Build a 1:20.3-scale dock for a lobster boat

Plan set #77-C

by Ted Stinson | Wiscasset, Maine

NOTE This will be the last pull-out plan set to appear in the print version of *Garden Railways* magazine. We will continue to publish the plans, but they will be available online only. You can find them at our web site: *www.gardenrailways.com.* While supplies last, previously published paper plans will continue to be available from Sidestreet Bannerworks.

Lobstering became a profitable industry in the 20th century and whole docks were built to handle the trade. Virtually every harbor in Maine has at least one dock that services the boats of the lobstering industry.

The dock presented here is based on the town dock in Wiscasset Harbor. I have made it a bit smaller than the prototype to better fit the typical garden railway. Here in Maine there is a 10-foot tide, so a float is required for the boats to tie up to. This, in turn, requires a ramp that leads from the float to the fixed dock. In the corner of the dock nearest the float is a crane, used to load and unload the boats. Though the dock in Wiscasset does not have a building on it, most docks used by lobstermen have some sort of structure. This may serve a number of purposes, including an outdoor eatery (featuring lobster, shrimp, clams, etc.), a retail fish market, or a wholesale fish and lobster dealer, just to name a few.

Constructing the dock

Refer to the plan. The drawing shows a side and front view. First, stain any wood to be used in the construction with a driftwood-colored stain. The dock shown is to be placed on a concrete paver set about 1" under the surface of the water. That way, the dock can be easily built to fit on a flat surface and it is removable.

Begin by cutting the ¾"-square girders. Drill ½"-diameter holes in the girders to accept the ½"-diameter piers (pilings). Glue the piers in place. Cut, fit, and glue the 3/16" x 5/16" diagonals in place on each set of girders. When the glue has set, drill pilot holes for the #18 x ½" escutcheon pins. Fit and glue the pins in place.

Now cut several 5/16" x ¾" joists. Set a pair of these on a flat surface and glue the girder/pier assemblies in place (upside down), with the joists located at the ends of each girder. With the end joists glued in place, you can add the intermediate joists.

By this time the whole things should be quite strong, so cut, fit, and glue in place, on each girder, the diagonals that run between the piers. When the glue has set, add the escutcheon pins. Turn the dock right side up and plank the deck with 3/16" x ¾" strips. Finally, add the 5/16" x 5/8" rail along the front and sides of the dock.

The float and ramp

I would want the float and the lobster boat to sit on a concrete paver located just below the water's surface. You can build the float around a 1"-thick block of foam or wood. The ramp can be built around a 3/8"-thick piece of wood, 1 7/16 " x 6 7/16" long. The dock should have a crane for unloading. Make one according to the drawing. It should be painted black and be glued in place.

The last detail is the building. I have shown the substructure for a typical building. Surface details, such as windows, doors, siding, and roofing are up to you. A restaurant would get top-of-the-line materials, while a wholesale fish dealer might settle for rough-sawn lumber siding and a tar-paper roof.

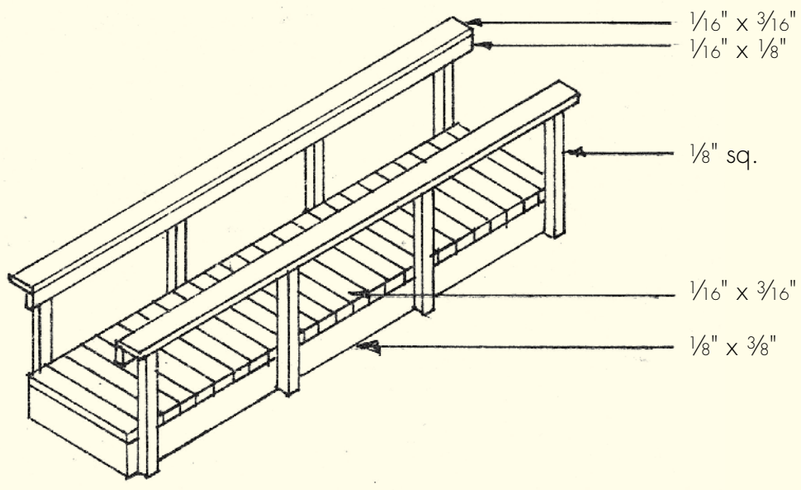
Add whatever details you wish—a stock of old traps, barrels of bait, picnic tables, trash barrels (made from 55-gallon drums), and, of course, some lobstermen. It is not the sort of model I'd want to leave out in the weather, so make it moveable. You're done.

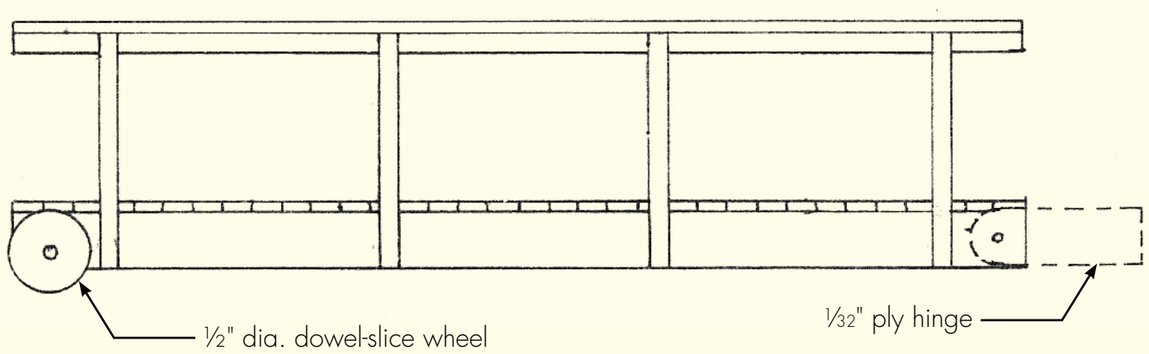
* * *

This sheet is a supplement to the October 2006 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.

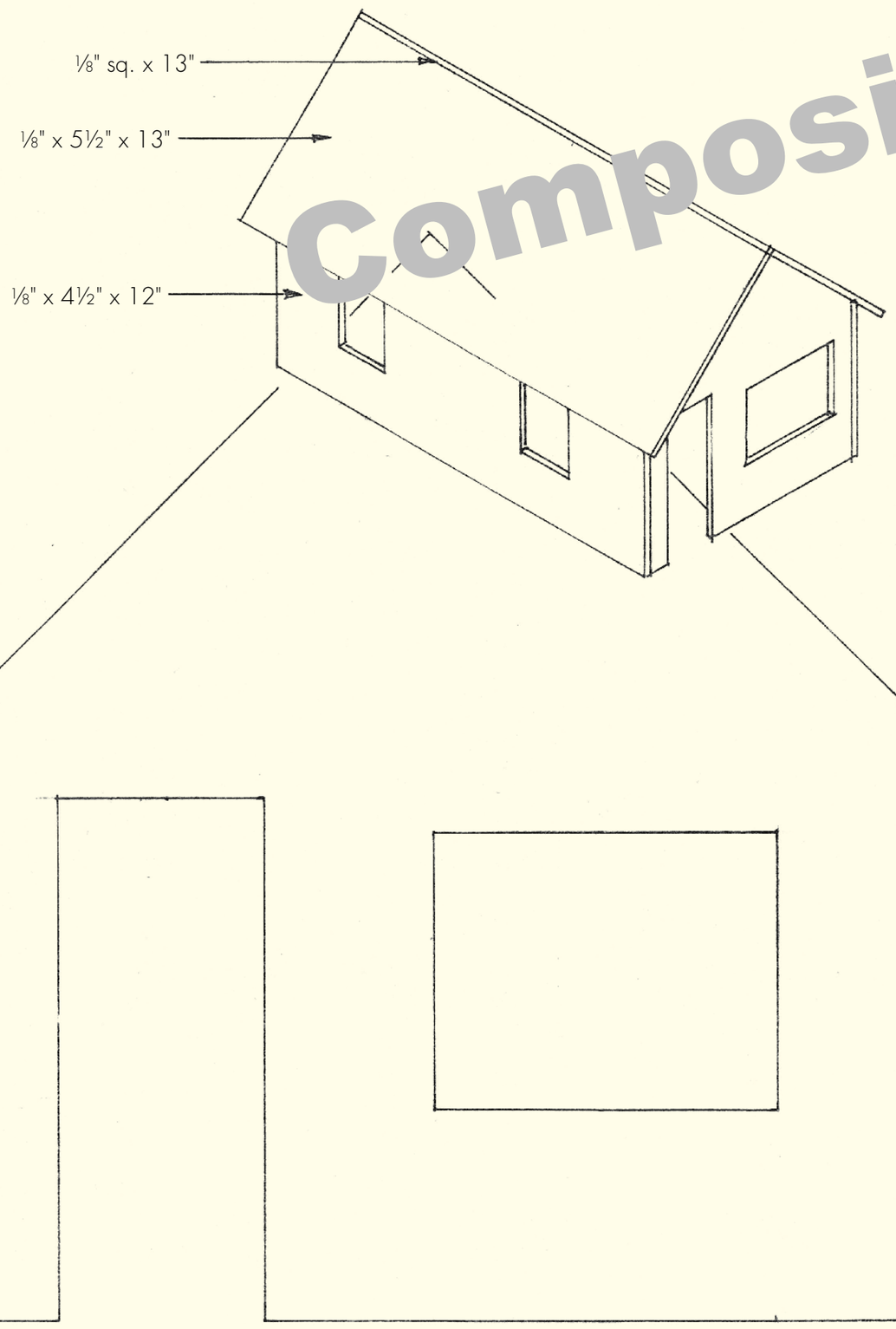
Please note: Since this project can mostly be done with a table saw, no kit is being offered. If you'd like to contact Northeast Narrow Gauge, the company's address is PO Box 191, Wiscasset ME 04578. Web site: *www.nemodel.com*

