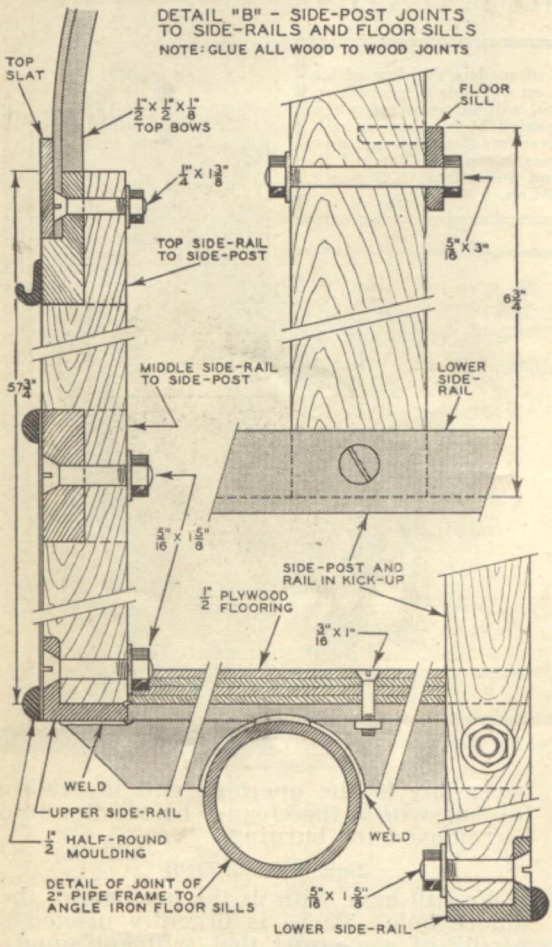
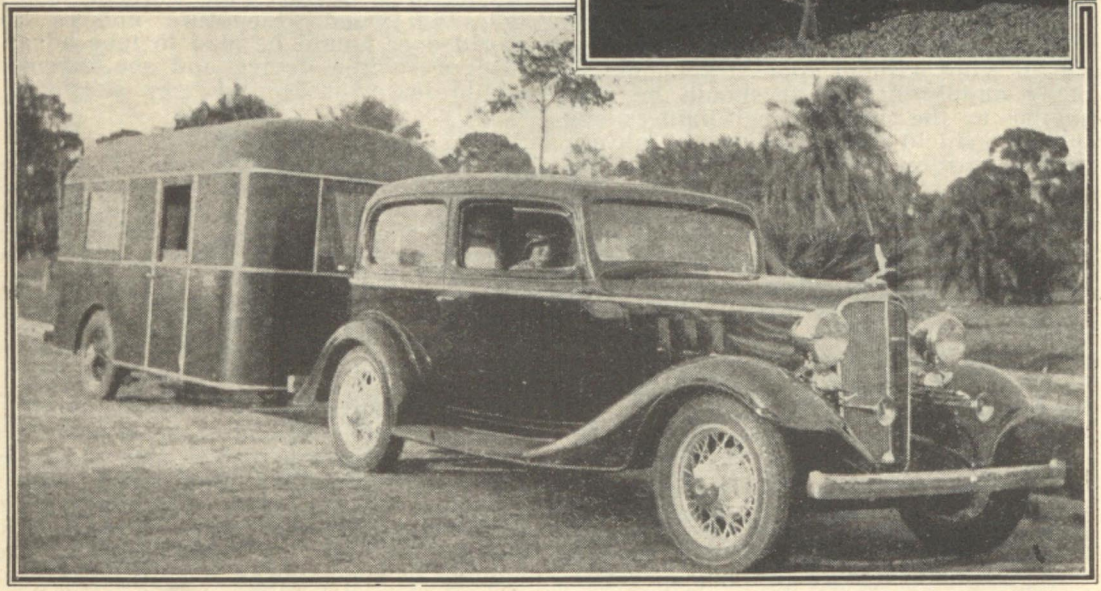
# "Wanderer" a Two-Wheel




**"Wanderer," the king of trailers, represents the last word in luxury on wheels. Sturdy as an oak, she'll stand the hardest traveling without a creak. Four passengers can ride comfortably in her quarters.**

HUNDREDS and hundreds of requests have come to MODERN MECHANIX AND INVENTIONS' blueprint department for a trailer that would accommodate comfortably three or four people on a cross-country jaunt—a trailer that would be a veritable hotel on wheels, filling all traveling needs.

