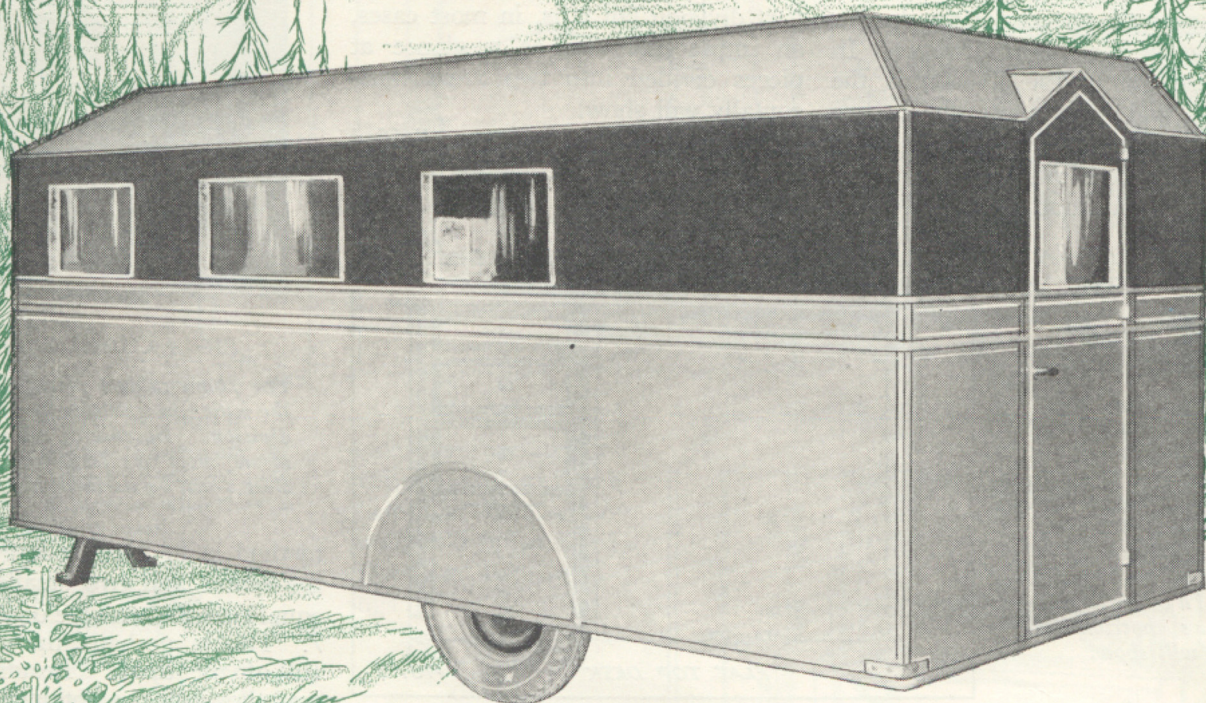


TODAY WE TRAVEL



Follow the Trails with this Trailer

PEOPLE in every walk of life, and for various reasons, travel, and as certainly as that fact is established, these same people must live wherever they travel, regardless of the reason which actuated them. Thus we have a perfect alibi—if one is needed—for the existence of the house trailer.

Primarily, a trailer is used for the

delightful purpose of seeing the country, getting into the out-of-the-way places with convenience and comfort. It may be used on those colorful fishing trips, for hunting, and for all vacational purposes.

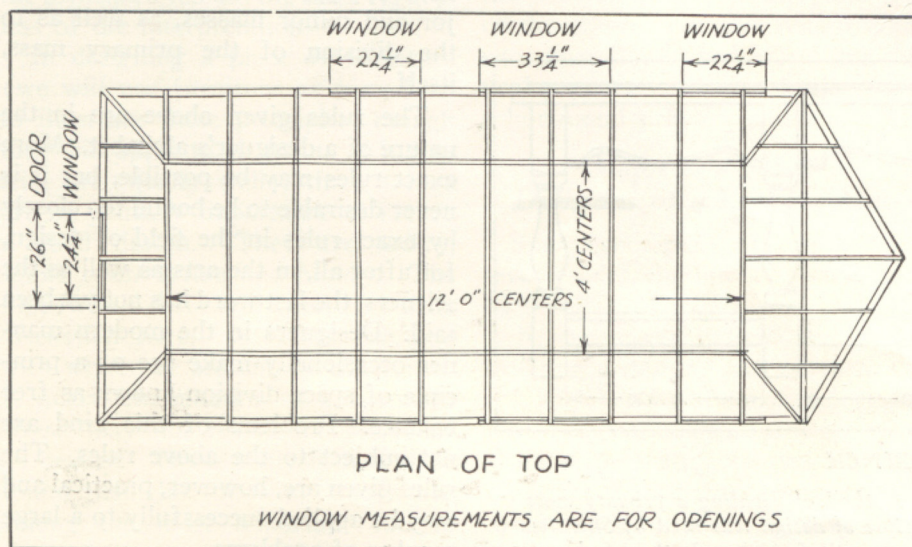
From the business standpoint, it may be utilized to sell goods, to lecture, to pursue the occupation of a traveling auditor, to carry polo

ponies and race horses, to repair locks and sharpen shears. But regardless of purpose, *we travel*, and a house trailer adds pleasure and profit to the picture.

