

1:20.3-scale wrecking crane

Plan set #83-B

by Ted Stinson | Wiscasset, Maine

This is a large-scale model of a wrecking crane. It is loosely based on a steam crane built and operated by the Denver & Rio Grande. Since the model is generic, it will also look right with 1:22.5-scale equipment. **NOTE:** This model utilizes plan set #83, the steam-powered drum winch, featured in the October 2007 *GR*.

Color scheme

Cab, steam winch: Black (with lots of rust)
Crane: Natural wood
Flat car: Boxcar red

Construction

Make the heavy-duty flat car. Seal the wood with clear lacquer, then paint the car oxide red. The circular disc at the center should be painted black. Fit trucks and couplers of your choice.

Now make the base. Cut out the plywood parts first, then glue them together and seal with clear lacquer. Paint the ply parts black before adding the stripwood frame, which should be left natural.

Make the crane from stripwood. These wood parts should be left natural. The metal fittings should be carefully painted black. When finished, fit this frame on the base.

Now make the cab from plywood and strip. When assembled, add the illustration board to each side. Drill .04"-diameter holes for the escutcheon pins, which should be cut to a length of about $\frac{1}{8}$ " before fitting and gluing in place. Make the roof from $\frac{1}{32}$ " ply. Sand this smooth before gluing in place. Paint the cab black with lots of rust.

Now make the steam-powered drum winch (plan set #83, October 2007 *GR*). The boiler would be black but the drum winch could be red or green. Also, make the spider, which should be painted black. Fit and glue the drum winch in place. Add the boom with its rigging. Sit the boiler in place and fit the cab over it. Adjust the boiler location until the stack passes through the hole in the roof. When satisfied, mark the boiler location, then remove the cab and glue the boiler in place. Reseat the cab, gluing it in place.

Using a short length of $\frac{1}{8}$ " dowel to center the crane, fit the crane, the spider, and the flat car together. These can be glued in place. However, if you want a working model, you will need to replace the dowel with a small bolt. This completes the wrecking crane.

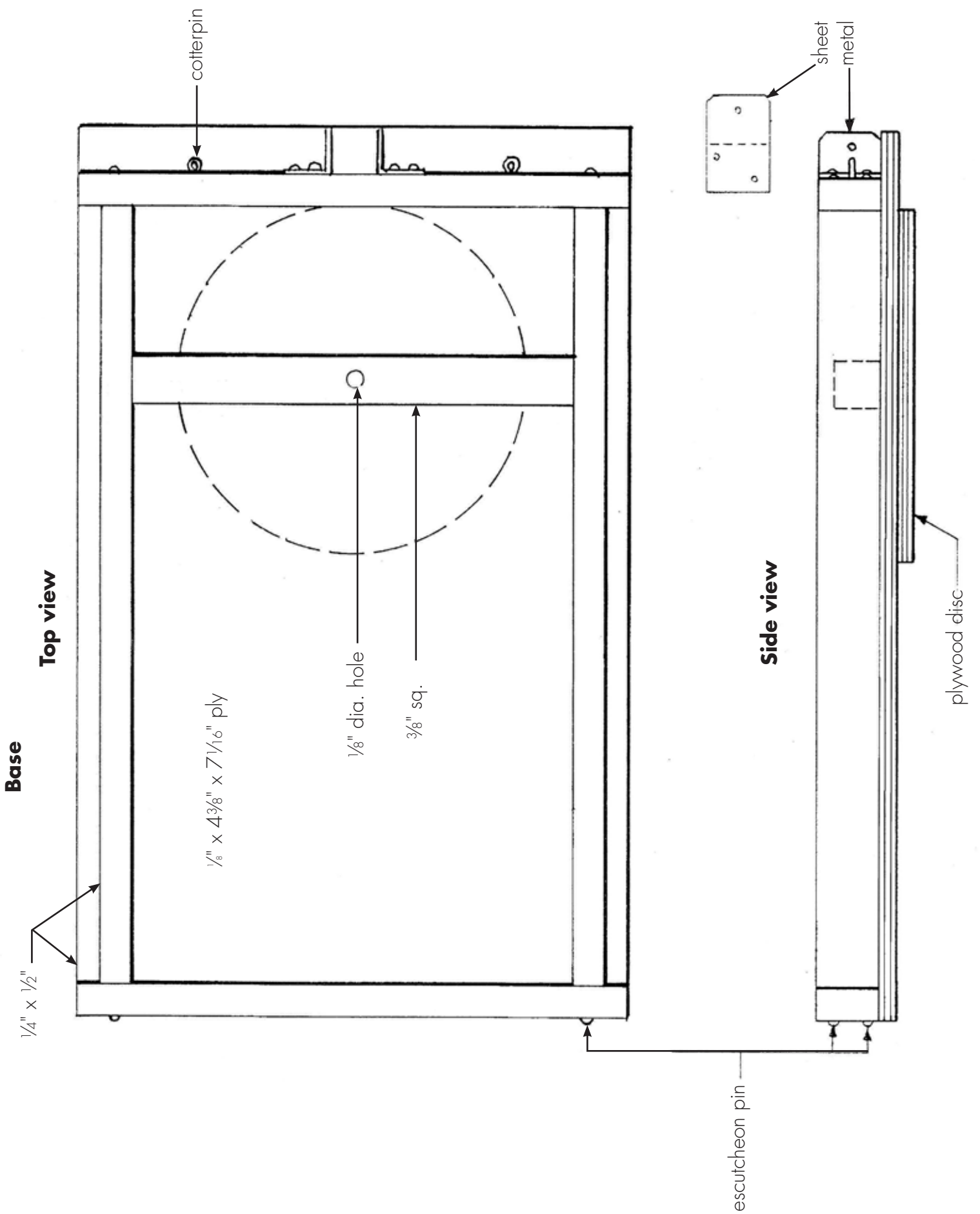
This is an online supplement to the December 2007 issue of *Garden Railways* magazine. To purchase previously published paper plans, see the list of those available at www.sidestreet.info