Ramp Construction Detail



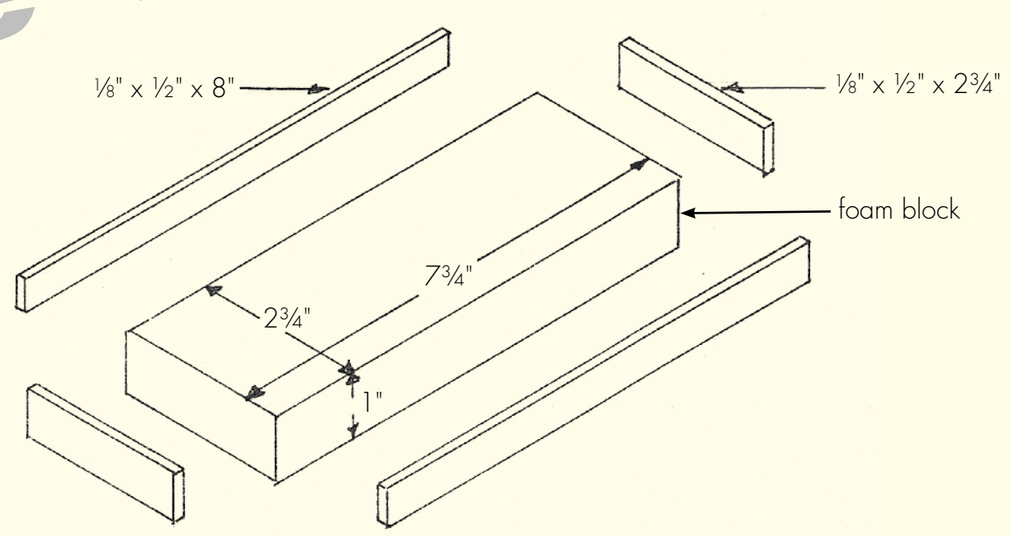


Building Substucture Detail

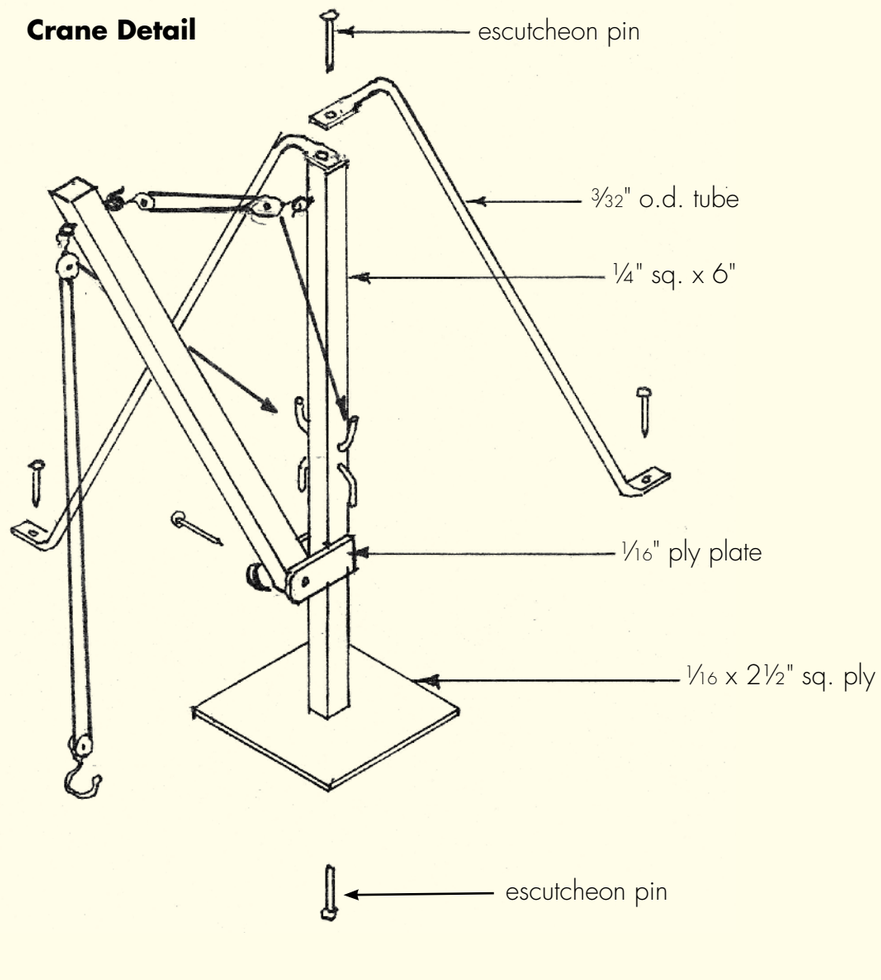


end plate
drawn full size

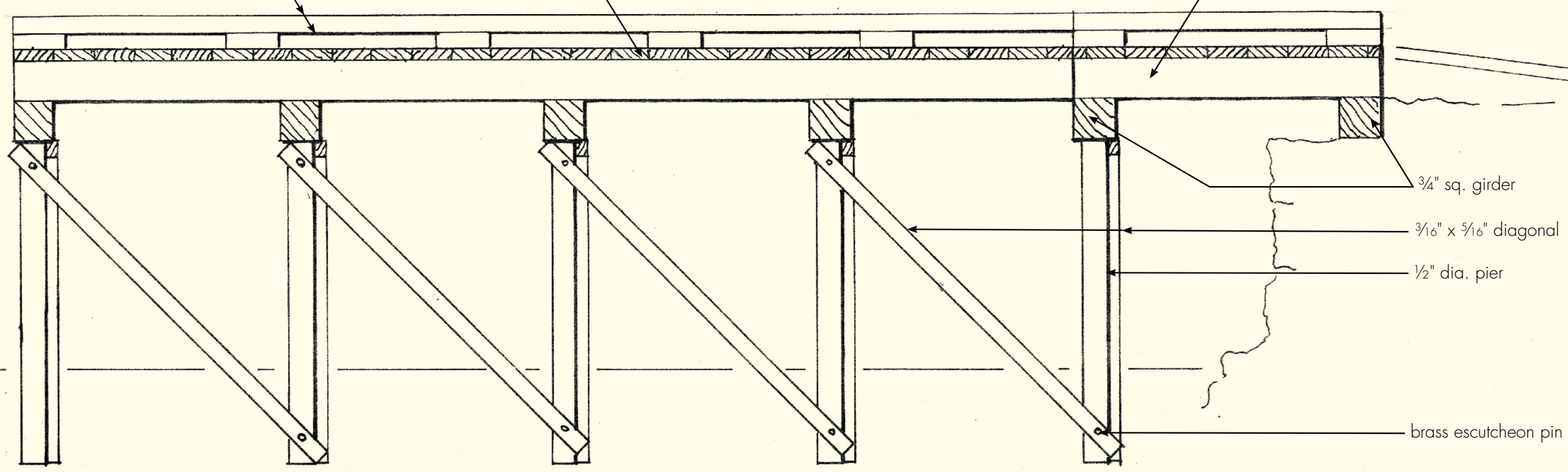
Construction Detail