A few years ago it was not at all uncommon to encounter scores of people who had never been out of their own country, and countless numbers who had never traveled out of the State in which they were born. Today on the highways we meet and pass untold numbers of people who have traveled over many States and carried their homes behind their automobiles.

See America in a Trailer

Without question a house trailer is the finest and cheapest way to see any or all parts of the forty-eight States of the Union, Canada, Mexico and the Canal Zone. The idea was developed primarily for the reason that there are good roads everywhere. All you need to have is any car and a good, well built trailer, designed along modern lines. We are told upon good authority that a



trailer which is well planned for its function costs the automobile owner only about 5% additional in expense to draw it. These are the two dominant reasons for the stupendous increase in the use of trailers during the last few years.

In one of the States there is a trailer for every three and one-half cars owned in that State. We are told they are building more trailers every day. This is something which may not be said of any other article being produced during these depression times.

While this mode of travel is becoming very popular, it is, perhaps, very natural that the people who have been stricken with the fever of building their own house trailer will not all follow the sensible and reasonable course in such building.

Skill Is Required

When the old, wheezy, original automobiles lumbered by the first horse stampeding days and the public generally began to recognize their unlimited possibilities, all kinds of crafts began to put in an appearance on the highways. These crafts were generally cumbersome and unwieldy; uncomfortable, and withal expensive. As time progressed, people began to learn that the engineering ideas which made the old buckboard behind old Dobbin a dependable conveyance had their limitations, and so, by a process of elimination, buggy axles, buckboard springs and surrey bodies faded out of the picture.

So it is with the house trailer. The finest automobile axle and automobile frames in the world just cannot adapt themselves to the demands of the satisfactory house trailer, and it is bound to cost a number of people a considerable amount of money to get that fact placed in some proper niche where they will never forget it. The early days of the automobile made it always necessary to have a blacksmith's shop as an auxiliary to the garage to put in frame sections, truss rods to strengthen frames and axles, and various braces and supports. Automobile engineering today has changed that picture.

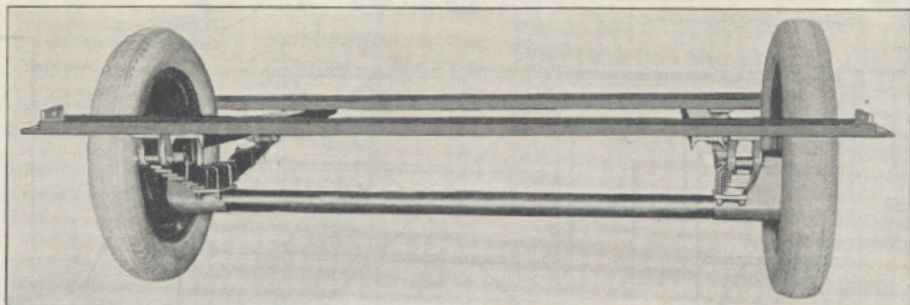
The cabin trailer picture is changing too. It is a natural resultant of improved highways and of considerable advertising of one's own country and adjoining countries. Those who have followed the high-

ways and byways become confirmed addicts to this form of traveling and are able to see more country comfortably than by any other means of locomotion. Independence and economy are the highlights in moving about with a trailer. Packing and unpacking, pitching tents in rain and blow, are obviated. Your home is behind your car; a roof over your head and a comfortable bed available. Your luncheon table is conveniently ready for that voracious appetite. You have the convenience

