

This gluing jig is used for the strip method of construction. It holds the assembly while the glue dries as well as preventing any misalignment. It is suitable for use with 2, 1 inch and larger scales.

Three quarter inch plywood serves as the base and angle iron or wooden pieces can be used for the fences. If wood the pieces should be square, smooth and have a good square face. [Fig. 1] The angle iron fences can be bolted to the base from the bottom using countersunk bolts. If wooden fence is used it can be bolted or screwed to the base.

By using a square when attaching the fences you can maintain a perfect inside corner of 90 degrees. Make the jig large enough to let you build the longest and widest wagons of your scale. Make fences a couple of inches longer than the widest and longest length desired.

When using, cover the top of the base with ordinary wax paper, slit it at the corner and fold up against inside of the fences. The best glue I have found is a 3M product in a small brown bottle named Scotch Contact Cement. It dries rubbery, sands off easily but still makes a good tightly glued joint.

It does not leave any hard glaze on the wood as various cements do. The wax paper prevents any glue that squeezes

out on the bottom of the assembly from sticking the assembly to the wooden base or fences. When assembly is removed from jig the wax paper peels off easily with little tearing if any at all.

When applying glue to the strips use a pointed applicator and lay a small ridge of glue down the center of the strips' edge. [Fig. 2] This leaves some room for the glue to spread out when strips are squeezed together.

Depending on the tools available you have two choices. If you have power machinery you can glue up a long assembly and then after completed you can cut two sides and a front from this one piece. If using a small miter box and a Exacto saw you can cut all strips to the desired length and then glue up each side and front individually.

Lay a strip against the fence, apply a ridge of glue to the next strip (along one edge only) and tip against the first strip letting it drop into place making sure end rests against the front fence. [Fig. 3] Continue gluing strips in this manner until side or front is completed. Lay a piece of scrap material along bottom edge, push gently against the assembly and drive several brads into the scrap piece letting it serve as a clamp until assembly dries. [Fig. 4] Do not apply a lot of pressure as side will have a tendency to bow up from base. Do not drive

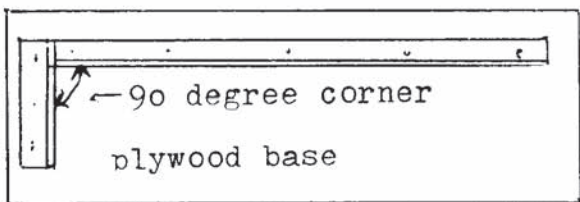


Fig. 1 top view

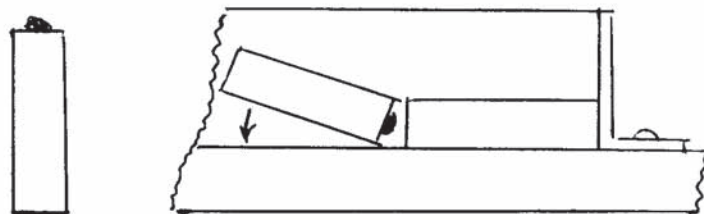


Fig. 2 end view

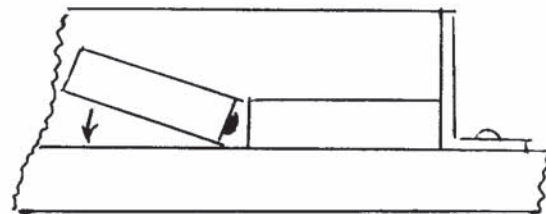


Fig. 3 end view

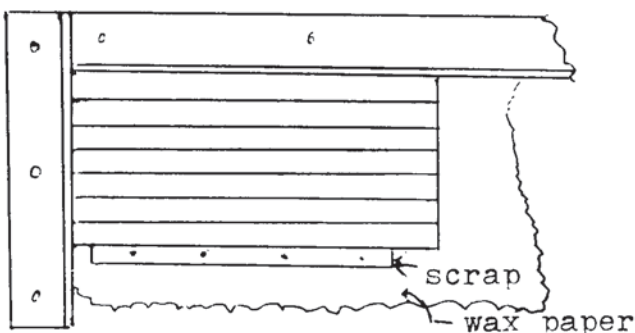


Fig. 4 top view

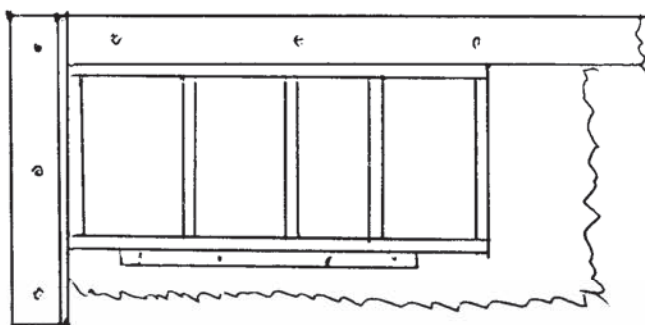


Fig. 5 Top view
Bed Frame

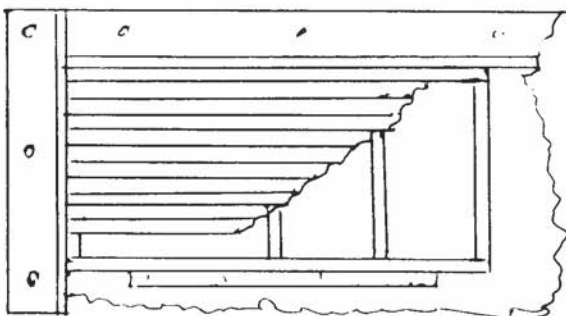


Fig. 6

Flooring over bed frame

How to Make a Gluing Jig

DATE: None	SCALE: None	SCANNED & REVISED: 07/03/02	Pg 1 of 2
Circus Model Builders			DRAWING NUMBER
Drawn By Karl Hartisch, CMB 1342			#0255

brads completely flush with scrap strip, leave heads protrude for easy pulling. When assembly is dry, remove brads and scrap strip, lift assembly off base and peel wax paper off back slowly. Sand both sides smooth.