This trailer, which its designer has dubbed "Wanderer," is the answer to those requests. It couples to any passenger car



Top left. Fig. 1 drawings. Below—"Wanderer" on the road. Top right, front view of framework, showing the coupler.

# Cabin TRAILER

by E. S. PURDOM

"Wanderer" all completed and off on a cross-country jaunt. She is safe at all speeds, for her center of gravity is kept low. Width is 67 in., length is 144 in.

in a few moments, and pulls with remarkable ease. It is the most economical means of traveling, for with it you eliminate hotel and restaurant bills and you can stop when and where you like, regardless of weather conditions.

This trailer car is safe at all speeds, for the center of gravity is lower than in the average car. The width is 67 inches, which is two inches less than a small auto; the overall height is surprisingly low; the length is 12 feet, or two feet less than a small car.

As for equipment, it has 32 cubic feet of cabinet space including a 3-foot refrigerator, a sink, running water, gasoline stove, racks for dishes and cooking utensils, a dressing table, three-quarter bed and a pullman type berth, a large folding table, radio and two complete lighting systems, 6 and 110 volt. What more could you want?

"Wanderer" is designed to be as light as possible at no sacrifice in strength, in fact, the weight complete is only 1,225 lbs. Keep this constantly in mind when building car, for this is one of the principal reasons why I cannot recommend too strongly that you follow the construction plans exactly.

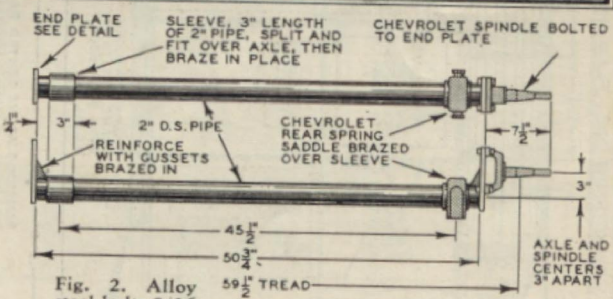
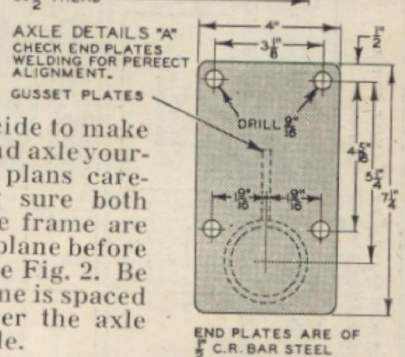



Fig. 2. Alloy steel bolts 9/16 by 1¾ secure spindle to end plate.




If you decide to make the frame and axle yourself, follow plans carefully, being sure both ends of pipe frame are in the same plane before welding. See Fig. 2. Be sure the frame is spaced properly over the axle spring saddle.