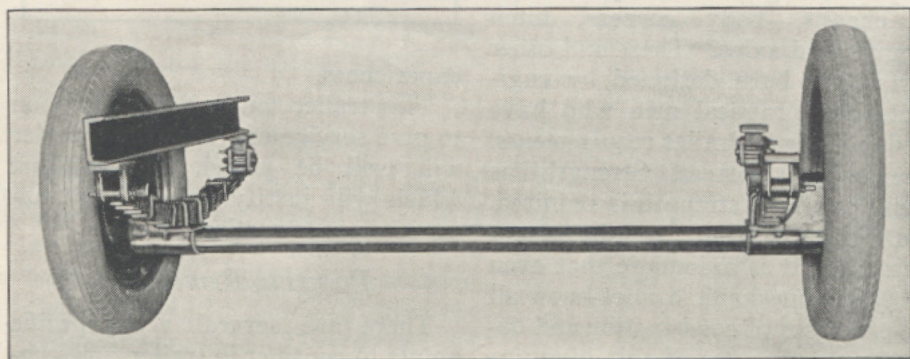
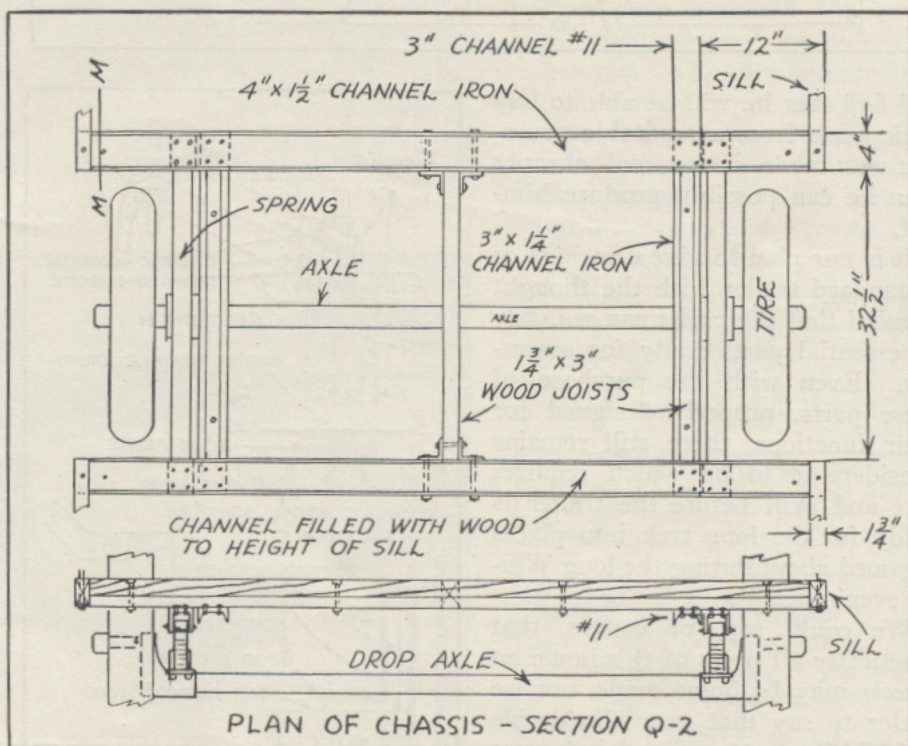
of home at every stop as well as on the road.

Avoid Makeshifts

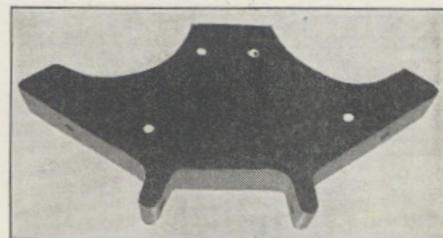
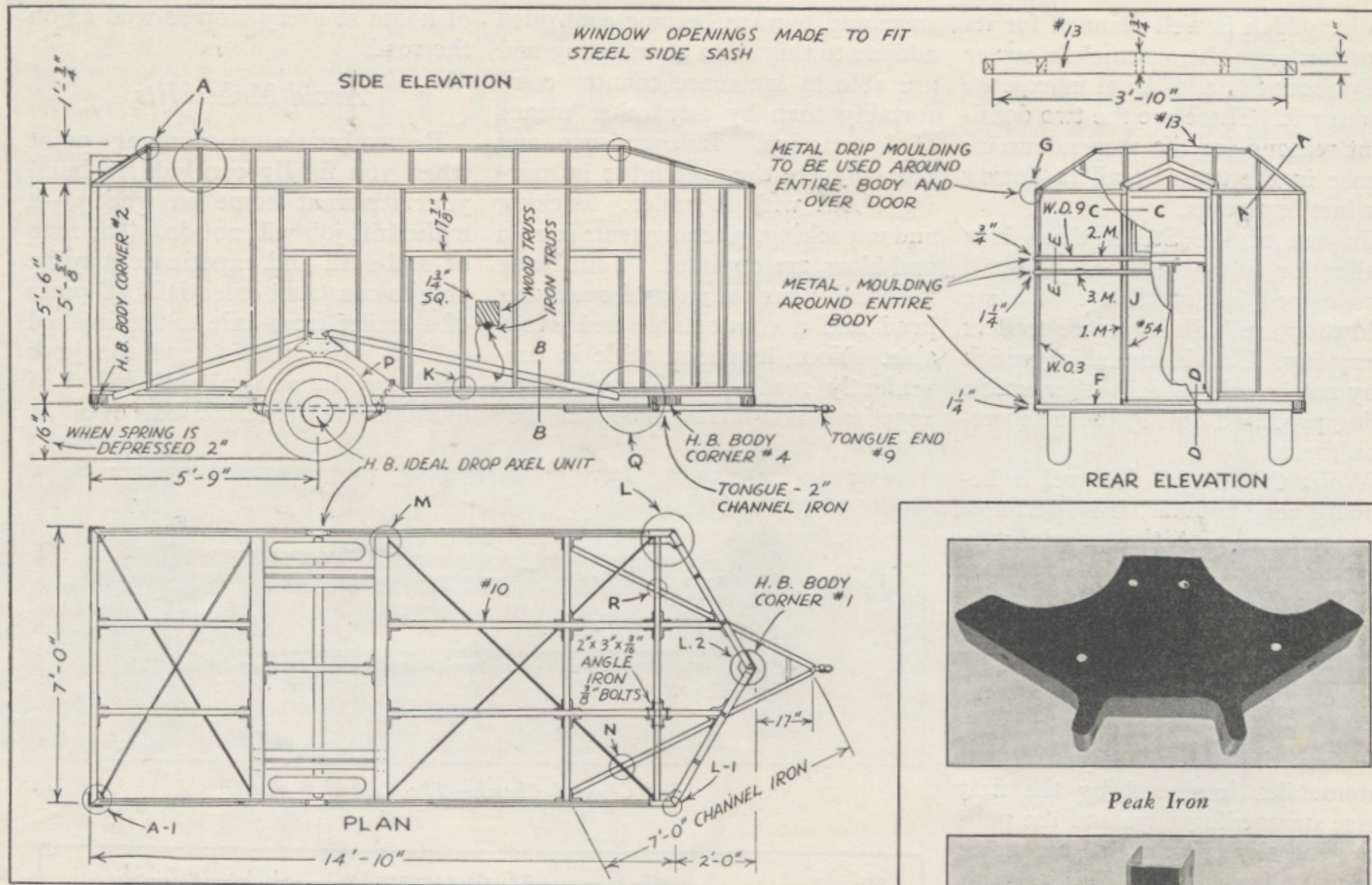
Remember a paramount point when you finally conclude to build your itinerant home on wheels,—a makeshift job will not do. The man of real skill and experience may be able to construct essentially all parts of a trailer from axle to the finished cabinet work within, and the junk yard may be an available source of questionable material, but even he