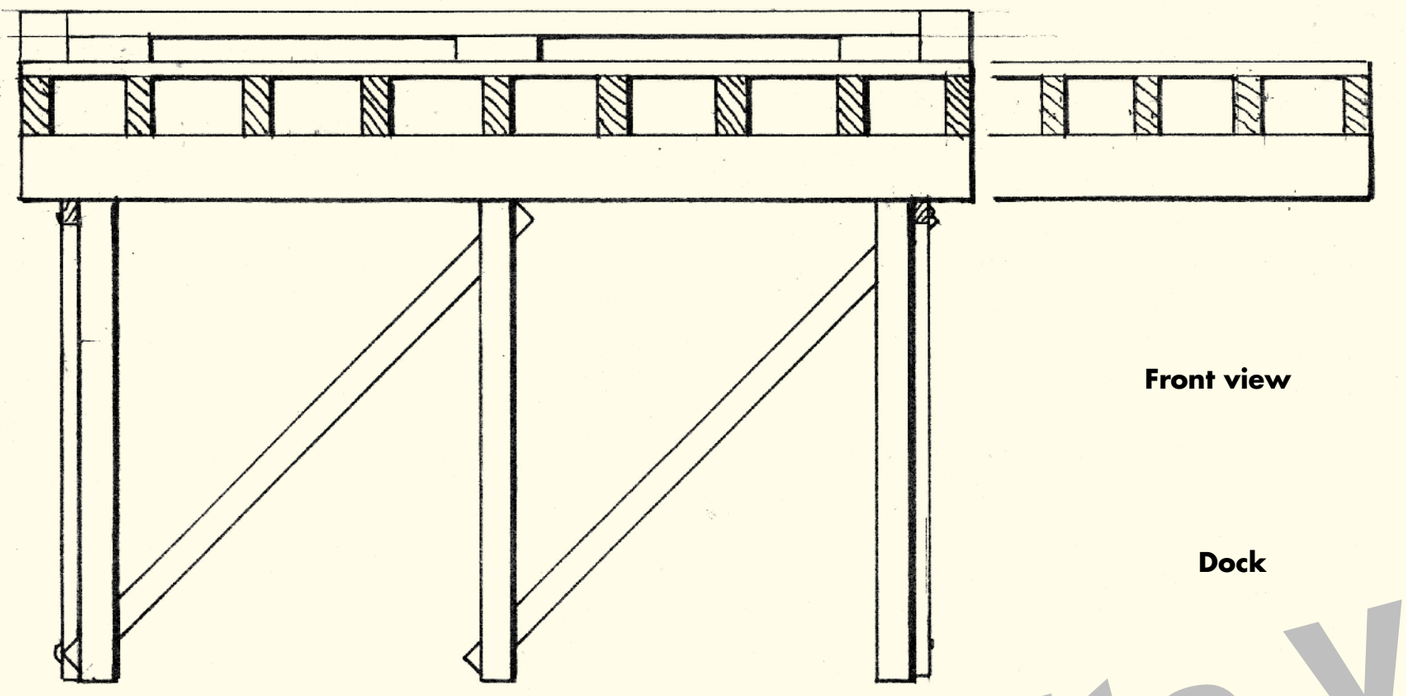


Crane Detail



Side view
Drawing at 50% of full size





Front view

Dock

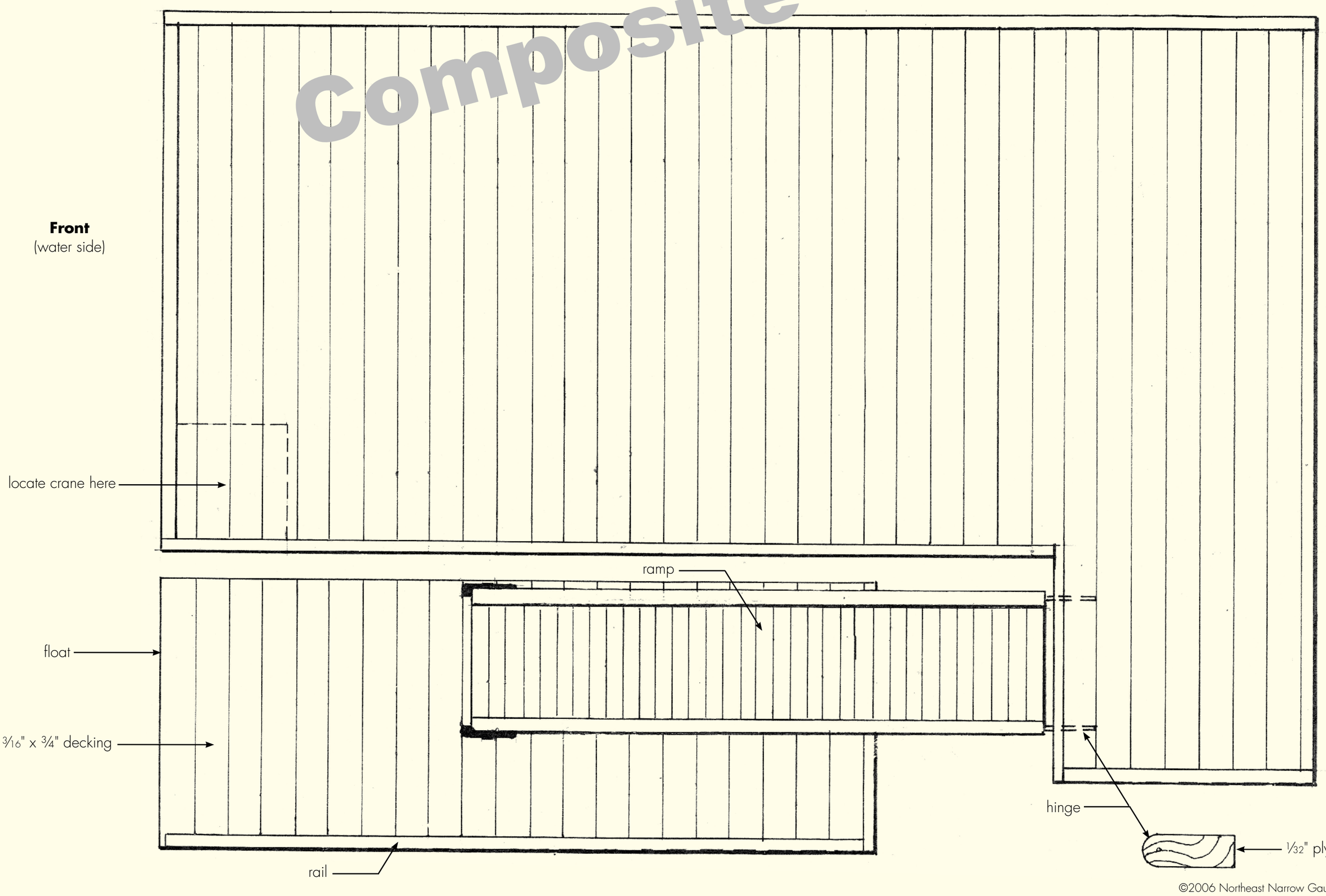
Are you working in a different scale?

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%.