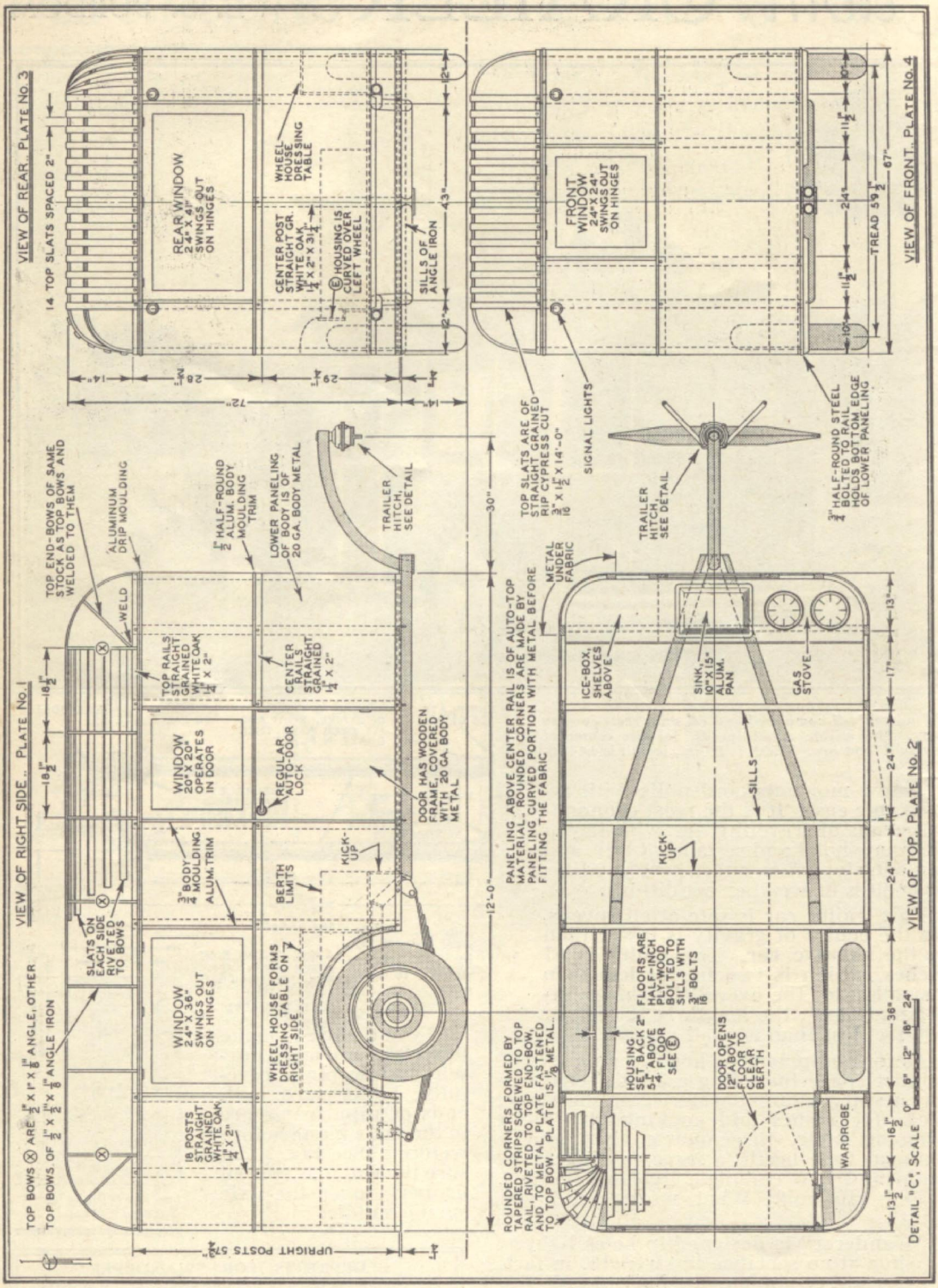
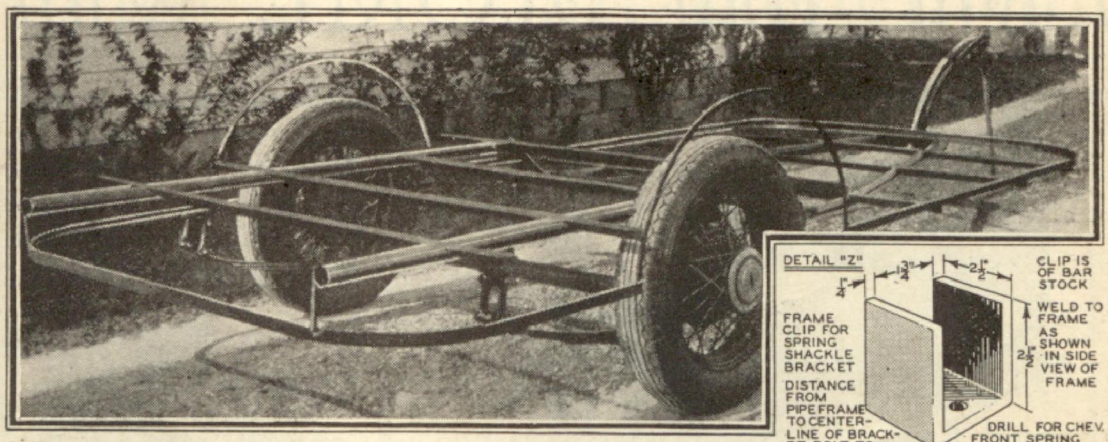