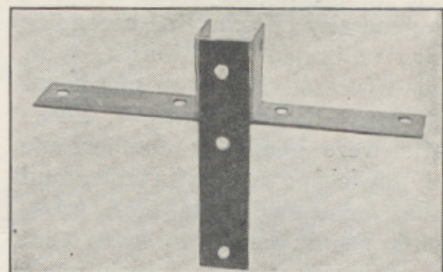
Ideal Channel Chassis—The Central Unit



Axle Assembly



Peak Iron

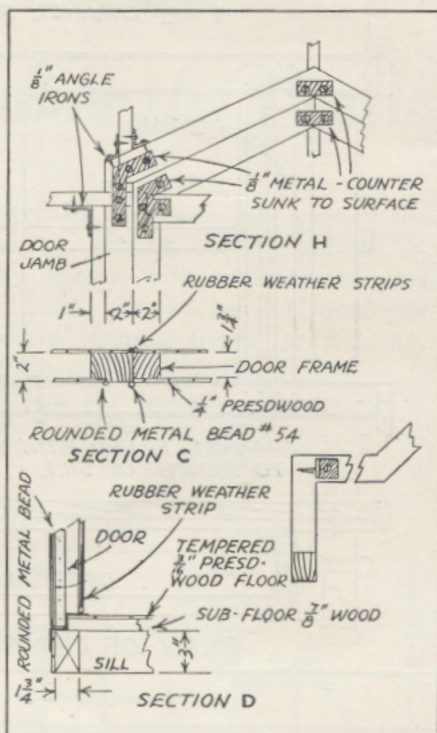


Studding Bracket

will find that he will be able to buy basic parts from a reputable manufacturer made better and cheaper than he can possibly produce himself.

It is our plan to give drawings of a standard trailer with the thought in mind that the craftsman will buy all essential parts ready for assembly. Even with the purchase of these parts, properly designed for their functions, there still remains considerable to do which requires care and skill before the trailer is ready for the long trek into places dreamed about during the long Winter evenings.

We could say, of course, that practically all parts of this home on wheels may be home made, but we prefer to say that you who decide to build it must use good judgment in purchasing all basic parts such as chassis, body corners, hitch tongues and axles. These and other parts have been designed by engineers and practical men who have made a study of trailer requirements. The design is correct. Strength has been put where strength is required and lightness where weight is not essential. It is axiomatic that even the skilled mechanic cannot know all the processes of construction and design of a structure of this kind, inasmuch as they are unrelated to his



experiences.

This trailer can be depended upon to give service of which the traveler will well be proud, and comfort which will justify the nominal expense of construction.

Points to Remember

There are several very specific points to consider in trailer construction. To build these without re-

course to sound practical engineering advice is impossible. The trailer must have steady riding without side roll. Those of you who have seen trailers bobbing along the road following a cork-screw path can appreciate that this factor is an essential one.

Every trailer should have ample road clearance so it may travel along over well crowned roads and make progress where rutted roads predominate. There must be broad spring supports and a low floor line. A triumvirate of essential factors is lightness, rigidity and roominess. The combination of the first two is difficult to obtain by the novice. To the experienced designer, however, these are factors which are actually built into modern trailers of which the one we describe is outstanding.

Rigidity is assured in this trailer by the use of truss rods. These rods may be readily adjusted at any time, if required, by the use of wrench on a nut. This particular trailer, because of this built-in feature, will

not develop squeaks and play. Roominess is provided in it through the use of a wide tread.