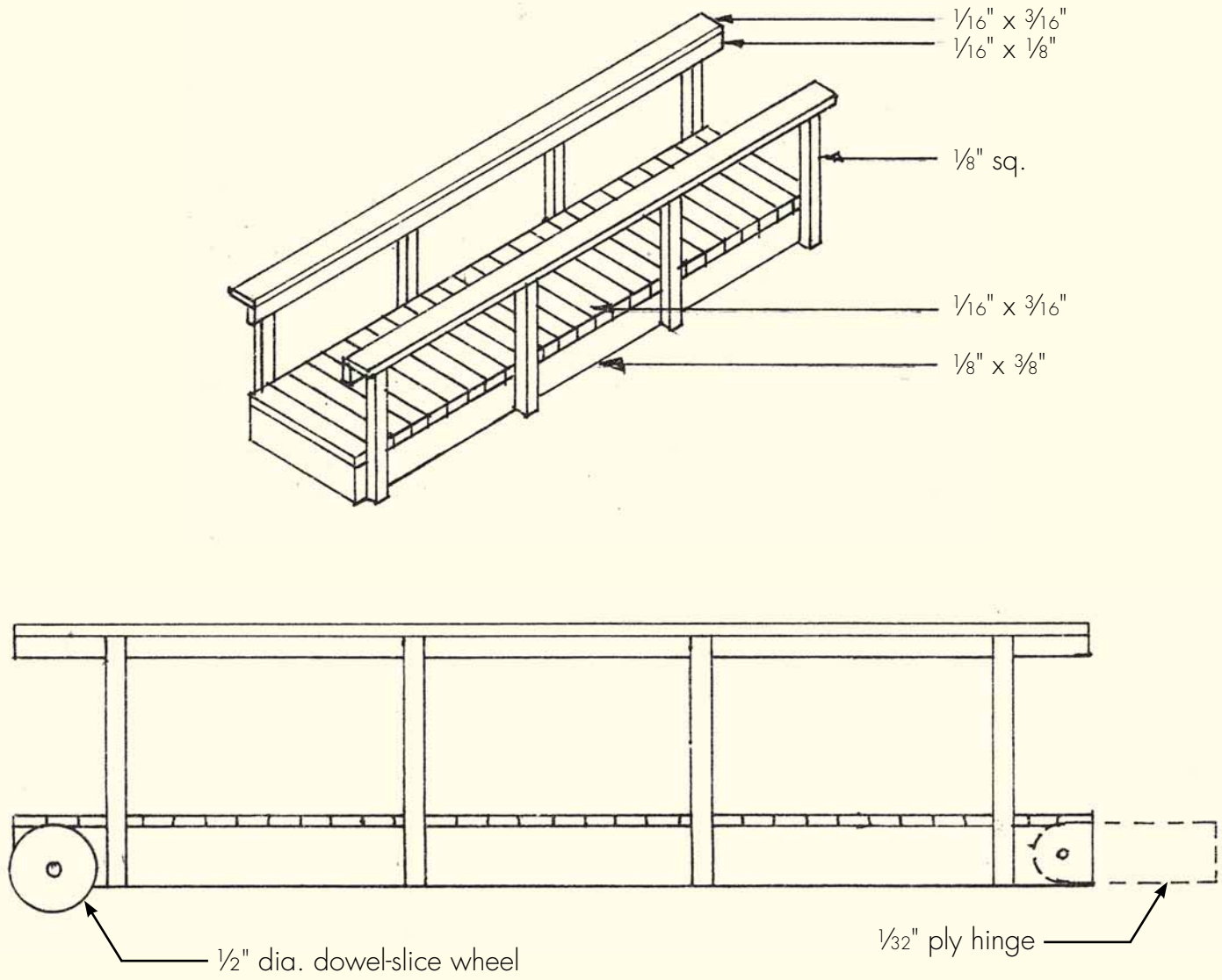
Composite View

Front
(water side)

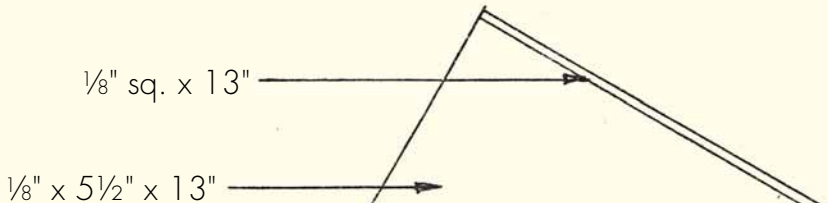
op view
Drawing at 50% of full size



Ramp Construction Detail



Building Substucture Detail



Build a 1:20.3-scale dock for a lobster boat

NOTE This will be the last pull-out plan set to appear in the print ver
Railways magazine. We will continue to publish the plans, but
able online only. You can find them at our web site: *www.gardenrailways.com*
last, previously published paper plans will continue to be available from Sides

by Ted Stinson | Wiscasset, Maine

Lobstering became a profitable industry in the 20th century and whole docks were built to handle the trade. Vir
bor in Maine has at least one dock that services the boats of the lobstering industry.

The dock presented here is based on the town dock in Wiscasset Harbor. I have made it a bit smaller than
better fit the typical garden railway. Here in Maine there is a 10-foot tide, so a float is required for the boats to t
turn, requires a ramp that leads from the float to the fixed dock. In the corner of the dock nearest the float is a cr
and unload the boats. Though the dock in Wiscasset does not have a building on it, most docks used by lobsterme
of structure. This may serve a number of purposes, including an outdoor eatery (featuring lobster, shrimp, clams,
market, or a wholesale fish and lobster dealer, just to name a few.

Constructing the dock

Refer to the plan. The drawing shows a side and front view. First, stain any wood to be used in the construction w
colored stain. The dock shown is to be placed on a concrete paver set about 1" under the surface of the water. Th
can be easily built to fit on a flat surface and it is removable.

Begin by cutting the ¾"-square girders. Drill ½"-diameter holes in the girders to accept the ½"-diameter pie
the piers in place. Cut, fit, and glue the 3/16" x 5/16" diagonals in place on each set of girders. When the glue has se
for the #18 x ½" escutcheon pins. Fit and glue the pins in place.

Now cut several 5/16" x ¾" joists. Set a pair of these on a flat surface and glue the girder/pier assemblies in plac
with the joists located at the ends of each girder. With the end joists glued in place, you can add the intermediate

By this time the whole things should be quite strong, so cut, fit, and glue in place, on each girder, the di
between the piers. When the glue has set, add the escutcheon pins. Turn the dock right side up and plank the dec
strips. Finally, add the 5/16" x 5/8" rail along the front and sides of the dock.

The float and ramp

I would want the float and the lobster boat to sit on a concrete paver located just below the water's surface. You c
around a 1"-thick block of foam or wood. The ramp can be built around a 3/8"-thick piece of wood, 1 7/16 " x 6 7/16
should have a crane for unloading. Make one according to the drawing. It should be painted black and be glued i

The last detail is the building. I have shown the substructure for a typical building. Surface details, such as
siding, and roofing are up to you. A restaurant would get top-of-the-line materials, while a wholesale fish deale
rough-sawn lumber siding and a tar-paper roof.

Add whatever details you wish—a stock of old traps, barrels of bait, picnic tables, trash barrels (made from 5
and, of course, some lobstermen. It is not the sort of model I'd want to leave out in the weather, so make it r
done.

* * *

This sheet is a supplement to the October 2006 issue of *Garden Railways* magazine. While supplies last, extra copi
ings can be had by sending $1.50 per set ($2.00 foreign) to: Sidestreet Bannerworks, PO Box 460222, Denver C
complete list of available plans can be found at *www.sidestreet.info*, or send a stamped, self-addressed envelo
address.

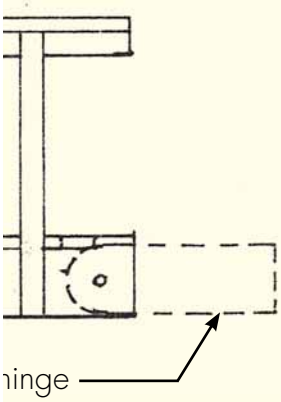
Please note: Since this project can mostly be done with a table saw, no kit is being offered. If you'd like to c
Narrow Gauge, the company's address is PO Box 191, Wiscasset ME 04578. Web site: *www.nemodel.com*

6" x 3/16"
6" x 1/8"

" sq.

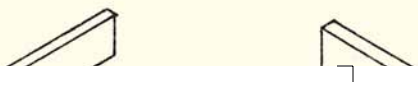
6" x 3/16"

" x 3/8"



hinge

Float Construction Detail



ut plan set to appear in the print version of *Garden*
will continue to publish the plans, but they will be avail-
ur web site: *www.gardenrailways.com.* While supplies
ill continue to be available from Sidestreet Bannerworks.

uilt to handle the trade. Virtually every har-
.

made it a bit smaller than the prototype to
s required for the boats to tie up to. This, in
lock nearest the float is a crane, used to load
ost docks used by lobstermen have some sort
ring lobster, shrimp, clams, etc.), a retail fish

e used in the construction with a driftwood-
the surface of the water. That way, the dock

accept the ½"-diameter piers (pilings). Glue
rders. When the glue has set, drill pilot holes