A kit for the wrecking crane (#289) is available from Northeast Narrow Gauge for \$100 + \$10 s&h. This will include kit #288, the steam-powered drum winch. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578. Web site: www.nemodel.com

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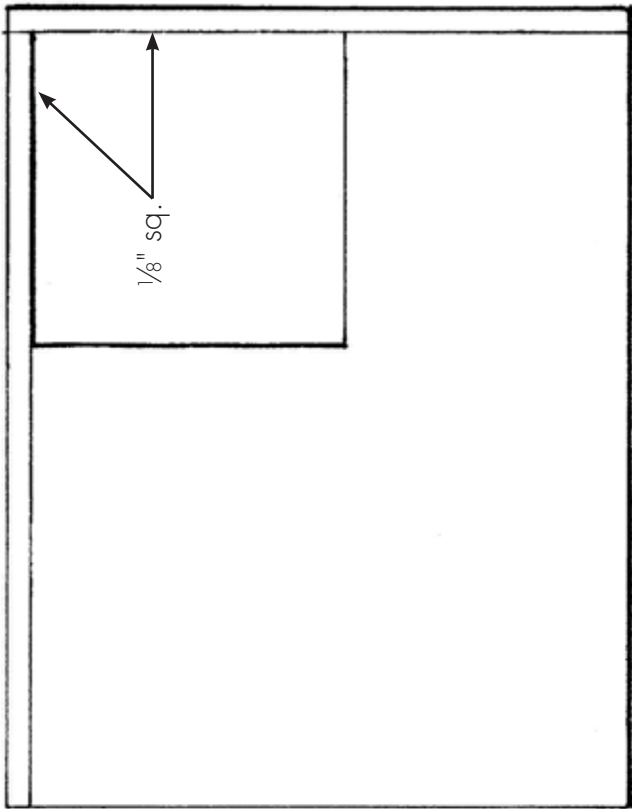
Are you working in a different scale?

- 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 1:13.7 ($\frac{1}{8}$ " scale), enlarge these drawings to 148%.

