



FINISHING YOUR WEEK-END TRAILER

By John Gartner

PART II

WHAT with spring getting under way, many people who last month passed up this invitation to build a lightweight trailer may now be ready to change their minds. It's not too late to start construction, but don't try to build your trailer from the information given in this installment alone.

Part I covered the construction of the chassis, walls, and chimes. The next step is to stud the sides with $\frac{3}{4}$ " by $1\frac{1}{4}$ " strips of pine, spruce, or hardwood. Locate the studs as shown in Fig. 8 (March), and in the drawings on the facing page, using such fixed positions as floor edge (Fig. 9), door, and window openings as guides. Fasten all studs with glue and collared screws, and place those on the second wall exactly opposite the corresponding members on the first (Fig. 10).

On the outside of each wall you will need a batten strip to cover and reinforce the plywood joint. Make this of $\frac{3}{8}$ " plywood 2" wide. Using similar $\frac{3}{8}$ " by 2" strips, build a border around the door opening, leaving a $\frac{1}{2}$ " margin except on the hinge side. A door is then cut from the same plywood to fit this frame, and screwed to the $\frac{1}{4}$ " plywood pieces previously cut from the wall to form the door opening. With rubber stripping added, this construction makes a relatively dustproof door.

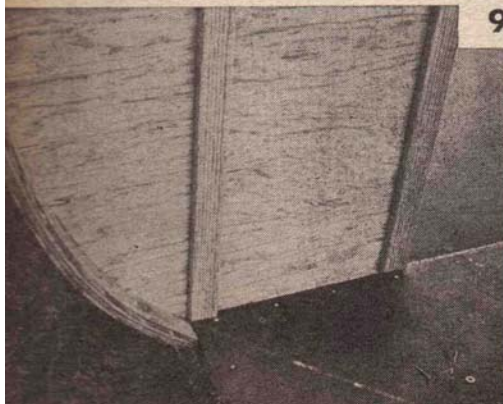
Mounting the walls to the frame is a job that may require some help from the neighbors. Glue and screw the right

wall to the sideboard cabinet over the wheel, and use whatever temporary bracing may be needed to keep the sides perpendicular to the floor. When the location of cross ribs is decided upon, square them across and notch them into the chimes.

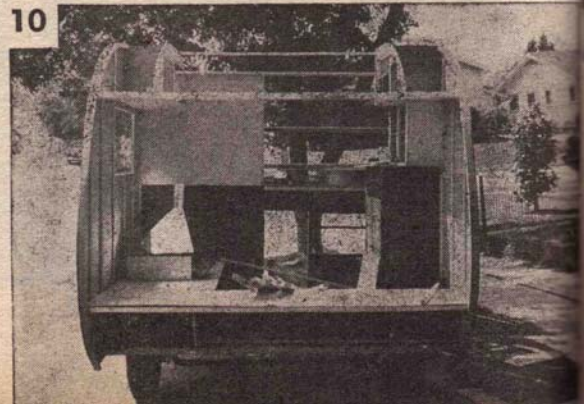
Plywood will be used for all cabinets, and edges can be given a finished appearance as shown in detail A. This detail is dimensioned for $\frac{1}{4}$ " plywood, and has to be adjusted to suit the $\frac{3}{16}$ " and $\frac{3}{8}$ " stock used for some of the cabinets.

A sheet of $\frac{3}{8}$ " plywood 3' wide, fitted across the front and flush against the sides, forms the front of the galley. Fasten it securely to the forward door stud, and to the corresponding stud on the other side. Allow the top of the galley to overlap about 6" into the closet area to provide a shelf for the water tank. Before fastening the top, build a frame of the $\frac{3}{4}$ " by $1\frac{1}{4}$ " stripping to help support the sink. The stove may be treated in the same manner, or it may be let in slightly below the surface (Fig. 11). In the latter case, with a keyhole saw cut the plywood very carefully, and use the cut-out portion as a cover.

Build the front and side of the clothes closet of $\frac{3}{16}$ " by 4' by 8' gum plywood. Notch a rib into the chimes across the top, where it will support the stove vent you have selected. Overhead cabinets, shown in Fig. 13, come next. Determine the shape of the longitudinal pieces by