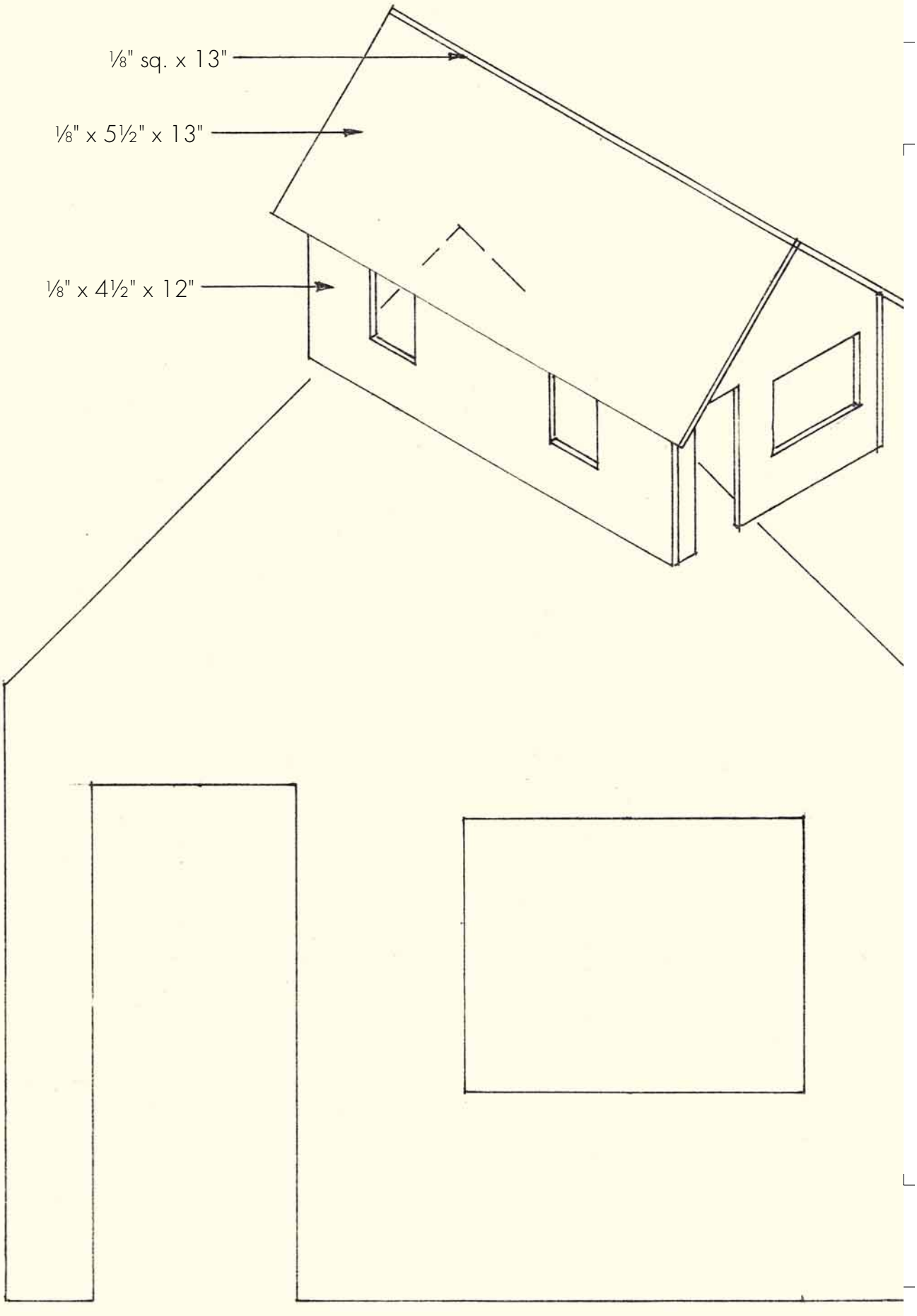
rder/pier assemblies in place (upside down),
ou can add the intermediate joists.
ace, on each girder, the diagonals that run
t side up and plank the deck with 3/16" x 3/4"

w the water's surface. You can build the float
iece of wood, 1 7/16 " x 6 7/16" long. The dock
ainted black and be glued in place.
g. Surface details, such as windows, doors,
hile a wholesale fish dealer might settle for

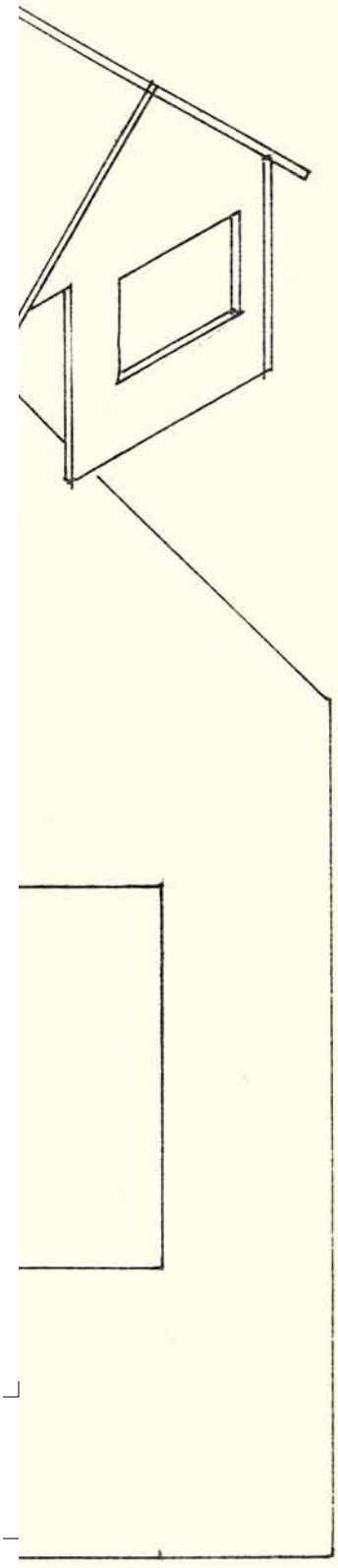
trash barrels (made from 55-gallon drums),
n the weather, so make it moveable. You're

hile supplies last, extra copies of these draw-
, PO Box 460222, Denver CO 80246 USA. A
nped, self-addressed envelope to the above

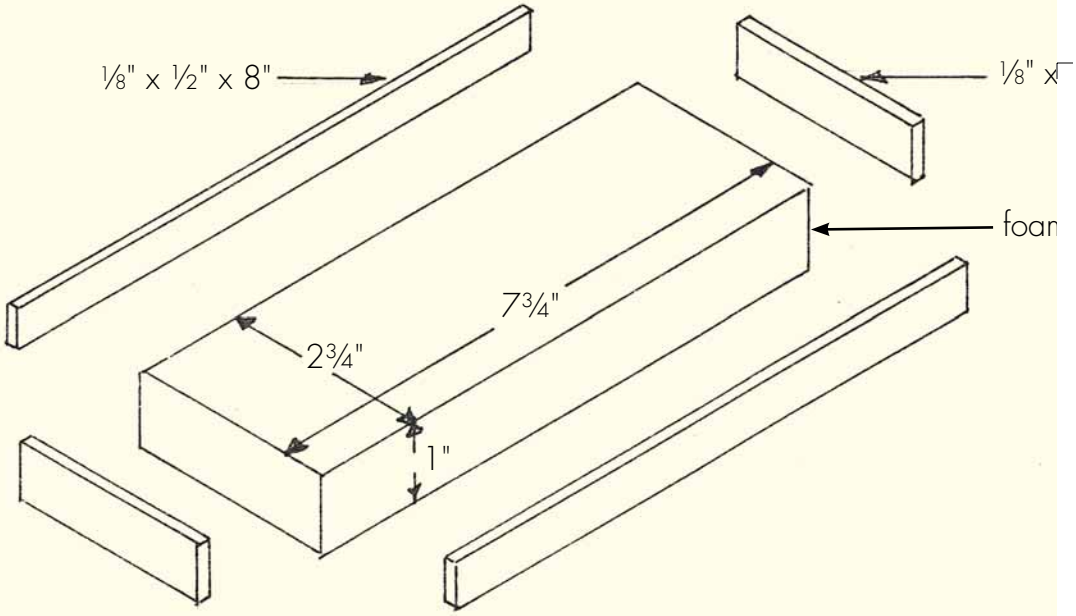
g offered. If you'd like to contact Northeast
www.nemodel.com