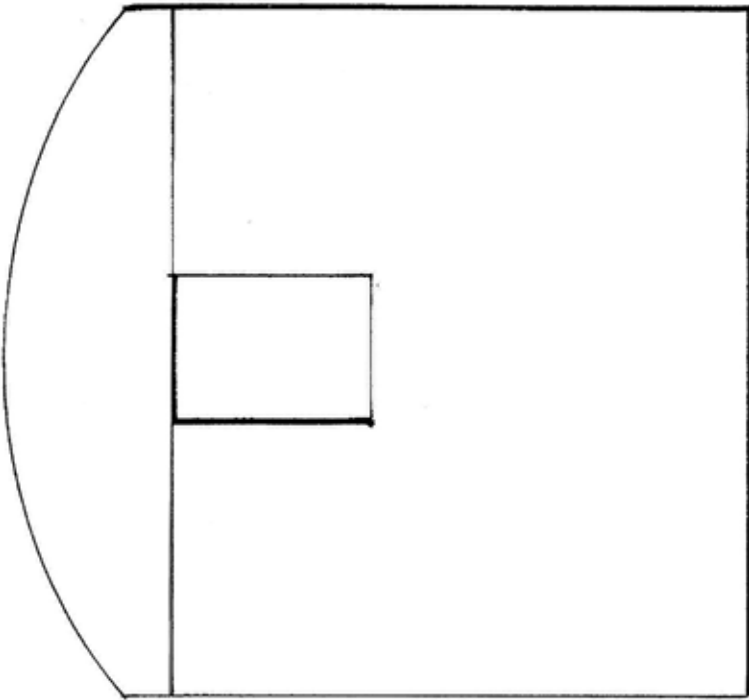


Cab substructure

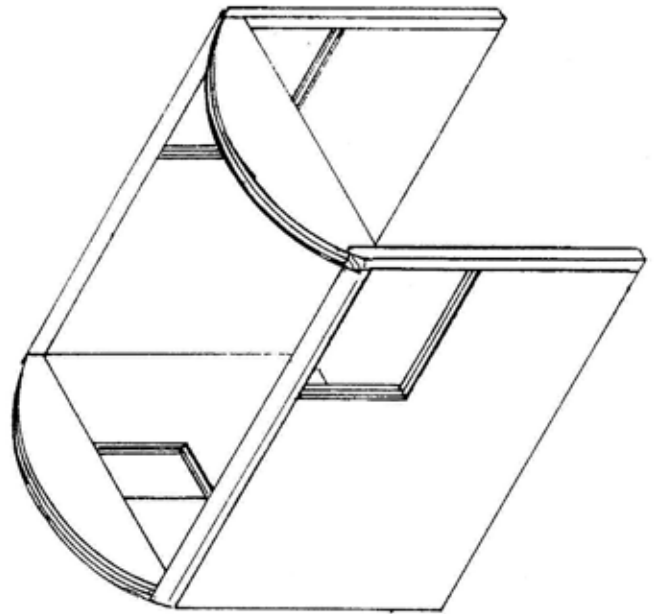
side—make 2



