scales out to 22' in length and about 8' wide.

Construction

Begin construction with the frame. Cut a piece of 1/4" ply, 3 3/4" x 12 1/2". Plank one side with 3/32" x 3/8" stripwood. On the other side, add the stripwood framing as per the drawing. Drill holes for the truss rods, which are made from 1/16"-diameter rod. Finally, add the underbody details. The chain can be added later, after the car is more complete.

Now make the stock-car sides from stripwood. Use 1/8" plywood for the ends. Cut the roof beams from 1/8" stock (balsa will work nicely). Assemble the substructure according to the detail. This should just fit on the previously assembled frame.

When the sides and ends are assembled to your satisfaction, surface the ends with stripwood and scribed wood as shown on the drawings. Begin by adding the 1/16" fascias to the ends. Now surface the ends with 1/32"-thick x 1/16"-spaced scribed wood. Cut, fit, and glue the 1/4" x 7/16" end beams in place. When done, drill .04"-diameter pilot holes and add the escutcheon pins.

Add the roof using 1/16" sheet. Sand the roof smooth and add the 1/8"-square roof braces, followed by the roofwalk. Now add the cardstock "metal" plates. These should be sealed with thin CA cement before pinning and gluing in place.

At this point, seal the car body with clear lacquer, sanding it lightly after it dries. Stuff the car full of paper towels, enough to block the spray from reaching the interior of the car. Now, using Rustoleum, Krylon, or Ace house-brand spray red primer, apply two light coats of paint. Allow 48 hours to dry before handling. The bottom of the car can be brush painted flat black.

All details added from this point should be pinned and glued in place. To complete the car, make work these in place, making sure that they slide freely. Then, paint the doors and fix them in place with three Z-brackets at the bottom. Add lettering of trucks and couplers, and you are finished.

This sheet is a supplement to the February 2005 issue of *Garden Railways* magazine. While supplies last, these drawings can be had by sending \$1.50 (postage and handling) to: Sidestreet Bannerworks, PO Box 460 80246 USA. A complete list of available plans is available at www.sidestreet.info, or send a stamped, self-addressed envelope to the above address.

Northeast Narrow Gauge offers a kit for the car for \$6.95 plus shipping and handling. Order from Northeast Narrow Gauge, Wiscasset ME 04578. Web site: www.nemodell.com

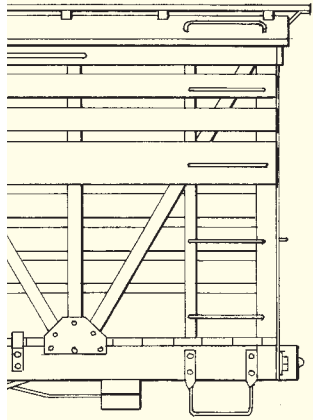
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1/16" x 5/8"

evation

& washer

Plan set #69



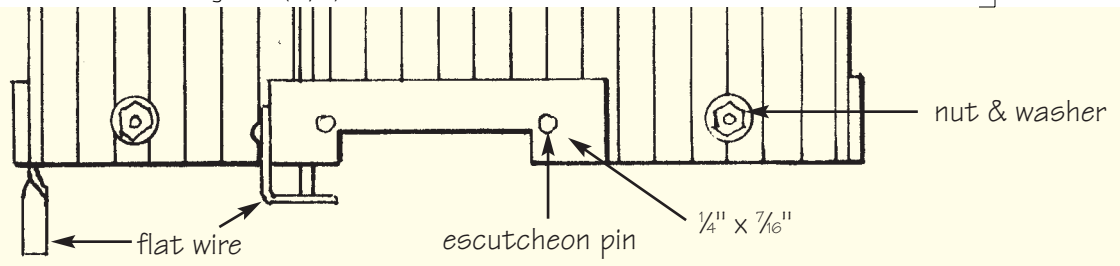
l from this point should be prepainted before
complete the car, make working doors. Dry-fit
king sure that they slide freely. When satis-
s and fix them in place permanently with the
he bottom. Add lettering of your choice, then
s, and you are finished.