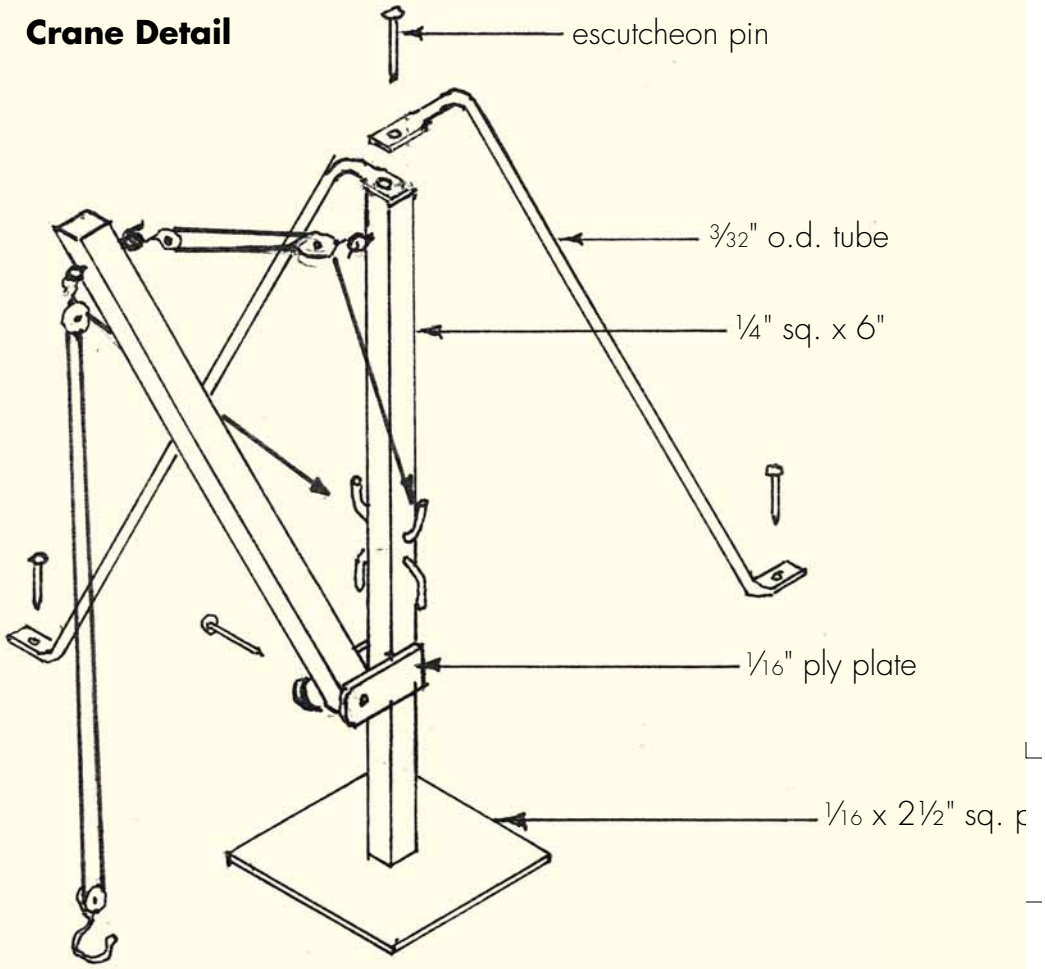
end plate
drawn full size

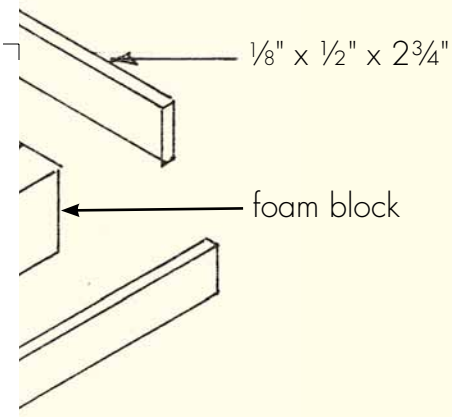


Float Construction Detail



Crane Detail





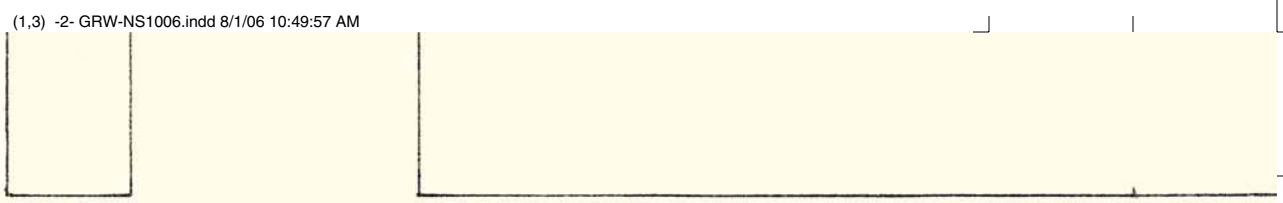
pin

2" o.d. tube

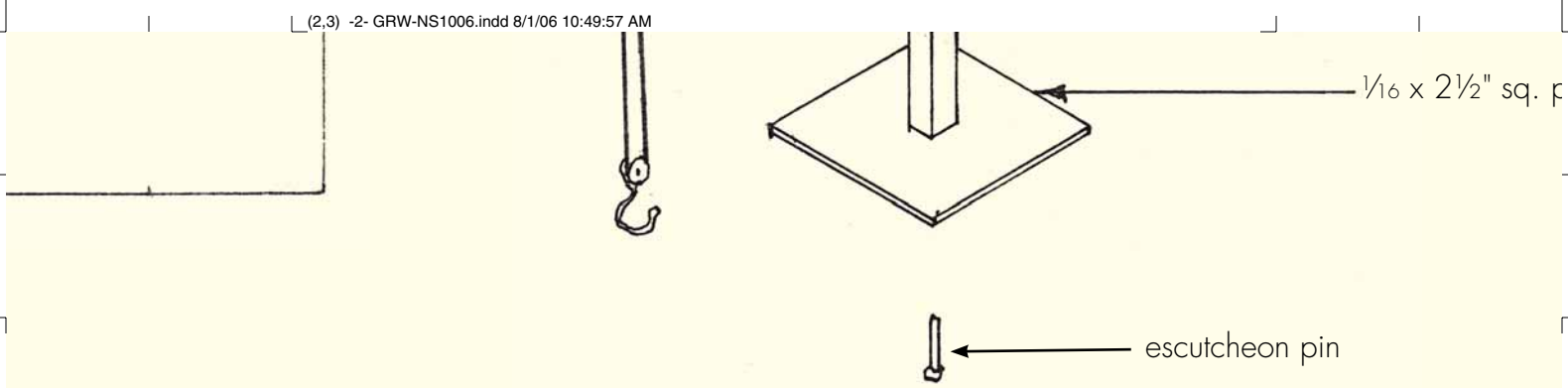
¼" sq. x 6"