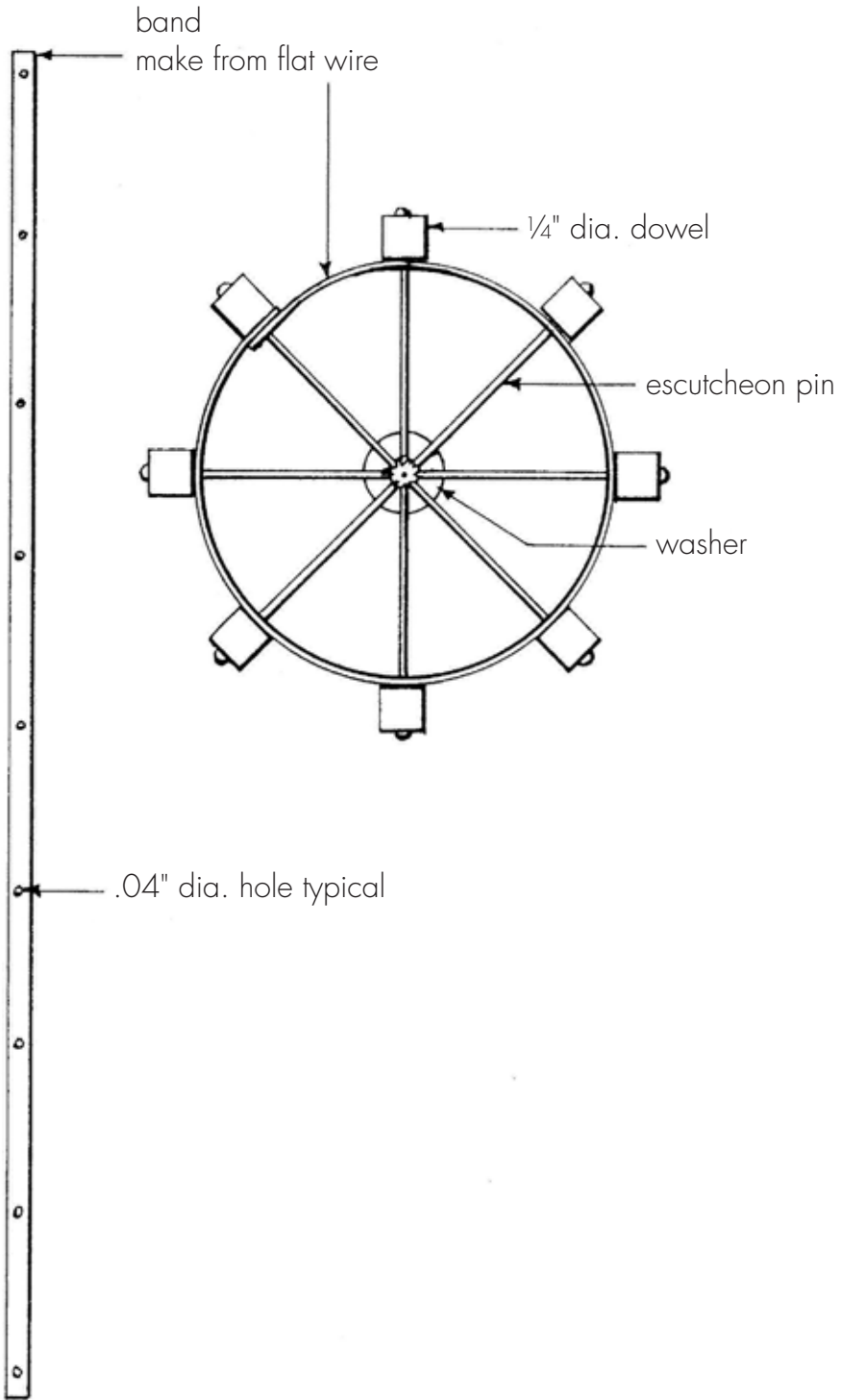
end



Substructure detail

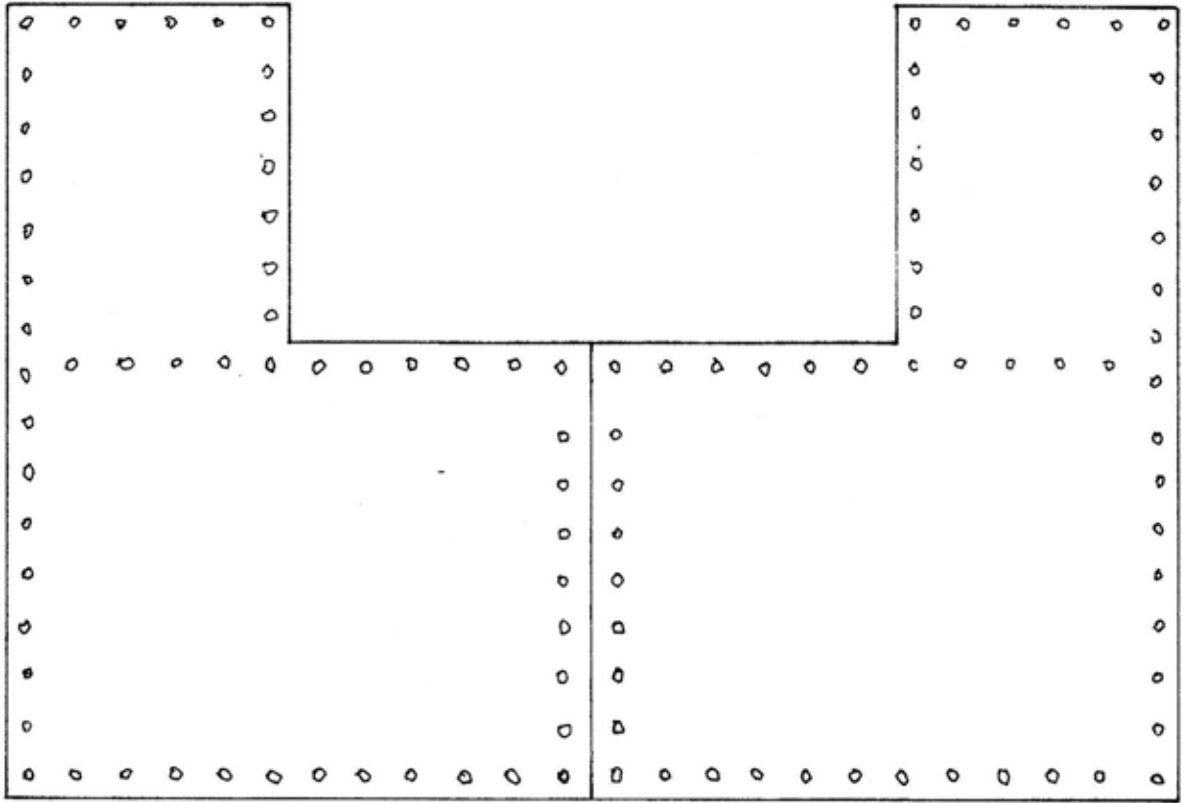


Spider

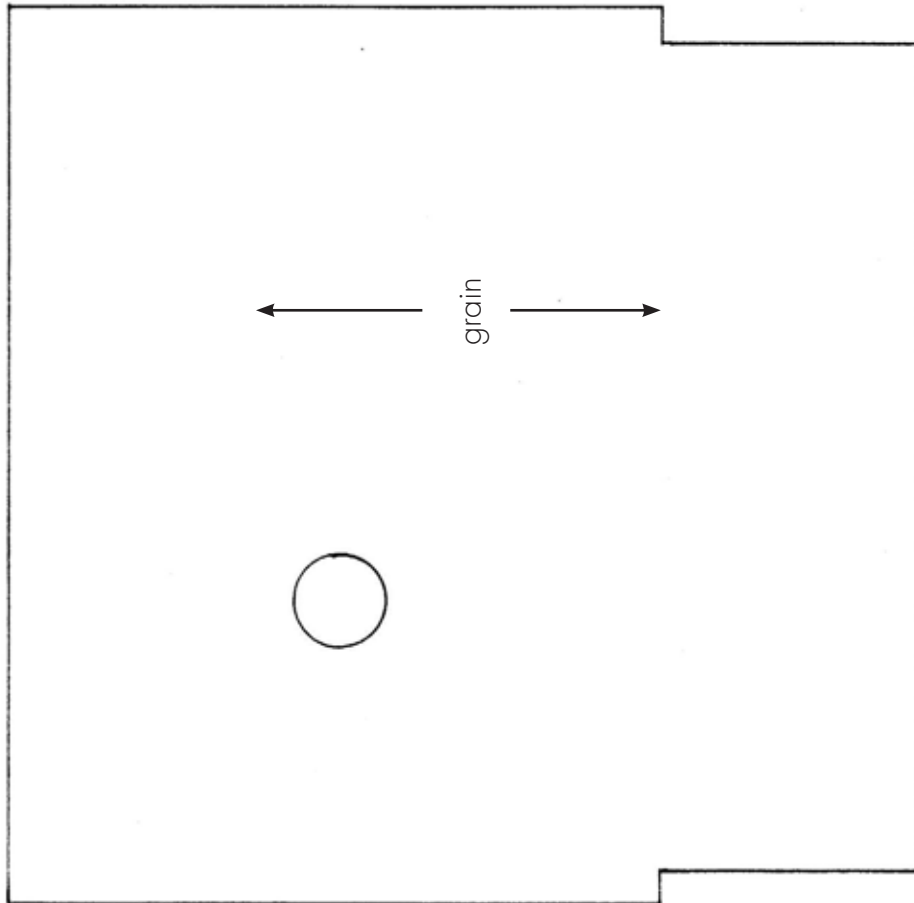