Construction Suggestions

If the craftsman will adopt a construction plan and follow it closely, he is bound to produce a staunch, sturdy trailer. Painstaking work is the backbone of success. Substitute parts or methods are not "just as good." Experience, through construction of scores of dependable trailers, has convinced the writer that there is no royal road to success and no substitute for tried out parts and materials.

The backbone of the chassis illustrated is the channel frame section shown at Q2 on the sketch. The 4" channel should have 1½" flanges and ⅜" flat section. The two cross sections are 3" wide x 1½" flanges with a ¼" web or flat section. All

Q2. Rivet or bolt this frame securely. Bolt the spring brackets to the bottom.

Remember that the length of the chassis may be reduced by eliminating one or more of the studdings. These are set 16" center to center. The length may be increased by the addition of one or more studs. Refer to the side elevation of the trailer for stud placements.

Joists and Sills

Clear white pine or white spruce, well seasoned, are fine woods for sills and joists. Other woods, secured locally, are as dependable, but remember lightness and strength are paramount. The stock is 1¾" x 3" and does not necessarily need angle steel lamination, although it should add rigidity. If steel is used, use a light gauge, as shown in section K,

straight side. However, they must have a shoulder setting on the top of the sill as shown.

Studs and Stud Brackets

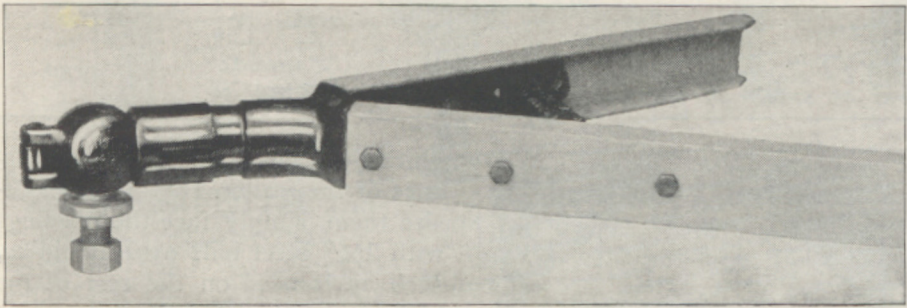
The strength of this trailer is due to the truss rods, malleable corners and stud brackets. These parts are shown in section Q and side elevation.

Brackets are used at both top and bottom of the studs and also on wood truss at section Q, by bending slightly on the wood truss fitted between studs and over truss rod Q-1. Place a thin block under the lower leg of this bracket as shown at section Q. On the top of the floor, where the floor lies on the outside sills, set a plate 1" x 1¾" onto which the studs set. Section K shows this. The stud brackets No. 7 are countersunk on the outside to provide a straight surface for the siding. Refer to section K.

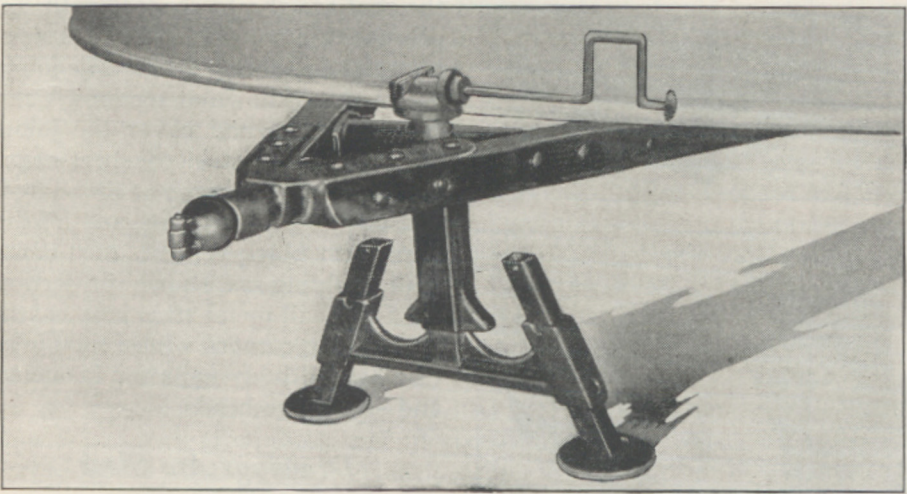
Body Corners and Siding

The siding should butt against the body corner irons on the bottom sills, so that these come to the outside surface. Then, when the finishing moulding is put into place, as shown at section B, there is metal into which to screw the moulding. This makes a very rigid corner to stand the strains and stresses.

A corner of one joist is shown in a sketch, using four sections of angle steel bolted with ⅜" bolts. This results in great rigidity. All joints should be made in a similar manner as shown on the plan view of the



Tongue End and Hitch



Parking Legs

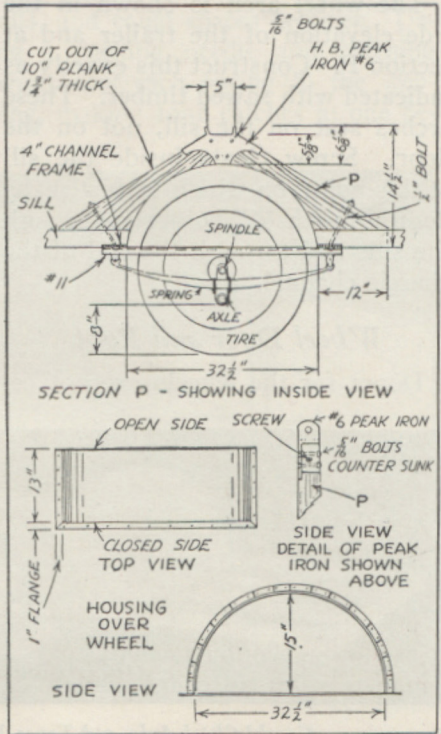
of the dimensions shown are for a 72" tread.