* * *

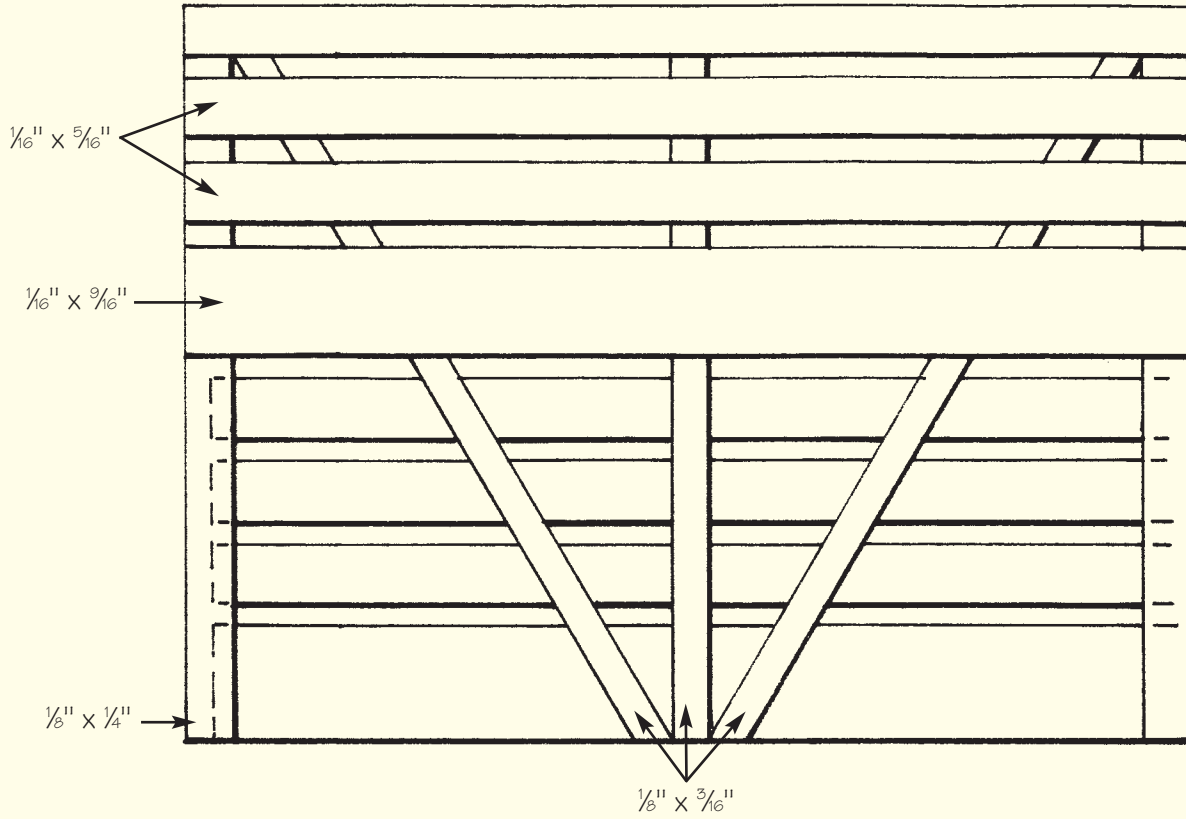
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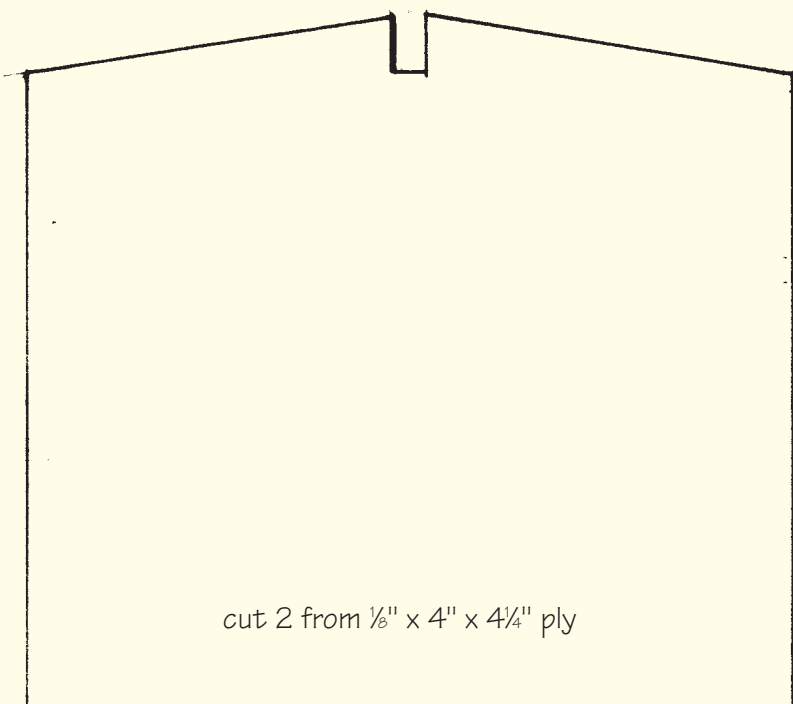
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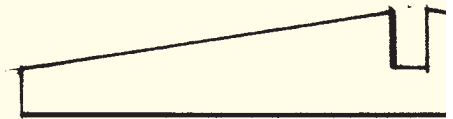
stock