side panels

cut from illustration board
drill holes for escutcheon pins

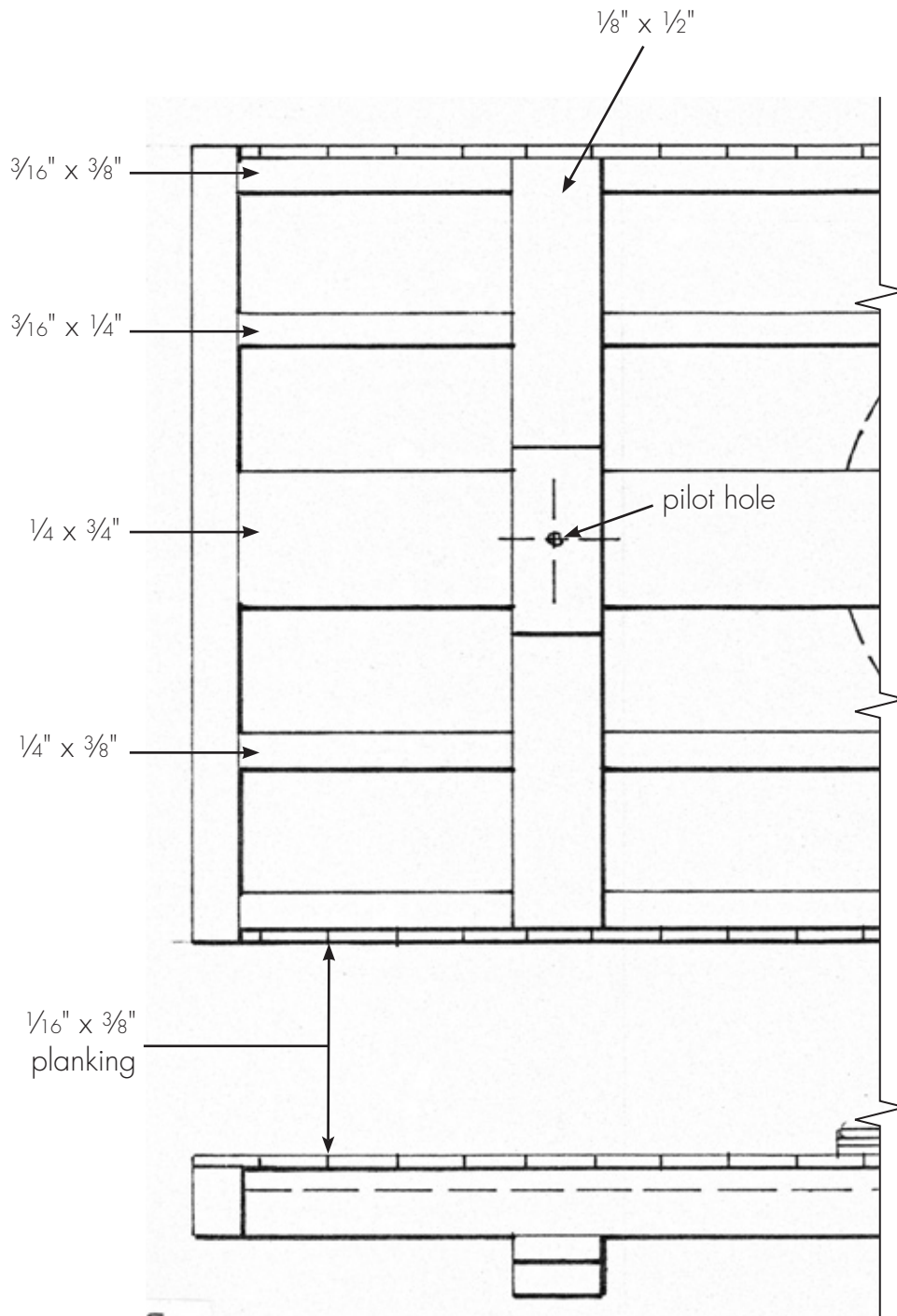


roof