If you frame the wagon bed instead of using a solid piece it can be framed as shown in Fig. 5. After the assembly dries, before removing it from jig, the flooring may be applied as in Fig. 6. Apply a thin strip of glue to the frame members to hold flooring in place.

Wagon sides and front can be glued to bed also. [Fig. 7] This holds them in true vertical position until dry. Then remove and reinforce with brads along bed and up the corner.

This jig can be used for making a number of assemblies. Doors for the rear, as well as side compartments, can be constructed and framed in this manner. If it is a wooden framed wagon, the corners can be glued up as shown in Fig. 8 in one long strip. Four corners can then be cut to exact length from this piece. Various other assemblies other than wagon assemblies can be made for a model show.

If working in 2 inch scale I have glued up 1/8 inch strips in this manner. While actually thicker than scale the roof hides this fact. For open top wagons of course this difference cannot be hidden. To use 1/16 inch thick material it is not thick enough to permit edge gluing.

Cut all side frame members to exact size making the wooden corners. Glue the side frame up just as the bed frame is glued up with the constructed corners serving as front and rear

frame members. Then lay a strip of glue on the frame member and glue the side strips to the frame member. In this case the edges simply set against each other without benefit of any glue.

It is advisable when cutting the side strips to cut them slightly shorter than the inside measurement from corner to corner. If they are the least bit long, since they fit inside the corner, the strip may bind and have a tendency to warp inward instead of laying flat.

After assembling both sides apply them to the bed. After they are dry, you can then tip the wagon body on its forward end in an upright position. [Fig. 9] You may then glue the front strips inside the corners. To finish the front then when strips have dried remove and place any upright frame members and the top and bottom rail in place.

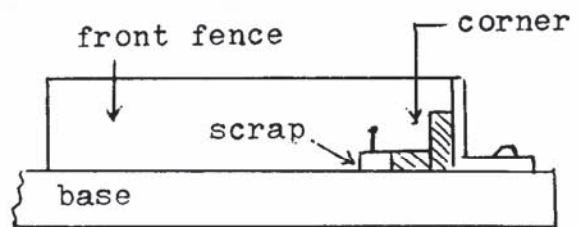


Fig. 8 end view

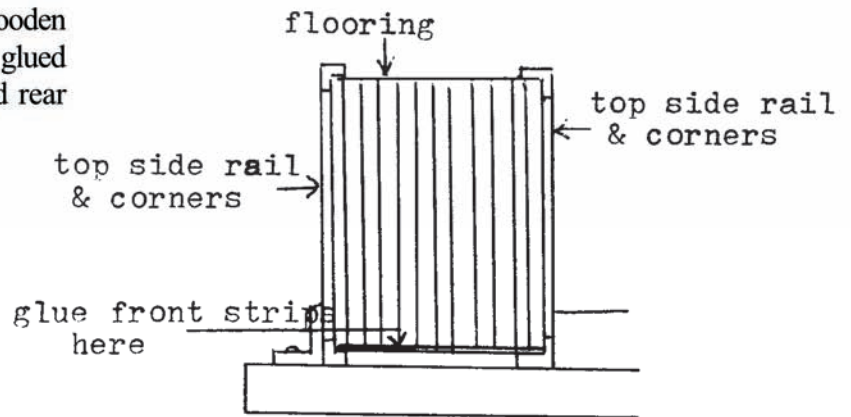


Fig. 9

Wagon tipped on front

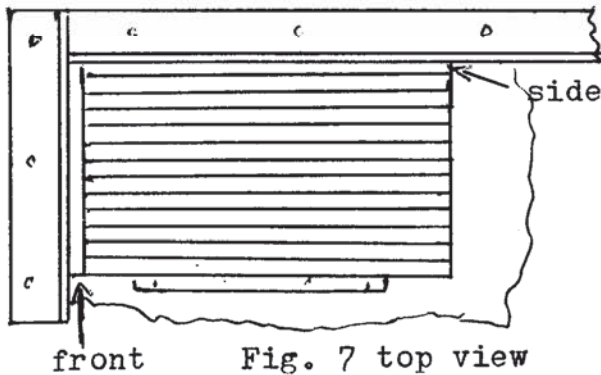


Fig. 7 top view

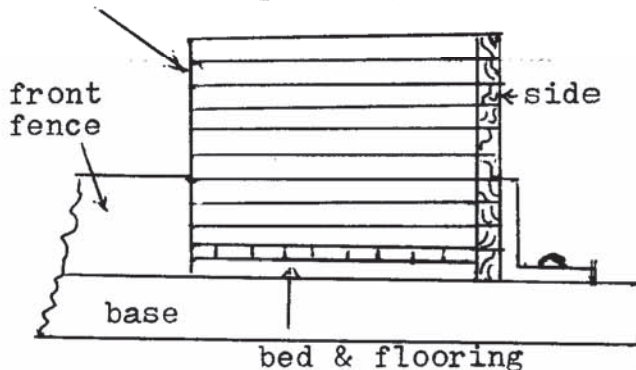
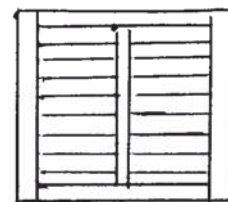


Fig. 7 end view
After dry reverse and glue
other side in place



when strips dry glue
top and bottom rails and
vertical frame members in
place

How to Make a Gluing Jig