car end



roof bea



cut 2 from $\frac{1}{8}'' \times$

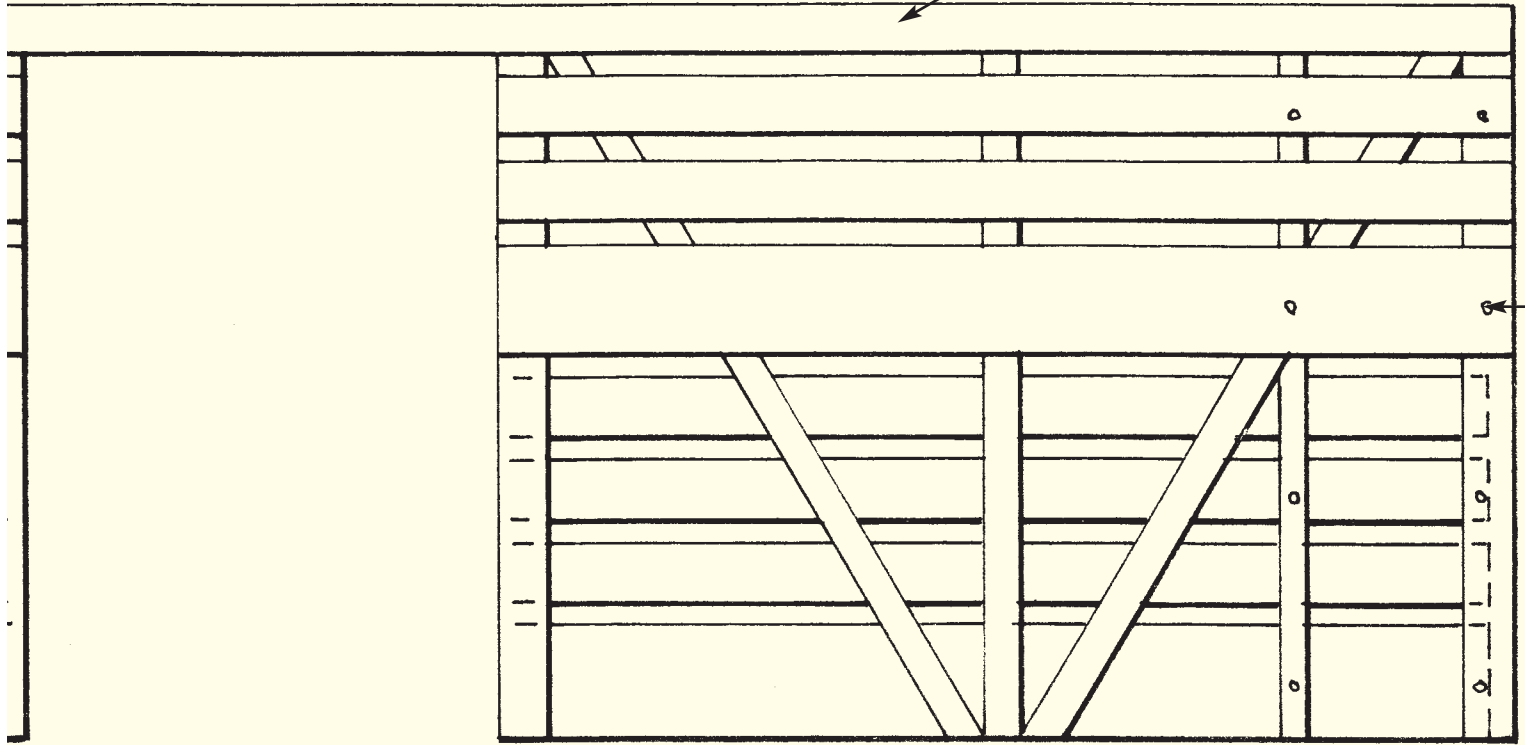
cement before pinning and gluing in place.

At this point, seal the car body with clear lacquer, sanding it lightly after it dries. Stuff the car full of paper towels, enough to block the spray from reaching the interior of the car. Now, using Rustoleum, Krylon, or Ace house-brand spray red primer, apply two light coats of paint. Allow 48 hours to dry before handling. The bottom of the car can be brush painted flat black.

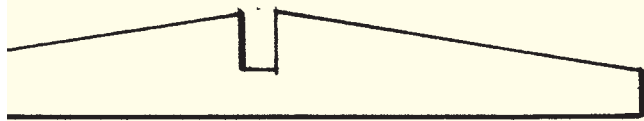
& washer

stock car side - make 2

$\frac{3}{16}$ " x $\frac{1}{4}$ " x 13"



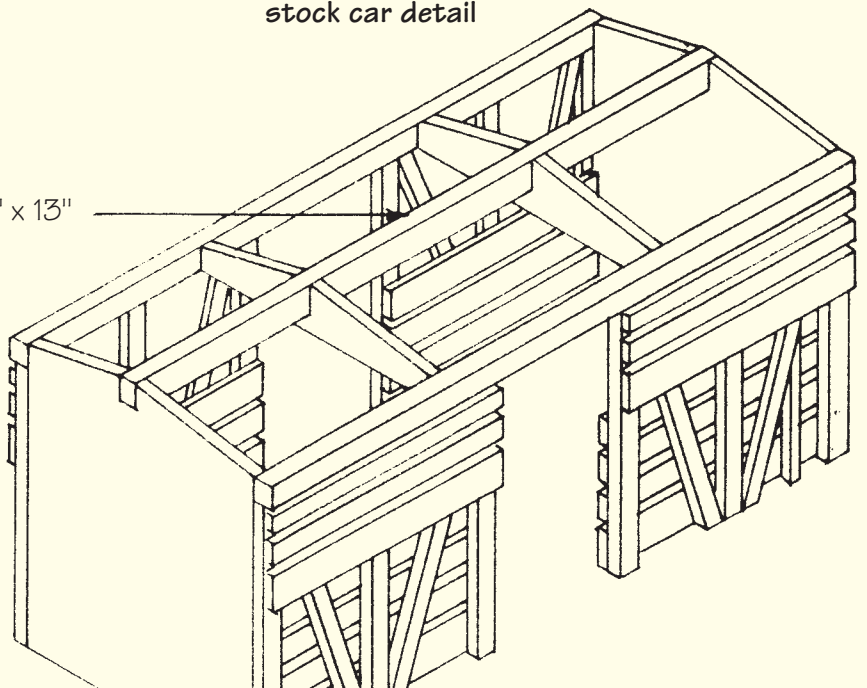
roof beam

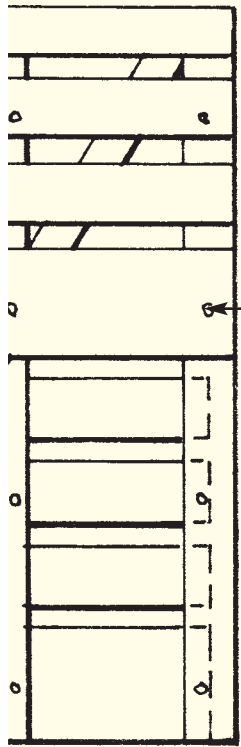


cut 2 from $\frac{1}{8}$ " x $\frac{5}{8}$ " stock

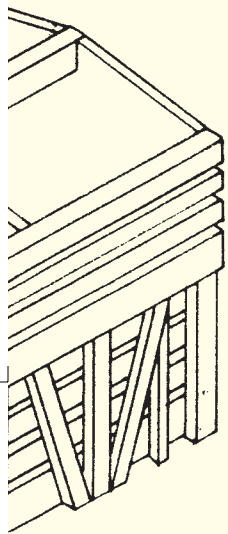
stock car detail

$\frac{3}{16}$ " x $\frac{5}{16}$ " x 13"