cut from 1/32" ply



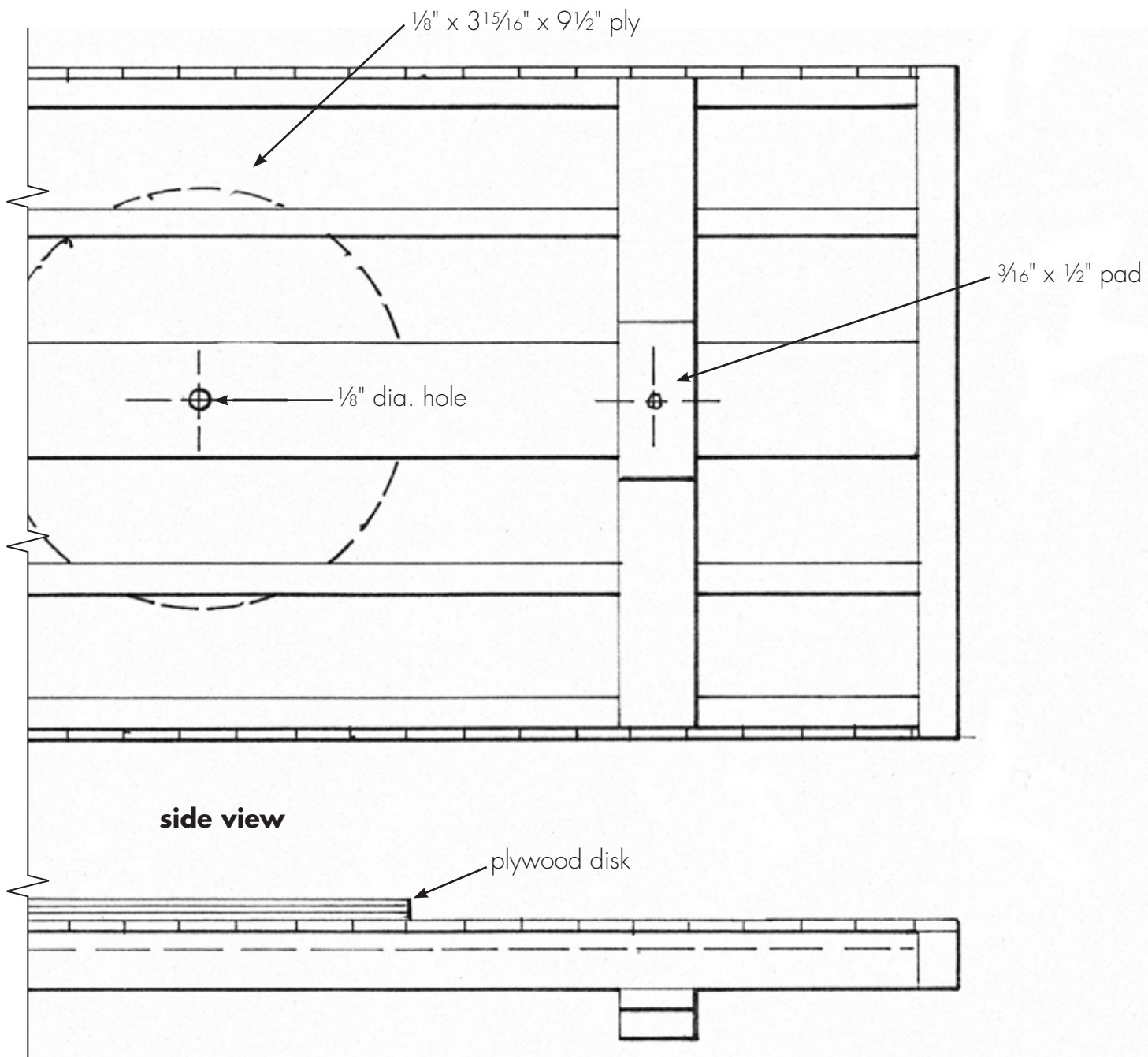
Heavy-duty flat car

Bottom view 1



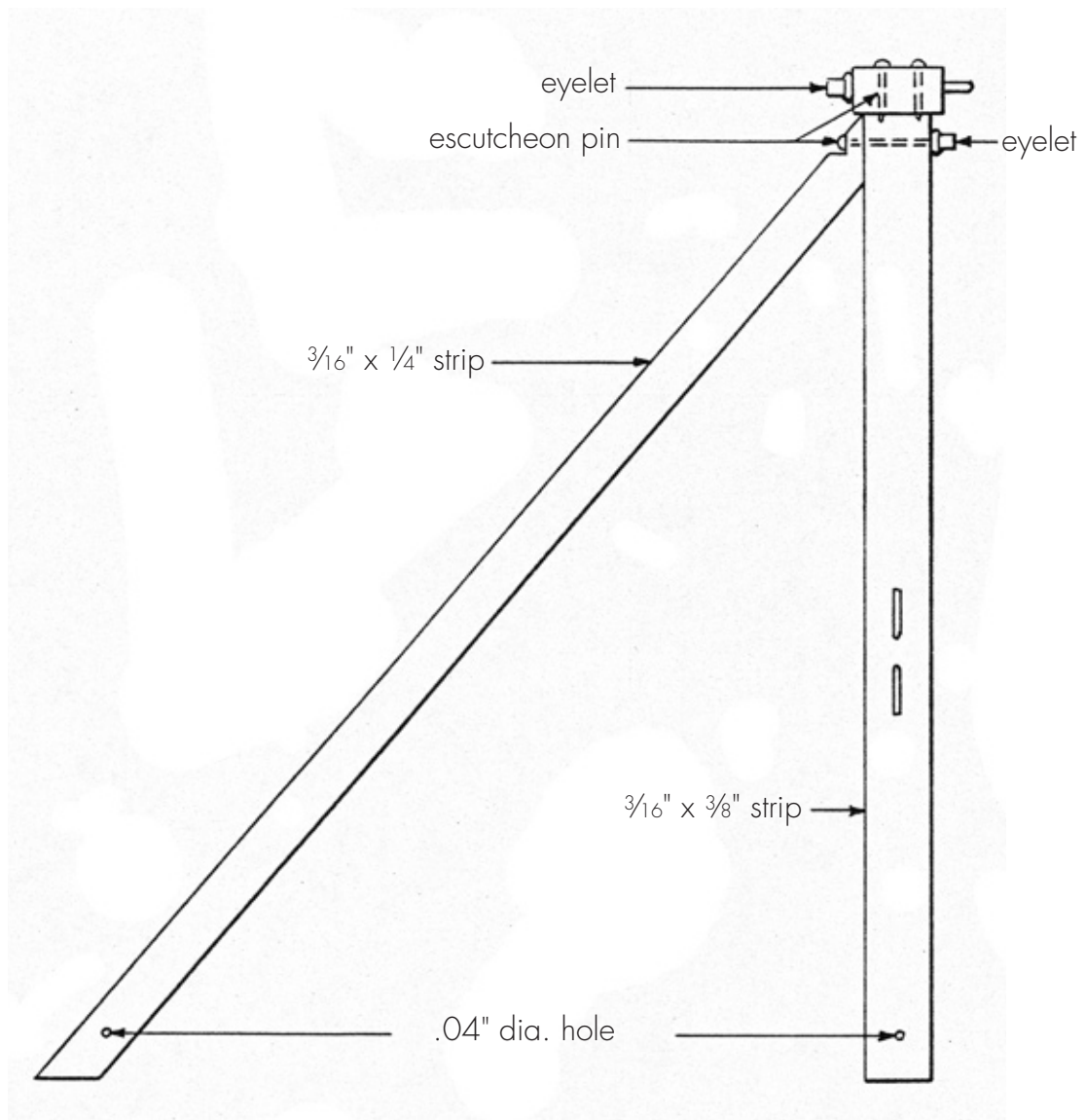