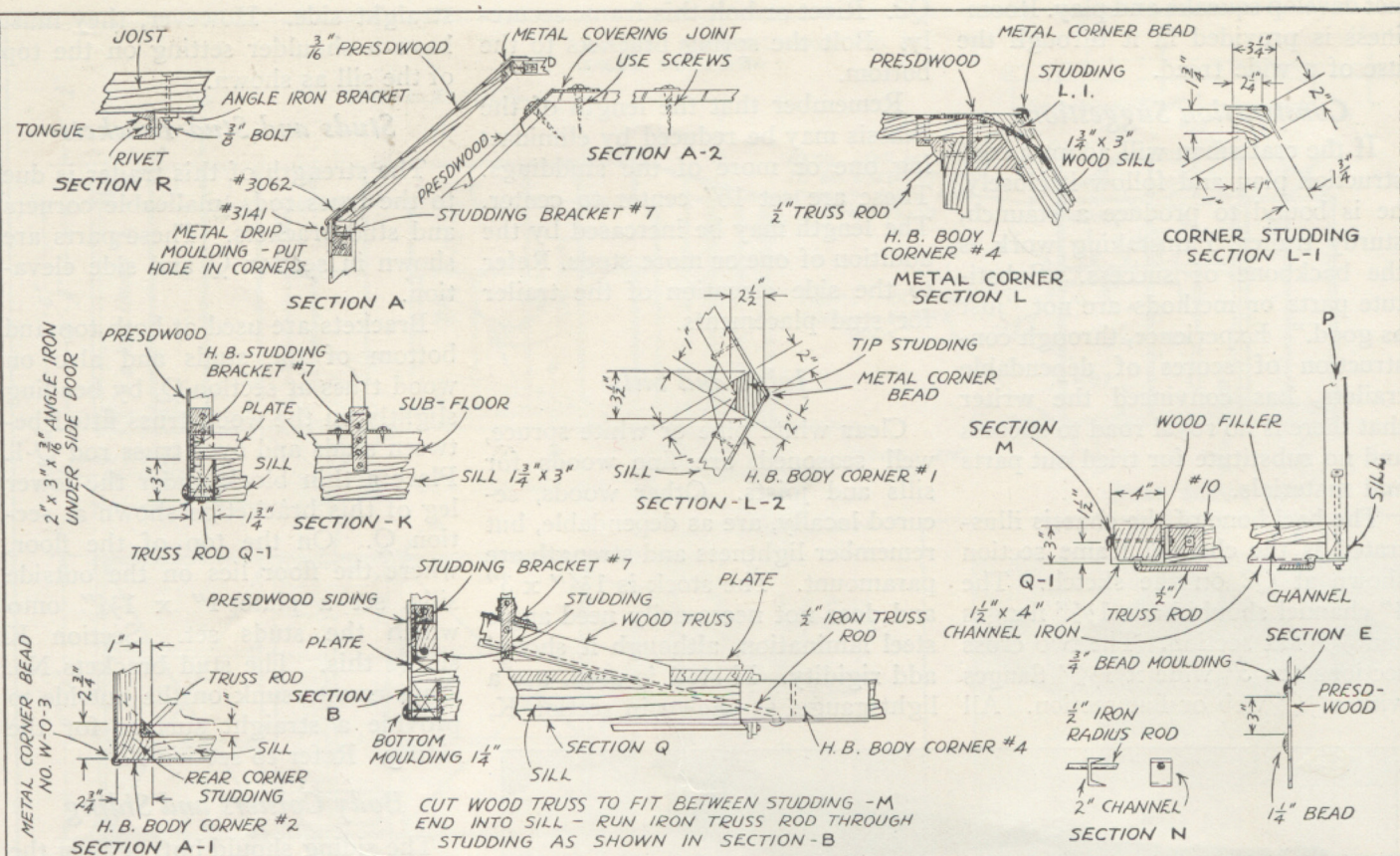
Note that the flanges are cut off the 4" channel on each end so that the 1¾" x 3" sill can fit into it. The structure is strengthened on the ends by 2" x 3" sections of angle where the flanges are cut off. Cutting off these flanges reduces by 1½" the height of the trailer. Fill the cross 4" channels with wood as shown in the elevation section at

on the inside of the sill. You will need to fasten the siding to the outside.

Corner Studs

The rear corner studs are shaped from 2¾" x 2¾" sawed stock and set into the body corners No. 2. The bottom sills butt against these studs. Section A-1, L, and L-1 show the front corner studs. They are set out on body corner No. 4 to form a





chassis. Countersink all bolt heads on the outside of the side sills.