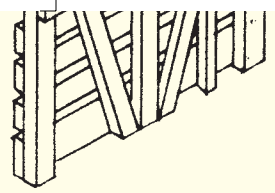
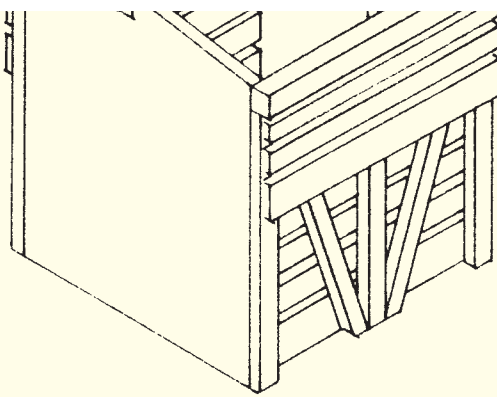




.04" dia. hole

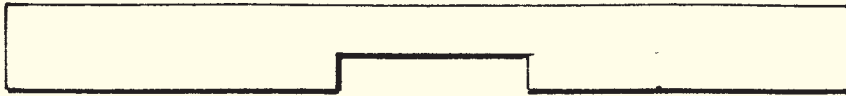


cut 2 from $\frac{1}{8}$ " x 4" x $4\frac{1}{4}$ " ply



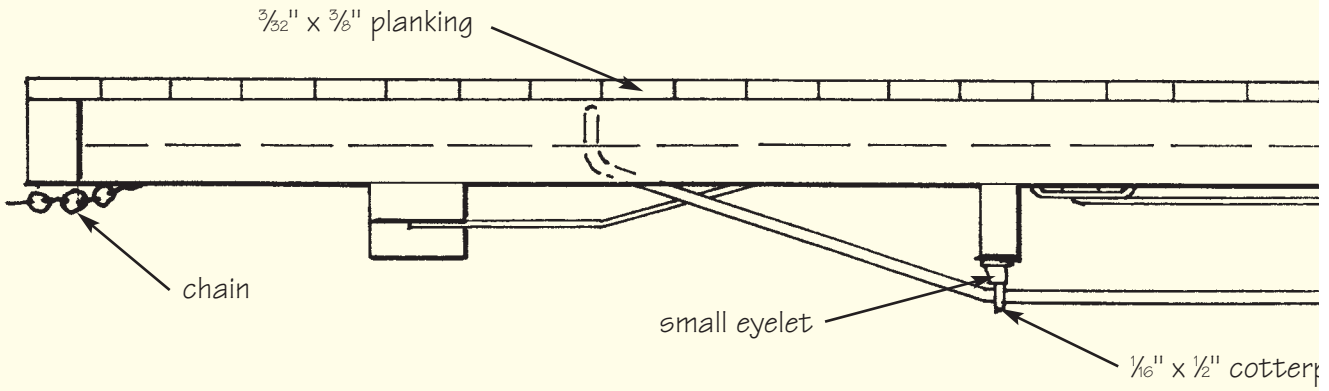


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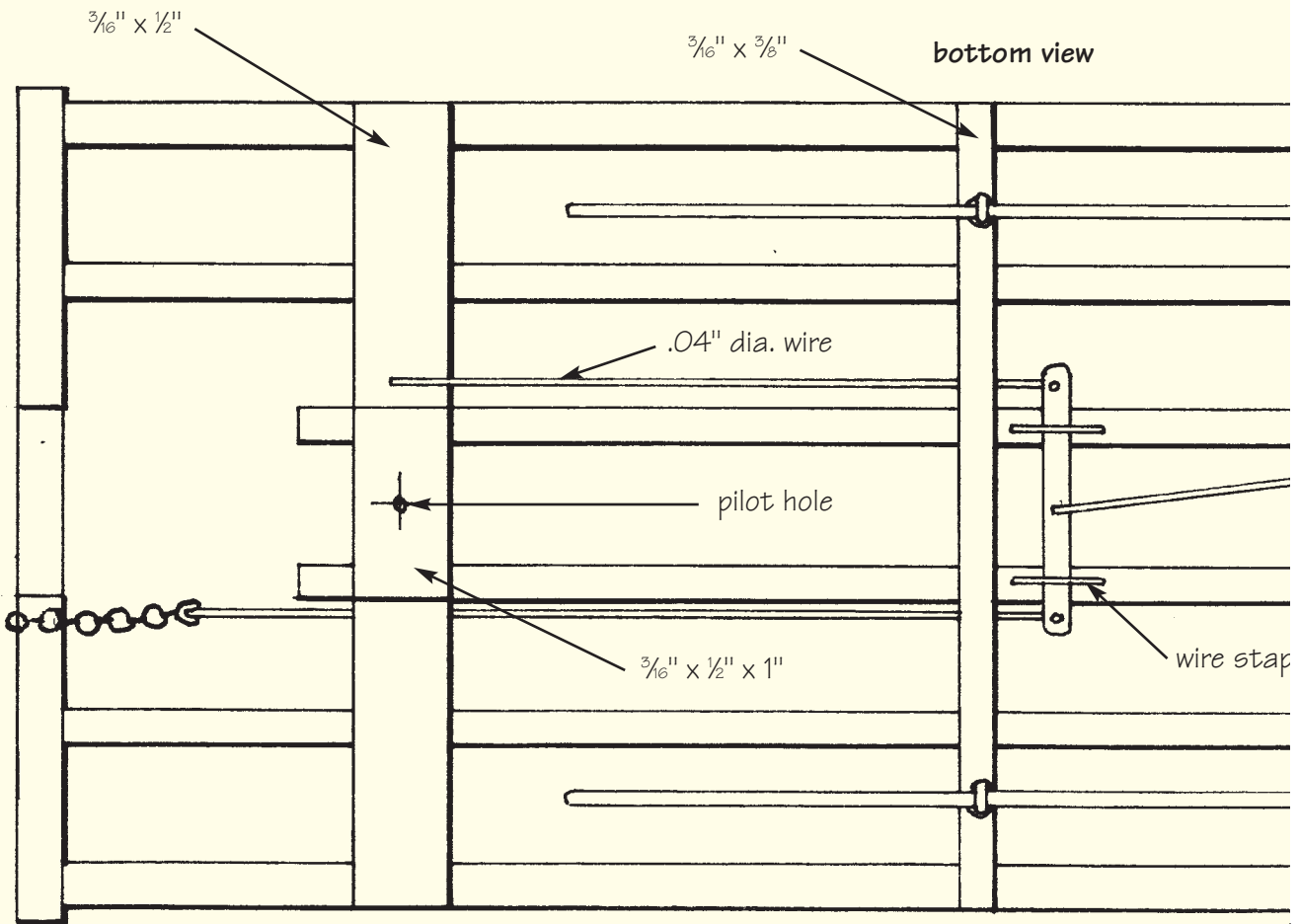