Fig. 3. Uprights and side rails of the body are straight-grained white oak, all of 1¼x2 in. stock. Glue all joints and check for squareness and alignment before the glue sets. To fasten corners in place use 2x⅛ in. steel plate 6 in. long screwed to each end. Side panels are 24 gauge auto body metal. Drawings also show arrangements of interior furnishings. Note that two tiers of bunks occupy right side, while cooking equipment takes up front section. Roof is covered with tan awning material, with auto top material stretched over that. Note that regular auto door locks are utilized. They can be taken from an old car.

# *Floor Dimensions of "Wanderer" 67x144, Smaller than Ordinary Car*




Here's the chassis ready to take the body. It's advisable for you to have local welding shop do the frame and axle assembly job. Cross-pieces are seen in drawings at right.

V out the lower side rail angle to make corner turns. Get a piece of sheet metal and make a template to check these turns, as they must be exact. Do not use galvanized pipe or angle.

Fumes from the zinc are dangerous and you can get a better weld on black steel. Drill axle end plates before welding. After aligning plates carefully weld them in place.

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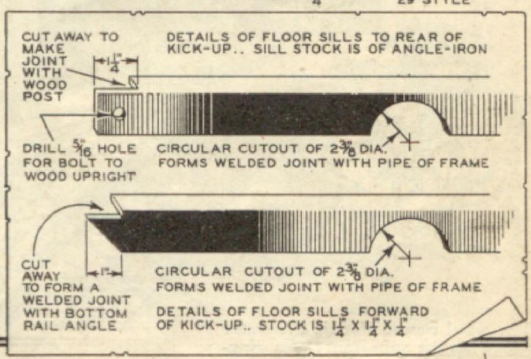