Heavy-duty flat car

Bottom view 2

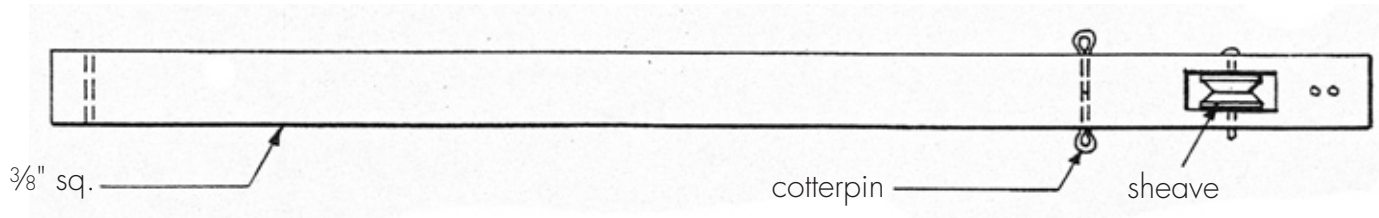


Crane frame & boom

Side view

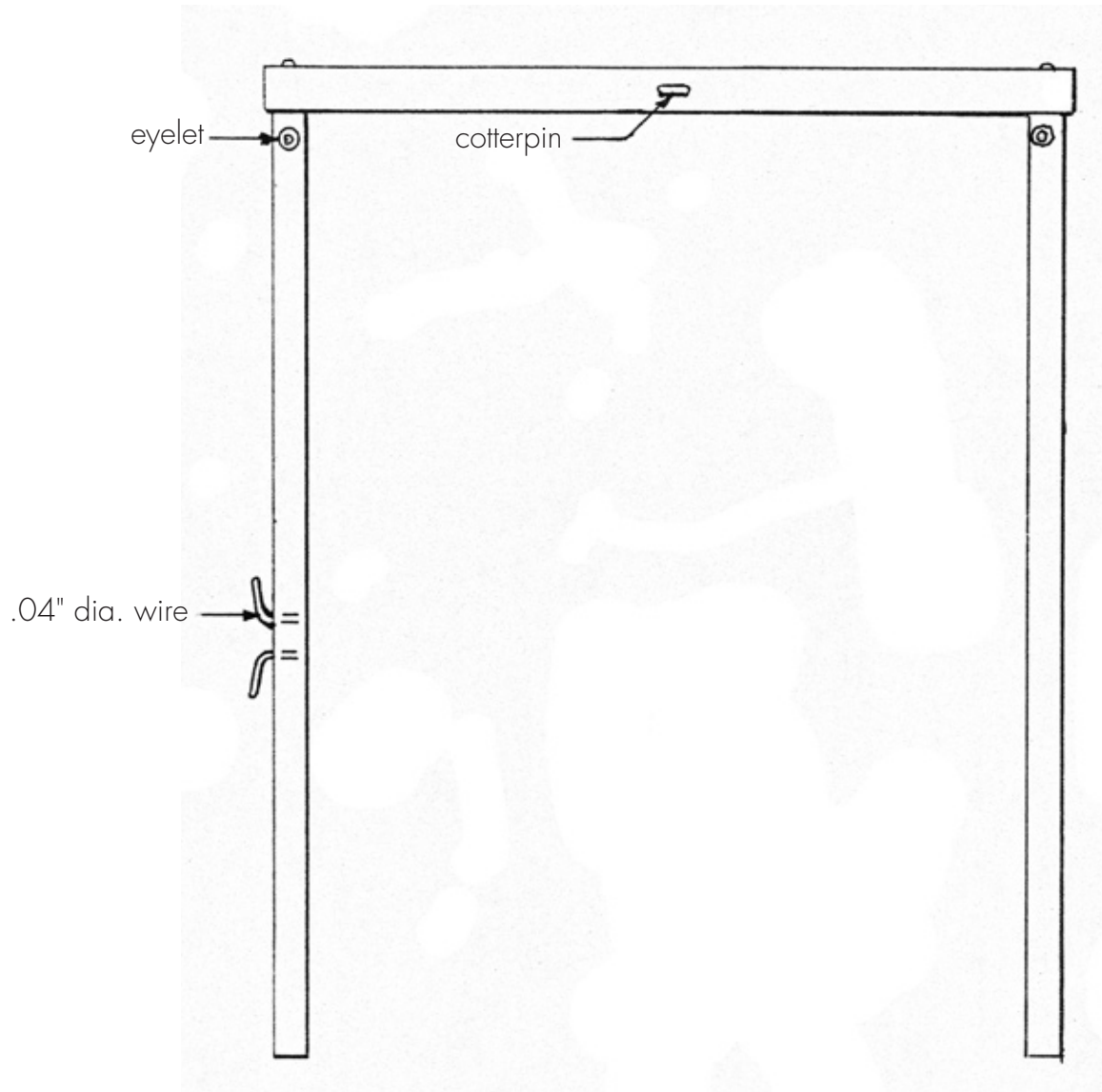