end beam
make from $\frac{1}{4}$ " x $\frac{7}{16}$ "

side view



bottom view



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

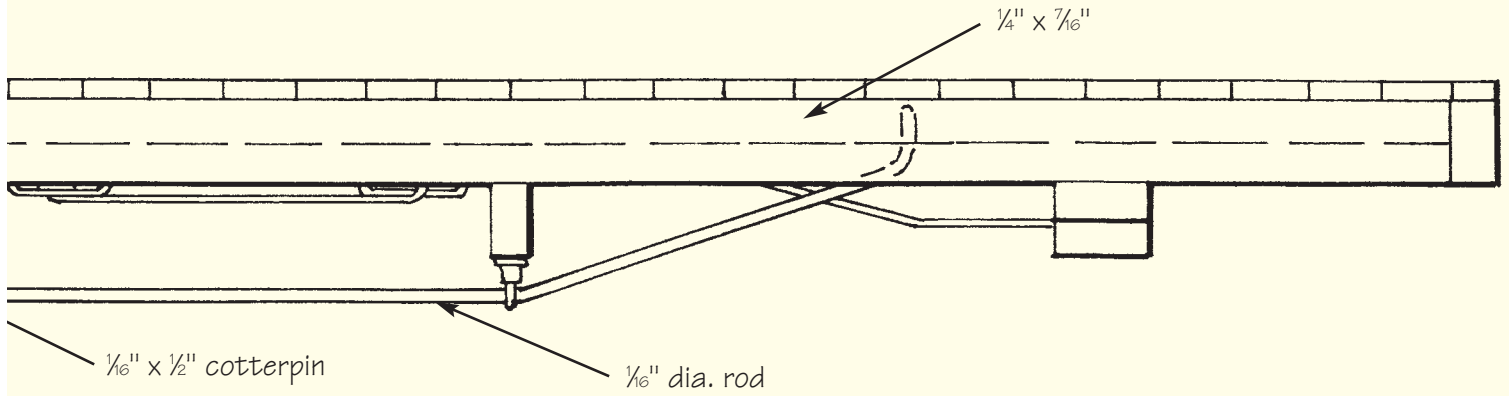
$\frac{1}{8}$ " sq.