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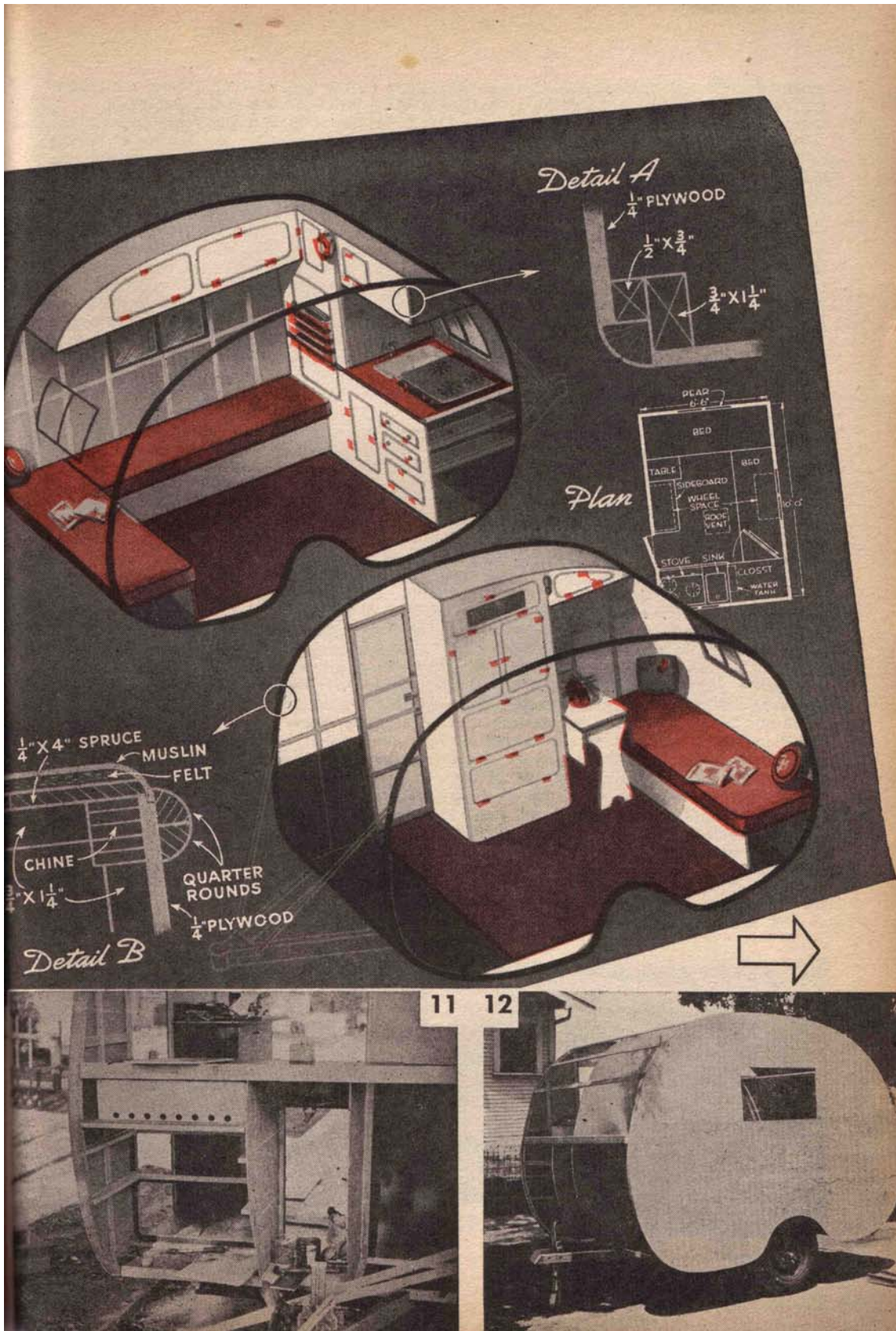


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marking them off against the corresponding chine curves. Use $\frac{3}{4}$ " stripping for the frames.

To make the side bed, set in a 12" piece of $\frac{3}{8}$ " plywood parallel to the left wall and about 22" away, using ribbing stock again as a frame. For the second bed, a similar piece of plywood has to be installed crossways at an equal distance from the rear wall. A piece of $\frac{3}{16}$ " plywood, 24" wide, is used as a top for each bed. Before fastening it to the bed frame, rip the top about 6" from the wall edge and install a length of continuous hinge. This arrangement will enable you to lift the cover without removing the mattress. Crosspieces, notched into the bed supports, will add strength.

Space two ribs across the highest portion of the walls to carry the ventilator you plan to use. Then rib the remainder of the top and ends at approximately 12" centers (Fig. 12). Ribs should be closest at points of greatest bend.

If your friends and family are still gleefully watching you work, call them into service for the next operation. First bevel off the lower edge of the front frame two-by-four. On a stiff cardboard pattern, cut tight notches around the tongue arms, and transfer the pattern to a sheet of $\frac{3}{16}$ " by 4' by 6'8" plywood. Gum is preferable to the fir panel for this use, since it shows less tendency to raise and weather under strain.