Boom

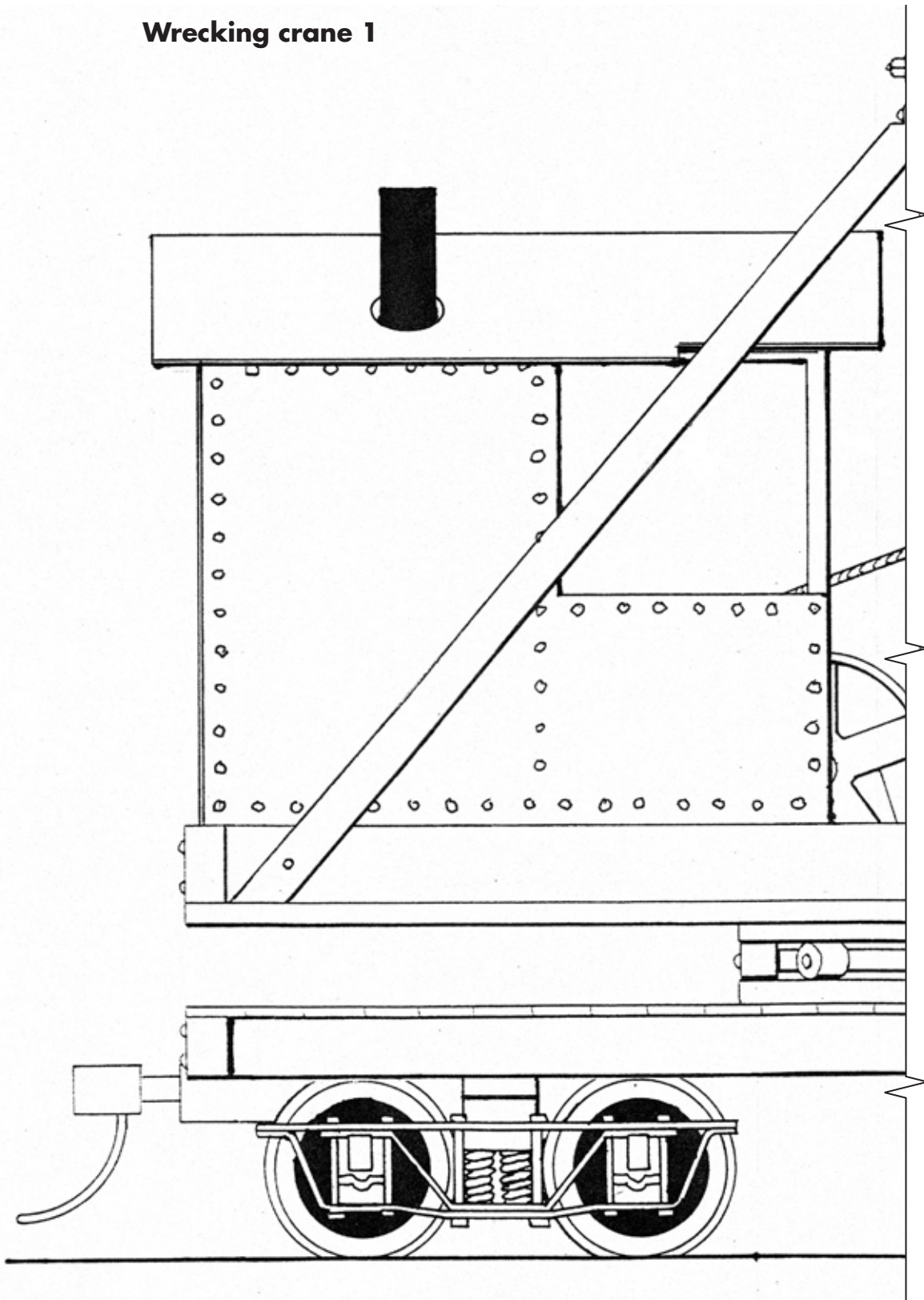


Crane frame

Front view



Wrecking crane 1



Wrecking crane 2