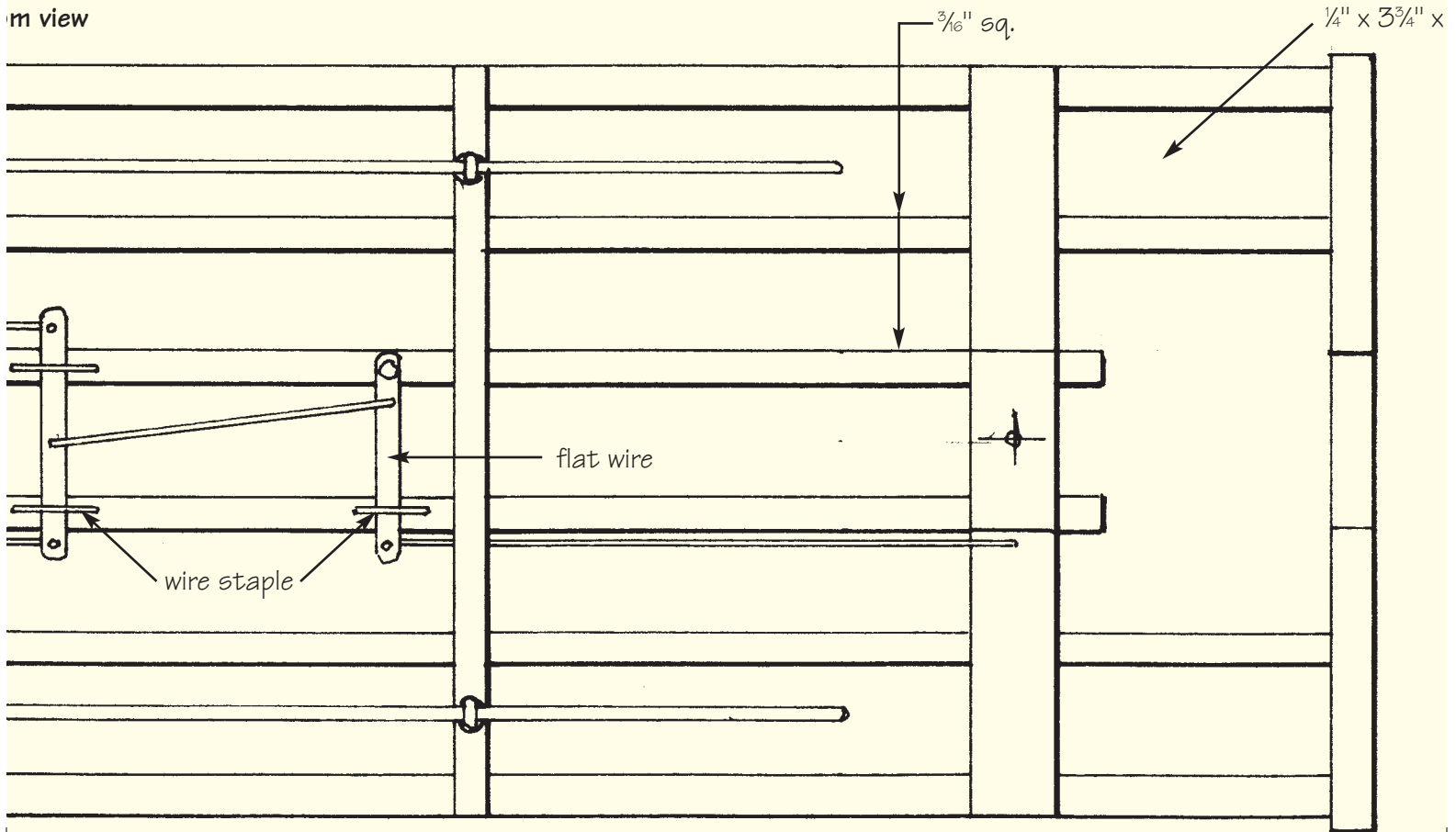
Are you working in a different scale?

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 (1/8") scale**, enlarge these drawings to 107%.