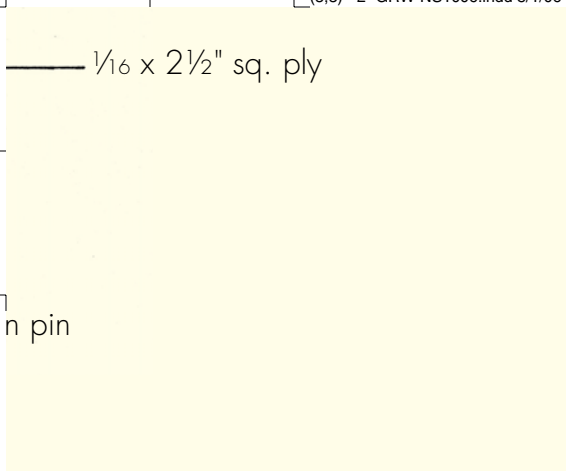
1/16" ply plate

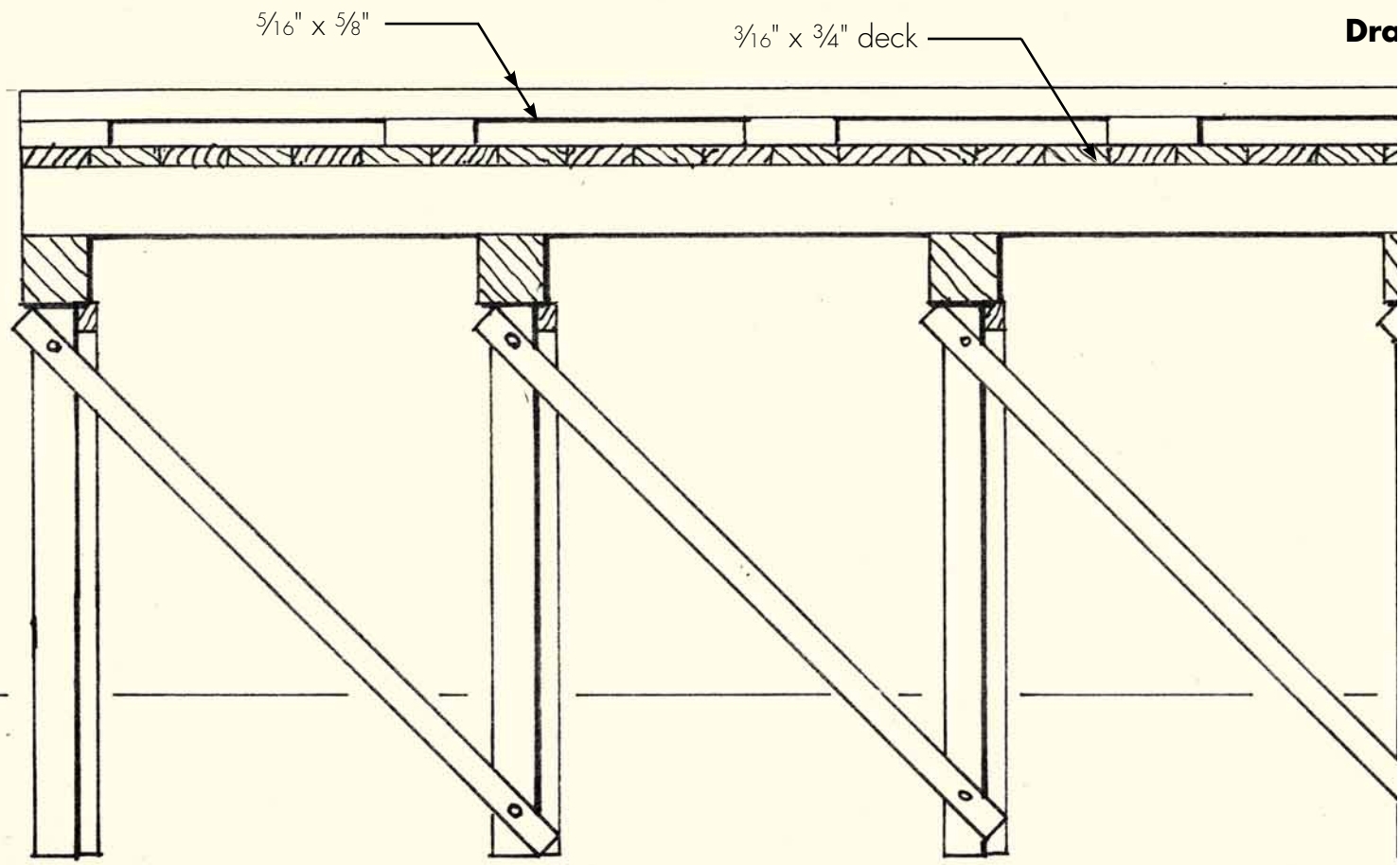
1/16 x 2½" sq. ply

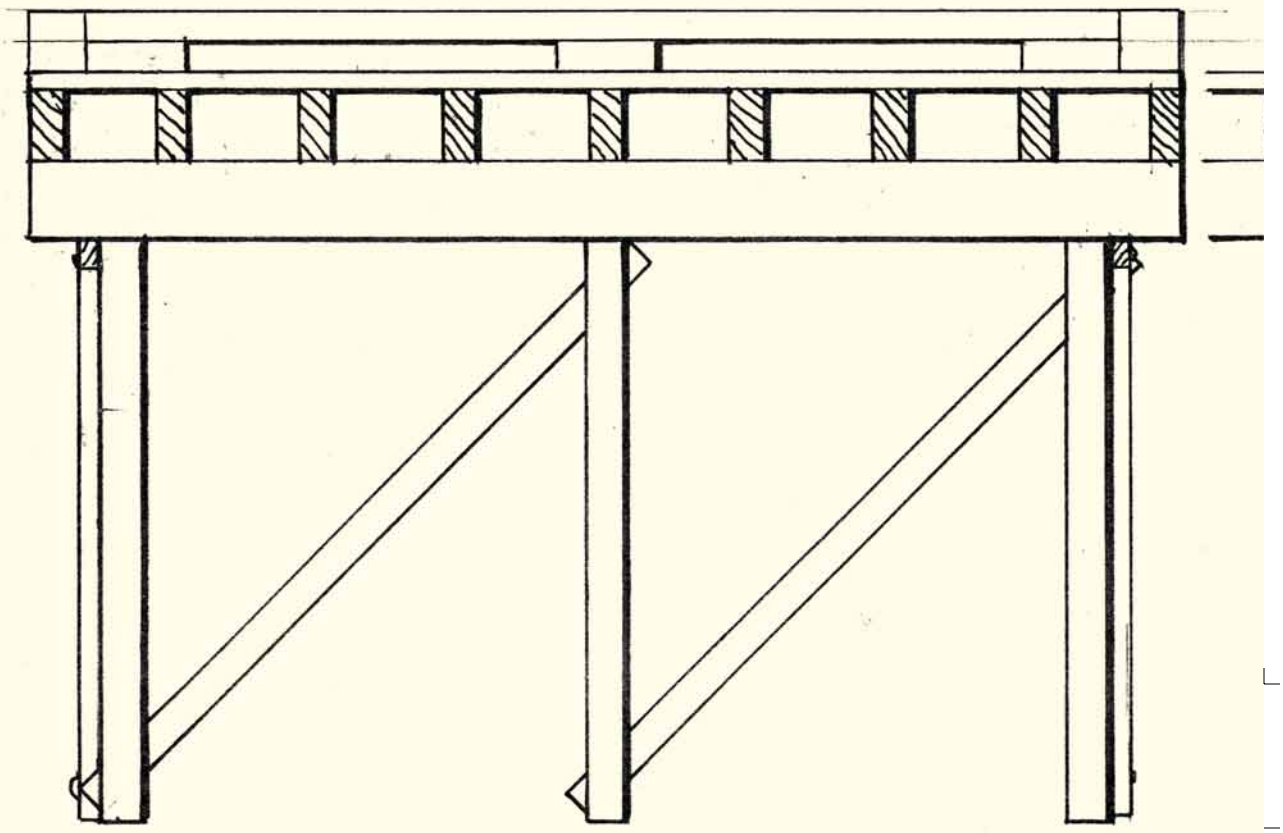


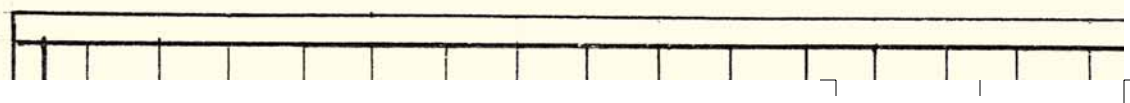
end plate
drawn full size



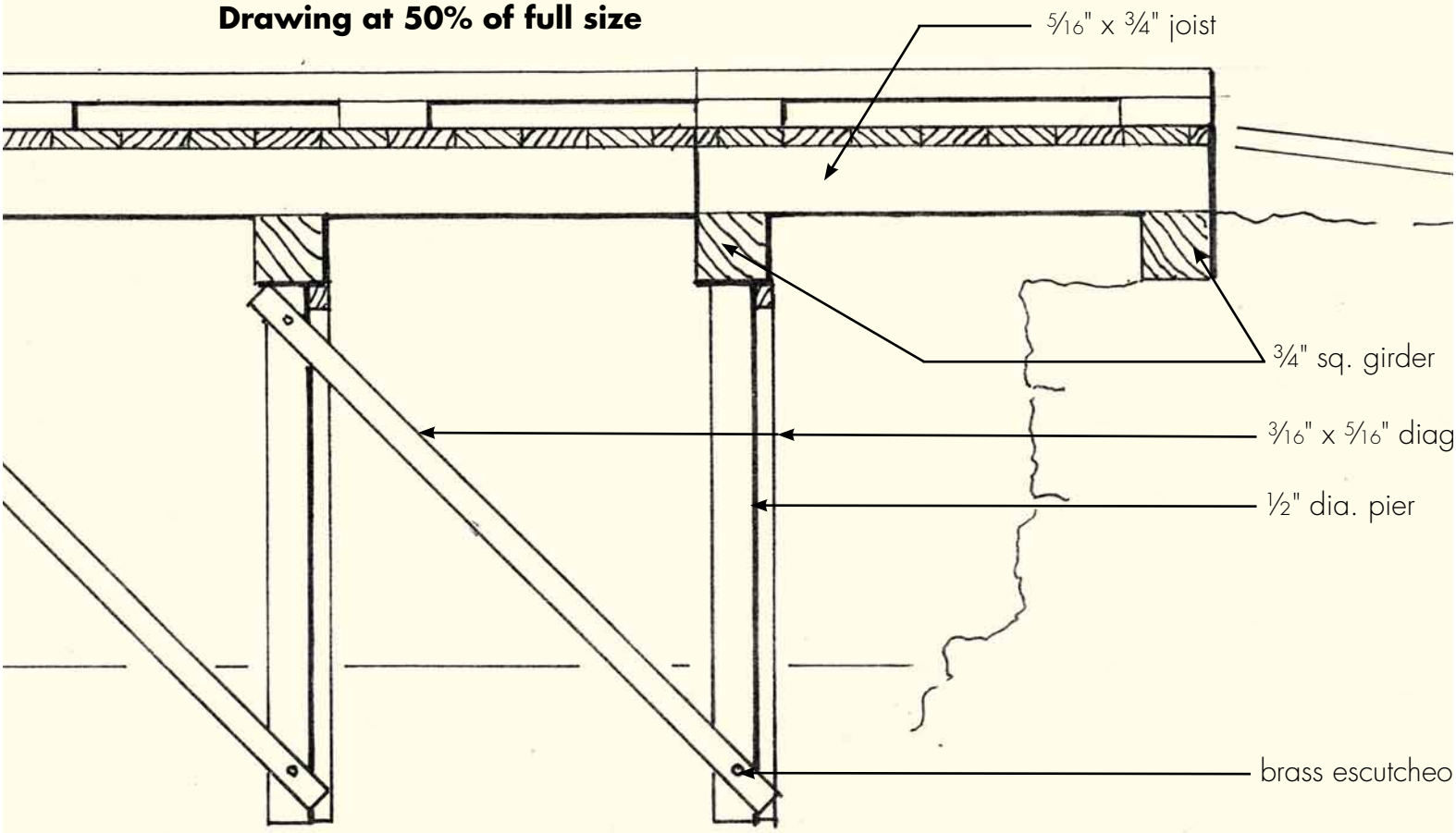


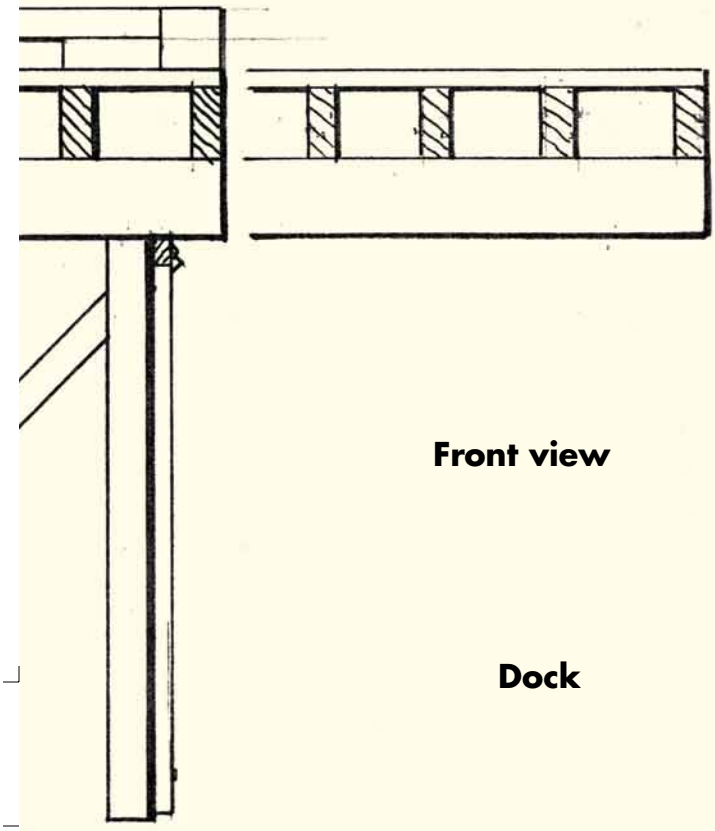






Side view
Drawing at 50% of full size





Front view

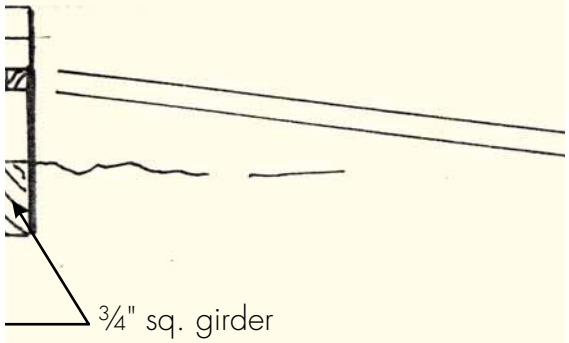
Dock

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 1