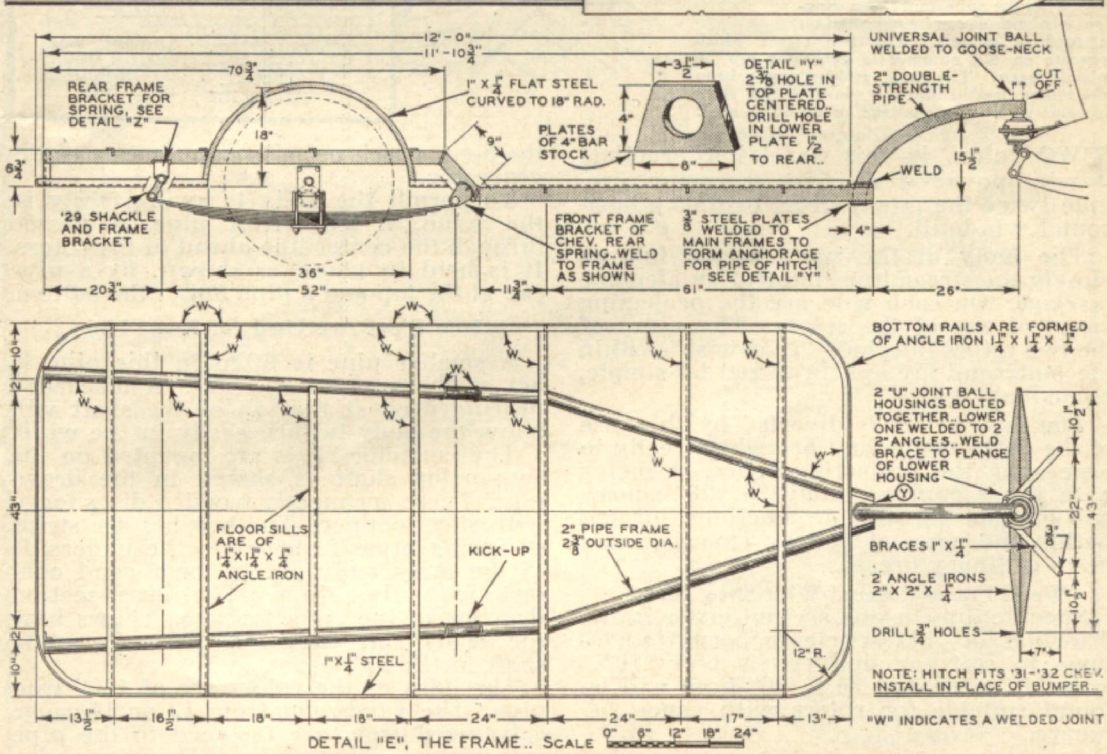


Have welding shop follow these plans when assembling the frame for the chassis. Wheel is located at point which makes riding easy, putting little weight on coupler. Biggest job here will be to get perfect alignment of frame and cross-pieces.

## "Wanderer"—a Two-wheel Trailer

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Then set up in the lathe and take a light cut from the outer face of each plate. This operation will give perfect alignment of the spindles.

The spindles are Chevrolet '29 to '32. All work necessary on spindles is to ream out bolt holes to ½ inch and saw off the boss from upper side so spindle can fit flat against axle end plate. Braze Chevrolet rear spring saddle to axle as they are malleable castings.

Assemble wheels "Chevrolet '29 to '33" and springs "Chevrolet '29 to '33" eight-leaf rear.

Use old style or "'29" spring shackles and bolts. After assembling the chassis block up all four corners and level the frame carefully, for you will find this a great help later on.

### Constructing the Body

You are now ready for the body. (See Fig. 3.) Have your mill supply straight grained white oak post and side rails in net sizes. They are all of one and one-fourth by two inch stock. Cut 18 posts 57¾ inches long, one post to go under rear window 31¼ inches. Cut four side rails 9 feet, 11½ inches long. Also have mill cut 8 oak 1¼ x 2 inch corners. Use your 12 inch radius template to lay out.

Cut four end rails 47 inches long. On two sides two end rails and four corner pieces have the mill babbitt upper outside edge 3/16 inch deep and 1 inch wide as shown in detail "B."

Mortise post and rails as shown in detail B, but do not fit the mortise too tight as it will have a tendency to spring the post and rail out of alignment.

Assemble post and side rails, glue all joints and check for squareness and alignment before glue sets. Bolt post to frame with 5/16 inch flathead stove bolts. Countersink the bolt head in the frame rail.

Now square up and align end and side assemblies and firmly brace in place.

### How to Fit Corner Pieces

You are now ready to fit corner pieces. I find an easy way to do this is to use a carpenter square, fitting the square between the posts, marking on it their position. Then lay the square on top of corner piece.

You can mark and cut for an exact fit. To fasten corners in place use 2 by ⅛ inch steel plate 6 inches long screwed to each end. To brace ends and corners and form bottom of upper cabinets, cut from ¼ inch plywood two pieces 12 inches wide and 66⅝ inches long. Cut ends to fit corner curve, then glue and screw to top of upper end and corner rails.

The floor is ½ inch plywood. Lay and bolt it down with 3/16 flathead stove bolts as shown in Fig. 1.

Now for the top bows. Cut the lower ends of bows to fit rabbet in side rail and bolt as shown in detail (B). Before bolting up bows lay a straight edge or line along center and along each side from bow 2 to 8, then adjust all bows to this level to get a smooth, level top.

For top slats have mill supply 14 ft. x 3/16 inch by 1⅜ inch straight-grained rip cypress.

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Soak ends of slats in water for a few minutes and they will bend readily. Bolt center slat first and work each side down together.

Side panels are 24 gauge auto body metal. Nail only upper edge and ends. Lower edge is held in place by 3/16x⅝ steel moulding bolted through side panel and rail as in detail B. Allow ½ inch from top of side panel to top of middle side rail for upper side cover nailing space.

At this stage I prefer to build inside trim and cabinets. For the upper end cabinets we already have the bottoms in, so we frame up with ¾x-1¾ inch stock and panel with ¼ inch plywood. Make door from ¼ inch plywood and swing from top.

Front lower cabinet includes refrigerator, sink, table, stove and two storage cupboards. Build in as in Fig. 3. Use ½ inch plywood for top, cut ends to fit body corners, glue and screw to top of middle end and corner rails. Ice box is insulated with two layers of celotex on sides and top, bottom four layers. Use 26 gauge galvanized iron for box lining.