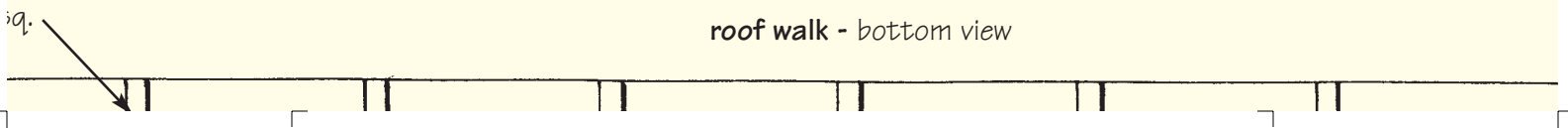
side view



m view



roof walk - bottom view

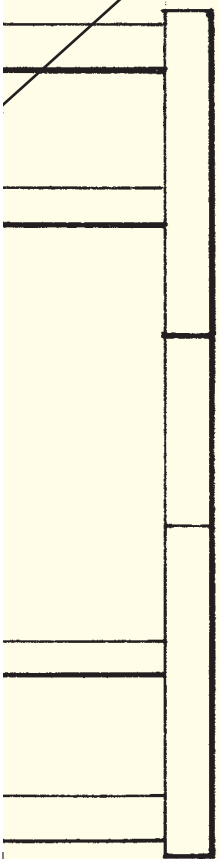


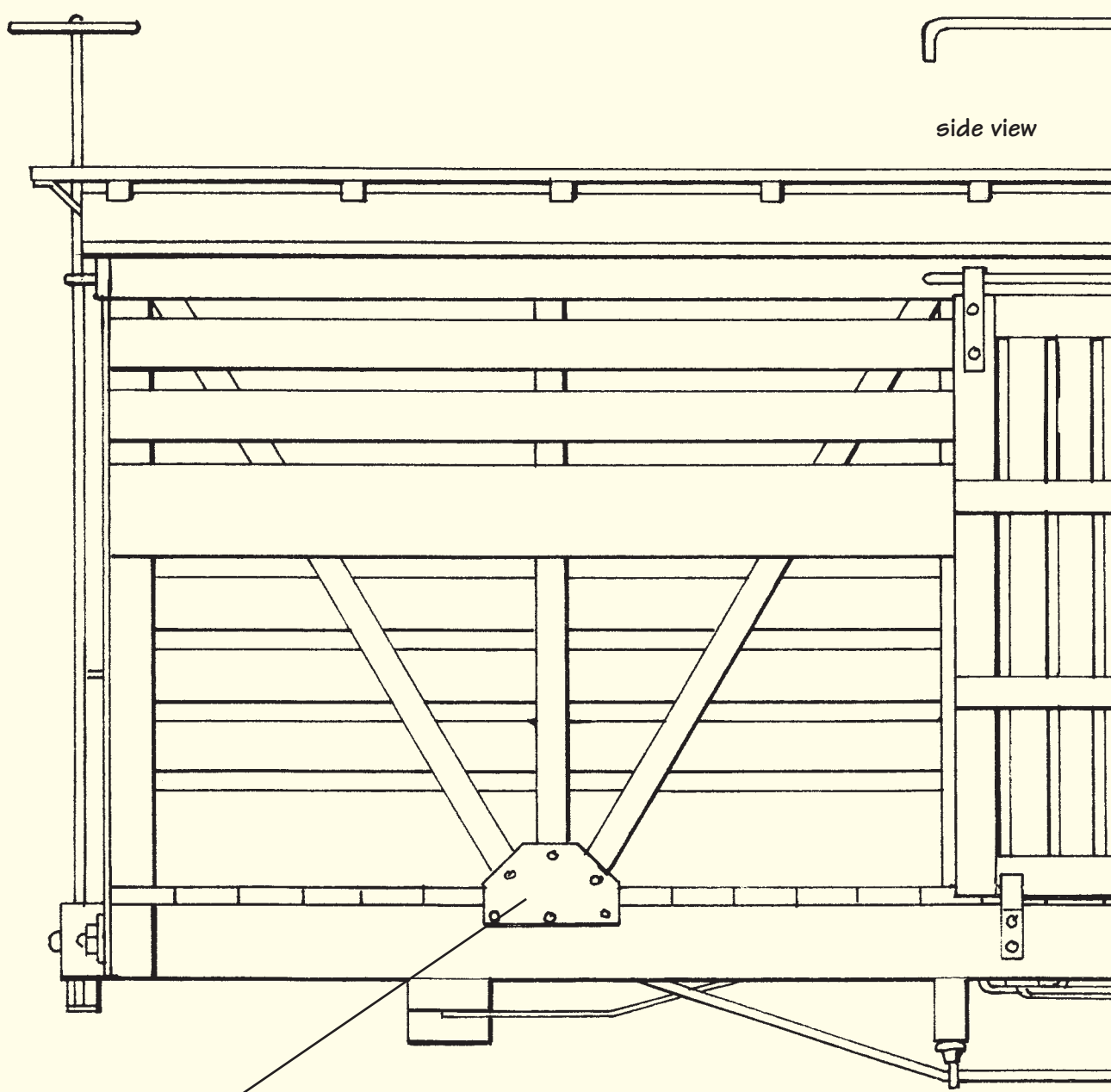
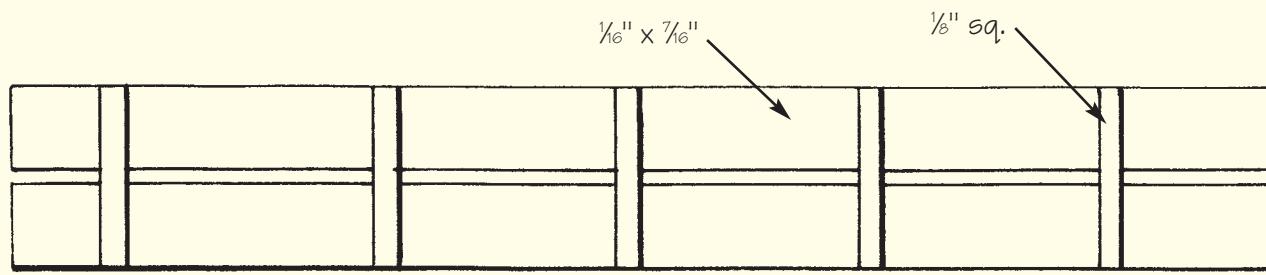
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- Reduce these drawings to 90%.
- Enlarge these drawings to 107%.
- Enlarge these drawings to 148%.