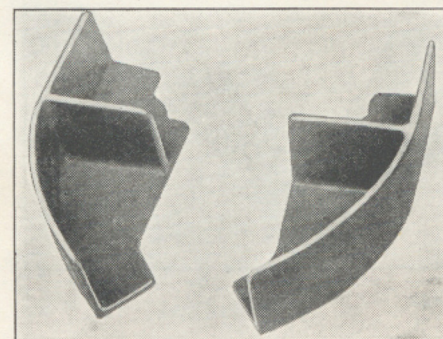
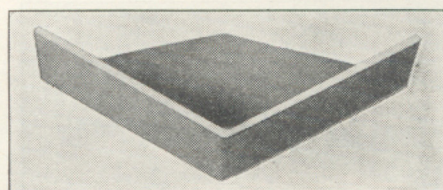
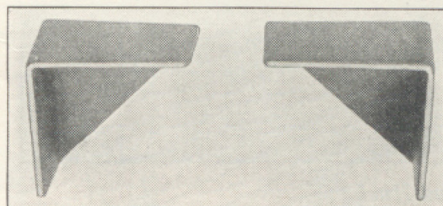
The Tongue and Wheel Arch

The tongue, as shown, is made of 2" channel iron. The fastening points are the same if angle steel is used. It should be fastened to the sill and joint with angle steel, riveted to the side of the tongue and bolted to the frame as shown at section R. This scheme of fastening will not weaken the channel.

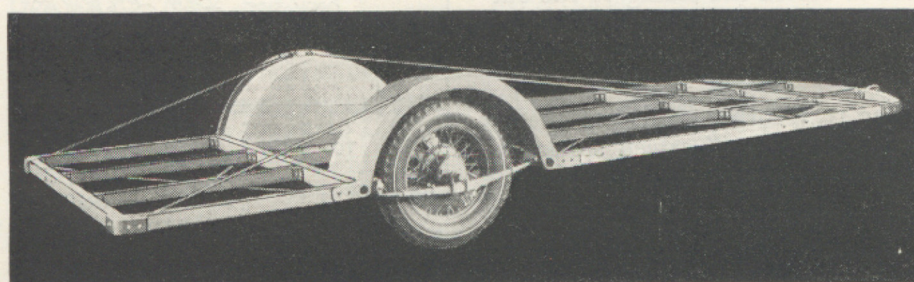
The wheel arch is shown in the side elevation of the trailer and at section P. Construct this exactly as indicated with sawed timber. These arches seat on the sill, not on the floor. Screw cleats inside the sill at this point, on which to fasten the flooring, with $\frac{1}{2}$ " bolts run through the sills and through the end of the chassis channel.

Wheel Door and Roof

Doors for the wheels are not es-



Malleable Body Corners



Combi-Chasi-Axle and Truss Rods—Making Complete Chassis

sential, but add much to the appearance of the trailer. If you do not desire them, simply face the openings with $1\frac{1}{4}$ " steel half oval moulding, such as is used on the rest of the body.

In section A the side quarters of the roof are shown covered with $\frac{3}{16}$ " composition material. Use the same material on the top deck. The joints are made as shown at sections A and A-2. Cement and cover the joints with a narrow strip of sheet metal and fasten with screws as illustrated. Put on the drip molding and fill the joint with black cement, then cover with molding as shown in section A. Solder all metal strip joint coverings at the corners where they join. Use barbed body nails for fastening and solder the heads.

Drawings Are Clear

The drawings and sketches which illustrate the foregoing descriptions should give to the craftsman all necessary details for beginning the construction of this excellent trailer. Further instructions will follow in the next issue of POPULAR HOMECRAFT. Where references have not been made to the plans, we have considered the sketch itself fully self-explanatory.

We have detailed blue prints for this Trailer available for \$3.00. Write the Service Department. Inquiries on construction will receive prompt attention. THE EDITOR.

TODAY WE TRAVEL

Follow the Trails with this Trailer

THE response to the description of the trailer given in the last issue of POPULAR HOMECRAFT has more than met our expectations. We emphasized the fact that a trailer must be well built, of standard parts, to stand the wear and tear of travel over a period of years. Well constructed, this trailer should give many years of dependable service. And we wish to re-emphasize the fact that all basic parts should be secured from a dependable dealer; parts which have been designed by experts in the field. While some craftsmen may have the ability to construct many of the parts, such as studding brackets and body corners, it is questionable whether the ex-

pended time justifies the saving in expense.

The first article on the building of this trailer described the various essential parts of the structure and working drawings of the wood fabrication. Refer to these in the following description.

Floor and Iron Rods

The floor is laid on the sill construction first, then the plate shown in Sec. K. Be sure the plate is true before executing the studding. Always use felt on a wood floor. Paint the floor first and lay it over the wet paint. Then put on a good linoleum block flooring or special flooring.