### Trailer Has Built-in Wardrobe

Build in wardrobe and right wheel housing as in plates 1, 2, 3, 4. The top of the wheel housing makes the dressing table. Left housing is made from a '25 or '26 Chevrolet rear fender cut off and bolted between lower side rail arch bar and side panel. Use half circle of body metal left when you cut out wheel clearance from side panel to side up inside of left wheel housing.

The next step is the painting. I painted all inside a dark green except door panels which were stained and varnished. Paint outside lower panels to match tow car.

After painting comes the top and side covers. You will find it makes a much better job to first cover top and upper sides with tan awning material, and then stretch auto top material over that.

When cutting be sure grain in material runs lengthwise with the car. I would advise having an auto top man cut and fit the top, as an ordinary sewing machine will hardly handle the job.

### Top Covered By Auto Material

For the top use two pieces of 54 inch double texture auto top material, stretched over top of trailer with seam in center. Fold under ¾ inch and lap over the other side to make center seam and temporarily tack in place, but leave both ends loose for about 30 inches. Pull down and temporarily tack sides.

Now pull in end centers, lap over and temporarily tack. Cut corners as in the drawing. Pull out most of the wrinkles, lap over and tack.

Chalk mark all seams, allowing ¾ inch for turn-under. Pull tacks, remove cover, and sew with heavy waxed thread. Then put cover back on top.

Starting with a tack in center of each end, pulling out all wrinkles as you go, next tack center of each corner and so on. It may be necessary to dampen the under side of material at corners. It also makes a smoother job to pad corners and end.



## "Wanderer"—a Two-wheel Trailer

Use ¾ inch aluminum runningboard moulding to bind sides of windows and doors. To bind bottom edge of upper side panel, use ⅝ aluminum crown moulding. For edge of top and side panel use aluminum drip moulding. The top material and mouldings can be purchased from any auto trimmers supply company or from your Chevrolet dealer.

Next job is to hang windows and doors. Swing the windows from the top. Hang the door with hinges to the front. Go to a junk yard and buy a lock and control board assembly from a right front door of a '25 or '26 Chevrolet closed body. Cut off and install complete on your door.

For water supply use a galvanized tank 10 inches in diameter and 24 inches high, installed in left front corner under sink, with a radiator filler cap on outside of body. The discharge pipe comes in at the bottom of tank, and a tire pump is valved in at top of the tank.

Fill tank ⅔ full of water, give pump a few strokes and there you are.

### Installing the Bunks

For the bunks I use a standard ¾ bed spring. Weld on short angle legs and bolt to floor. For upper berth use single or double canvas cot hooked to brackets screwed to side posts over lower berth. To support outer edge use two folding legs to rest on floor. When not in use you can swing whole assembly up and hook to roof bows.

Use a four-wire, rubber-covered cable from trailer to plug-in on car. Install storage battery (6v) in trailer, ground the negative terminal to the frame and to ground wire in cable. Then connect positive wire in cable which continues to battery side of generator.

Use Chevrolet '31 or '32 stop and tail lights, bolting one on each side of lower back panel. As lights and panel are grounded through frame and cable to car, all we have to do is continue tail and stop light wires from the car through the cable and then to their respective terminals on trailer lights.

Install an auto dome light on the forward side of the wardrobe, and another in bottom of forward upper cabinet directly over icebox.

This trailer gives the constructor an unlimited opportunity for making those little fittings and cabinets and gadgets that so delight the builder.

## Daring Death With Cameraman

*(Continued from page 135)*

he cannot pause to inquire as to the weather. He can not wait until ideal conditions prevail. He must go or the scene he is after will no longer exist and a rival will beat him to it.

Lieut. Eddie Dowling of my staff was covering army maneuvers from the air not long ago when the plane he was riding dove into New York Bay. A parachute jump was out of the question because the plane was too close to the water. A fireboat picked him and the pilot up, and, after a brief spell of recuperation, he was back in action again—all set for new adventures.

The news cameraman of the newspapers and the movies is the friend of the high and low. That's all in a cameraman's life.