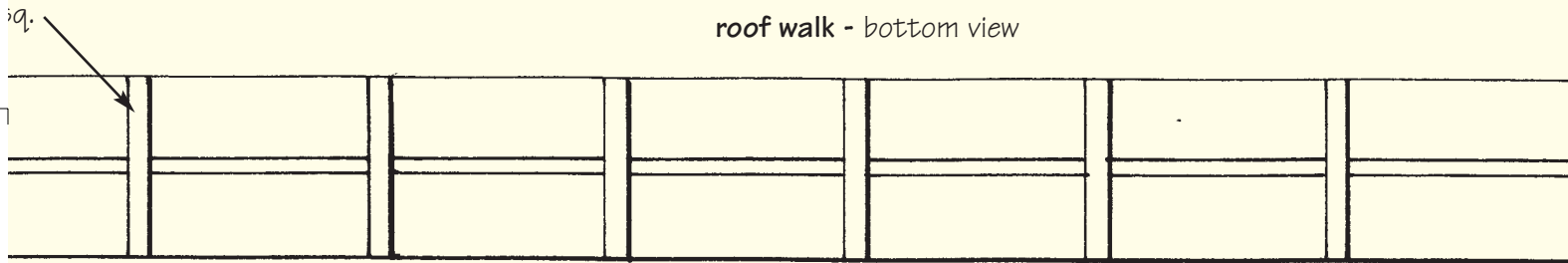


$\frac{1}{4}'' \times 3\frac{3}{4}'' \times 12\frac{1}{2}''$

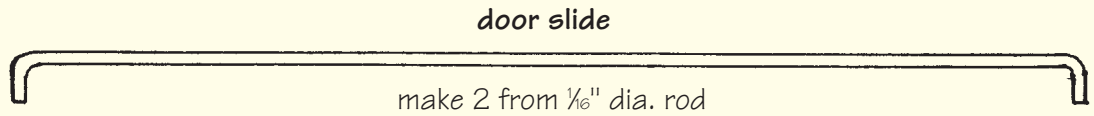




metal plate
make from cardstock
& pins

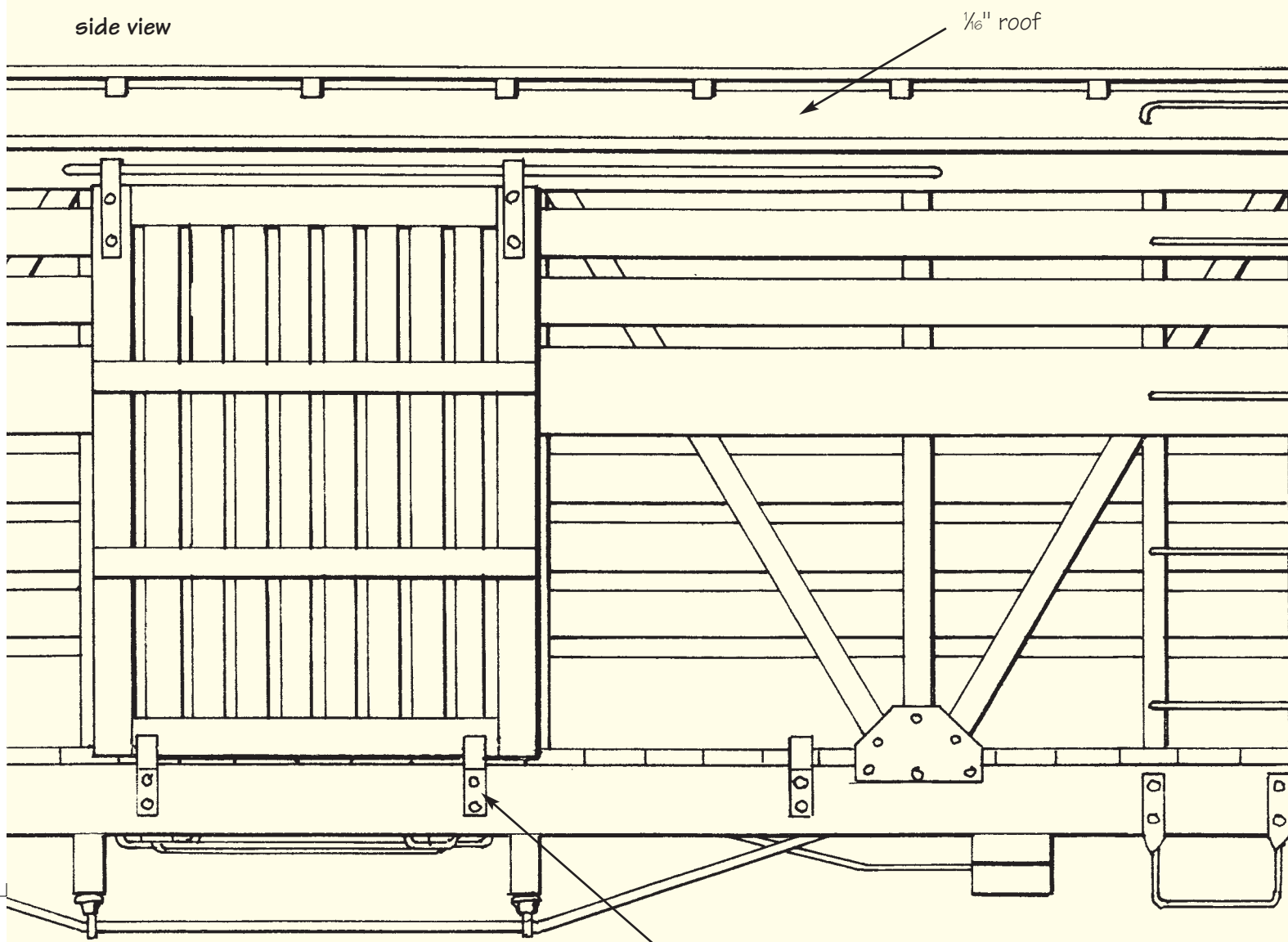


roof walk - bottom view



door slide

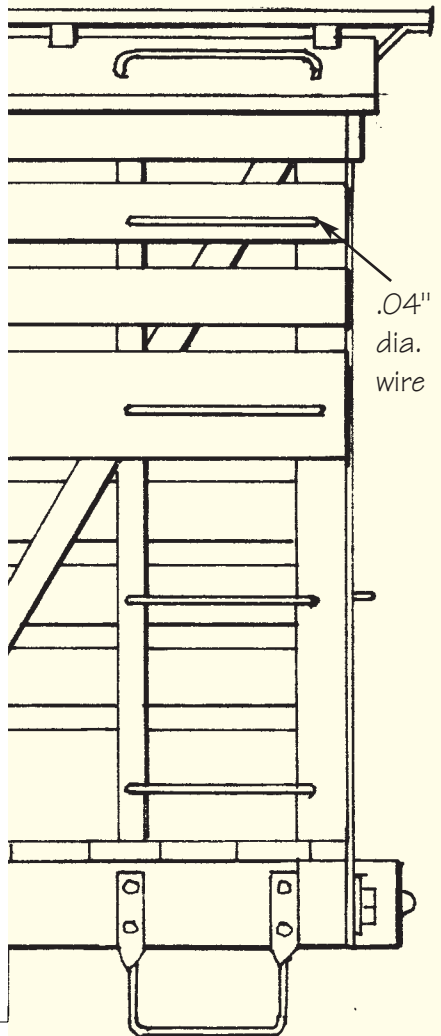
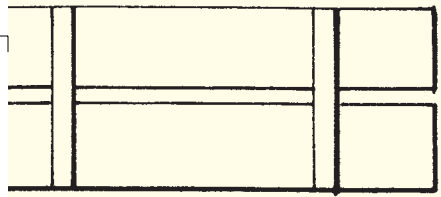
make 2 from 1/8" dia. rod



side view

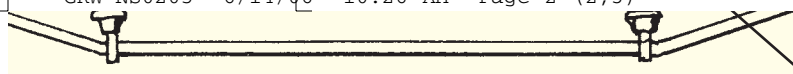
1/8" roof

flat wire bracket



metal plate
make from cardstock
& pins





flat wire bracket

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