With two people holding the plywood, glue and screw it to the beveled two-by-four. Mark and bore the opening for the sink and icebox waste hoses, and fit the drainpipes before continuing to fasten the wall. Bend the plywood carefully to the shape of the wall, and fasten it to chine and ribs at short intervals (Fig. 14). This front wall should come up to the midpoint of the galley-top rib. Trim any excess beyond this point, and also trim the overhang flush with the sides.

A similar procedure can be followed with the rear wall, which reaches the middle of the window-base rib. Any remaining

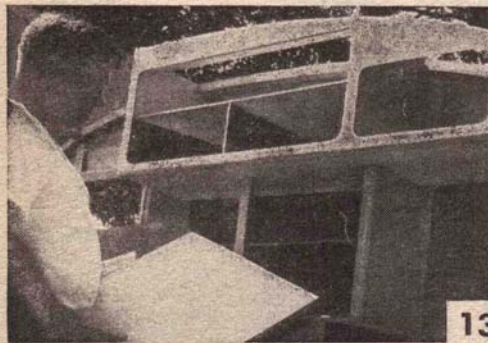
gaps on the underside or around the tongue can be patched with sheet aluminum.

For the roof and the remainder of the front and rear walls, use $\frac{1}{4}$ " by 4" spruce planks. Fit them smoothly along the ribs (Fig. 15), and secure them with $\frac{5}{8}$ " screws. Round off the exposed chine corners so that they will not tear the fabric roofing.

Before covering the top, fit the windows and ventilators, but do not install them. Cover the cracks between the roof planks with masking tape and secure a layer of felt padding on top of the planks with canvas cement. Stretch the roll of muslin sheeting tightly over the padded top, and fasten it in place with copper tacks placed about 1" apart. When cutting felt and muslin for the window and vent openings, leave about 1" of excess material which can be tacked tightly into the frames.

After installing these fixtures—preferably with waterproof calking compound—give the top a coat of canvas cement thinned with the solvent recommended for it by the maker. All exposed plywood on the trailer should now be sanded well and coated with a thin mixture of waterproof glue. Three coats of a good spar or plastic varnish will complete the weatherproofing job, and two coats of enamel take care of the appearance. Use two applications of varnish, enamel, or lacquer inside.

For minimum electrical wiring, fasten a female four-way connector to the steel member holding the hitch ball to your car. The four wires lead, through a rubber-covered cable, to the stop light, taillight, battery, and ground. A corresponding male plug is attached to a 3' section of four-wire cable, which goes to the interior of the trailer. Tail and stop-light wires (as well as a ground) are then run to the tail-stop combination that is bolted to the rear wall. Branches from this light are also run to the clearance lights. Battery and ground wires run directly from the connector to three conveniently located interior fixtures. By



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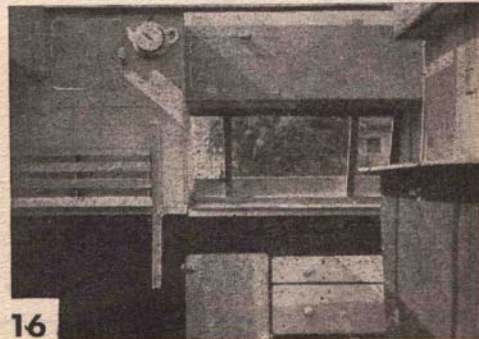
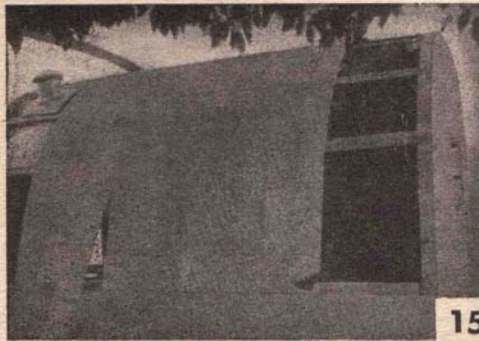
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using regular screw-base bulbs and sockets, the same outlets may be made to change over to 115-volt service when available.

Front braces relieve vibration in the tongue and steady the trailer in motion. To make them, cut four 6" lengths of $\frac{3}{4}$ " electrical conduit or brass tubing, fit one on the end of a $\frac{3}{4}$ " dowel, and bolt it through the chine. Cut the dowel to proper

length, fit another piece of tubing, and bolt the end to the hitch. Install a duplicate brace on the other side.

With the hitch ball installed and the safety chain bolted to the tongue, you're ready to roll. And if your travels up to now have been limited to hotels and tourist camps, you are about to discover a brand-new freedom in vacation motoring.



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