If you are working in 1:13.7 (7⁄8") scale, enlarge these drawing

Top view
Drawing at 50% of full size

ɔist



¾" sq. girder

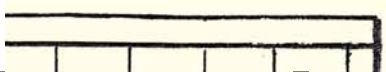
3⁄16" x 5⁄16" diagonal

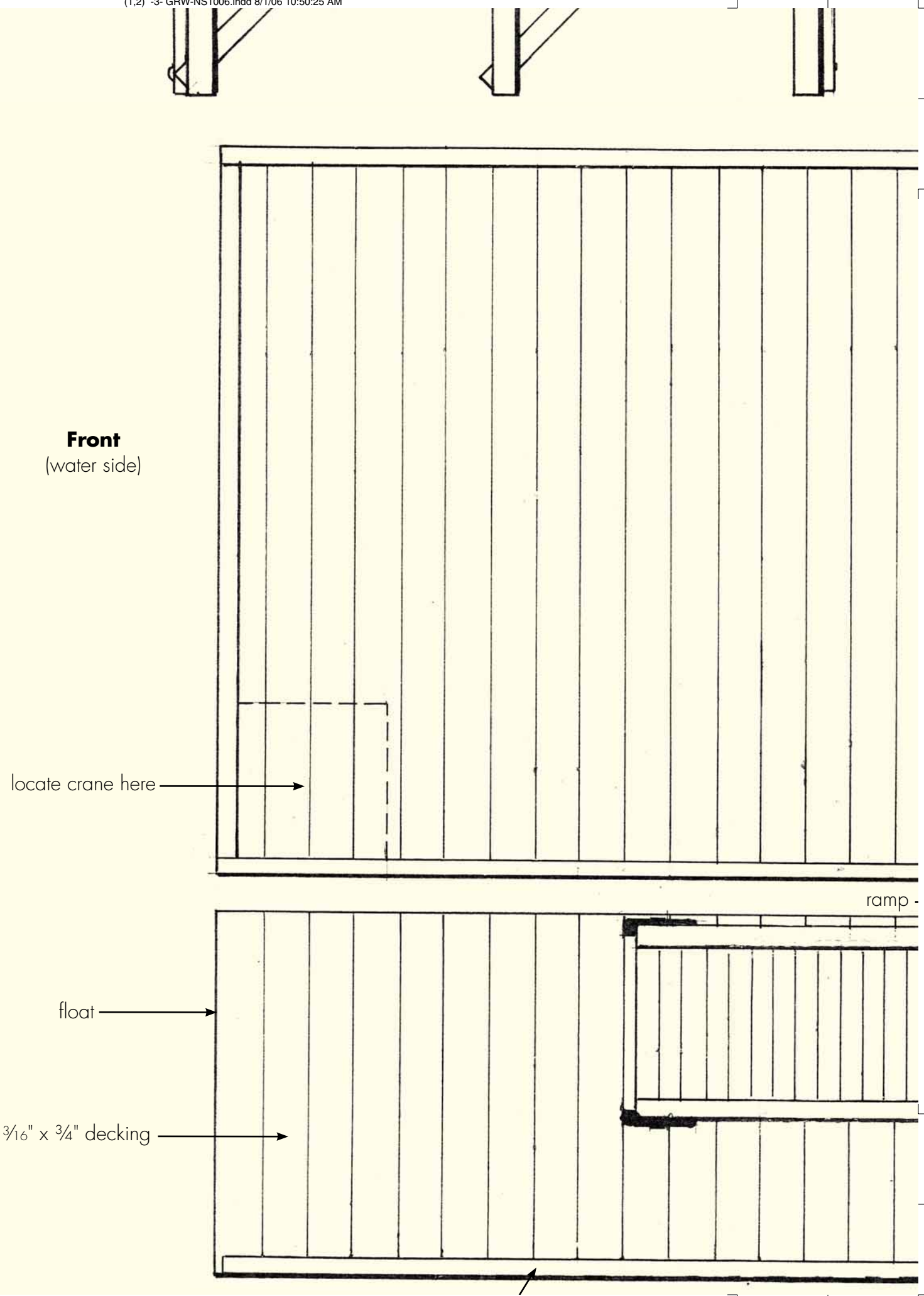
½" dia. pier

brass escutcheon pin

scale?

duce these drawings to 63%.
duce these drawings to 70%.
duce these drawings to 88%.
reduce these drawings to 90%.
enlarge these drawings to 107%.
scale, enlarge these drawings to 148%.





Top view
Drawing at 50% of full size