Note that the strut sill over truss

rod Q-1 is notched into sill. Sec. Q. At the other end it stops against lugs at the peak irons, as shown in the side elevation. It is fitted tightly between studdings and held in a bracket, as shown at Q. After securing the ends, the nuts on the rod at the top end should be tightened.

Molding or Beading

The drawings show $\frac{1}{4}$ " composition material for exterior and inside. This material is Masonite, a name applied to all Presdwood. This particular material must be Tempered Presdwood. It may be obtained from any good lumber dealer or builders' supply house, and is a composition which will stand up under all weathering conditions and strains. It may be painted as well as wood.

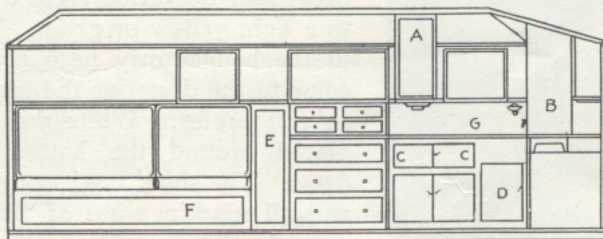
Fasten the Presdwood with flat head screws, countersunk, and cover the heads with a good body builders' putty. Brass screws are not recommended; they twist off too readily.

The composition material is not made in sheets larger than 4'x12"; therefore, it is necessary to joint the material as shown in the drawing in the previous issue, rear elevation. Make the horizontal joint on the line of molding 2-M. The molding is $\frac{3}{4}$ " wide.

The lower molding in Sec. E and the bottom molding F, are $\frac{1}{4}$ " half oval iron. This should be fastened with long flat head stove bolts, reaching through the studding above and the sills at the bottom. All nuts should be countersunk where they interfere with the interior finish. The heads of these bolts and the end joints, where the molding is joined, should be soldered and filed smooth.

The top $\frac{3}{4}$ " molding, 2-M, in rear elevation, covers the composition joint just under the windows. This molding is known as W.D.9, to fit $\frac{1}{4}$ " Masonite. Top or Drip Molding G covers the lower end of the quarter deck. Lapping over this is another molding, as shown in Sec. A. Lay this on white lead or block top cement and screw it down securely. Holes should be drilled in the drip

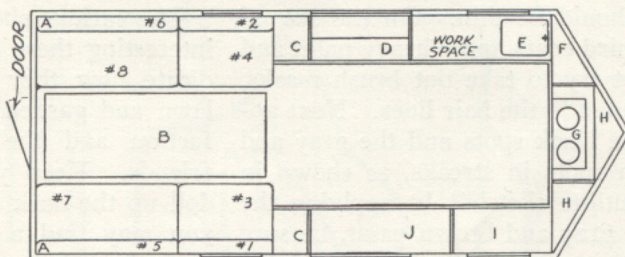
SLEEPING ACCOMMODATIONS FOR FOUR PERSONS



SIDE ELEVATION

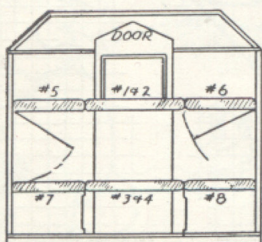
- A - FLOWER BOX
- B - WATER TANK
- C - ICE BOX
- D - STORAGE
- E - CABINET
- F - STORAGE FOR BEDDING
- G - STAINLESS STEEL

- A - BACK CUSHION
- B - FOLDING TABLE
- C - CABINET
- D - DRESSER
- E - SINK
- F - WATER TANK
- G - STOVE
- H - CABINET
- I - FOOD STORAGE
- J - CLOTHES CLOSET
- K - STORAGE UNDER SEAT CUSHIONS #3-4-7-8



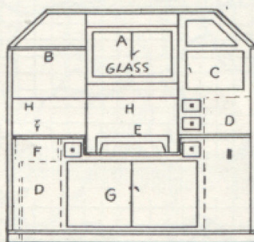
FLOOR PLAN

BACK CUSHIONS #5-6 ARE HINGED ON TOP AS SHOWN IN REAR ELEVATION - #1-2 ARE FITTED TO MAKE UPPER BED - BY MAKING CUSHIONS 24" WIDE x #5-6 - 4' LONG - #1-2-3-4 - 32" LONG OR A BIT LESS SO AS TO FIT, WILL GIVE 2 BEDS 48"x80" OR 4' x 6'8"

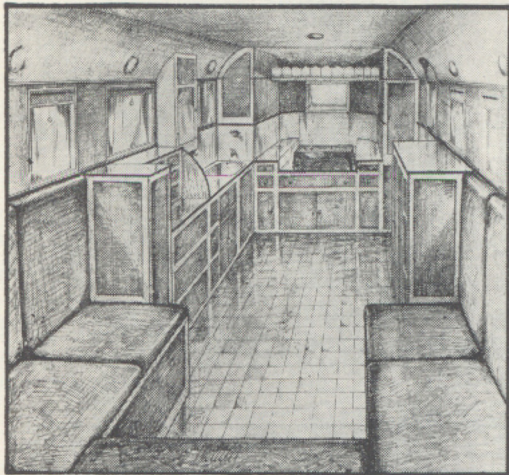
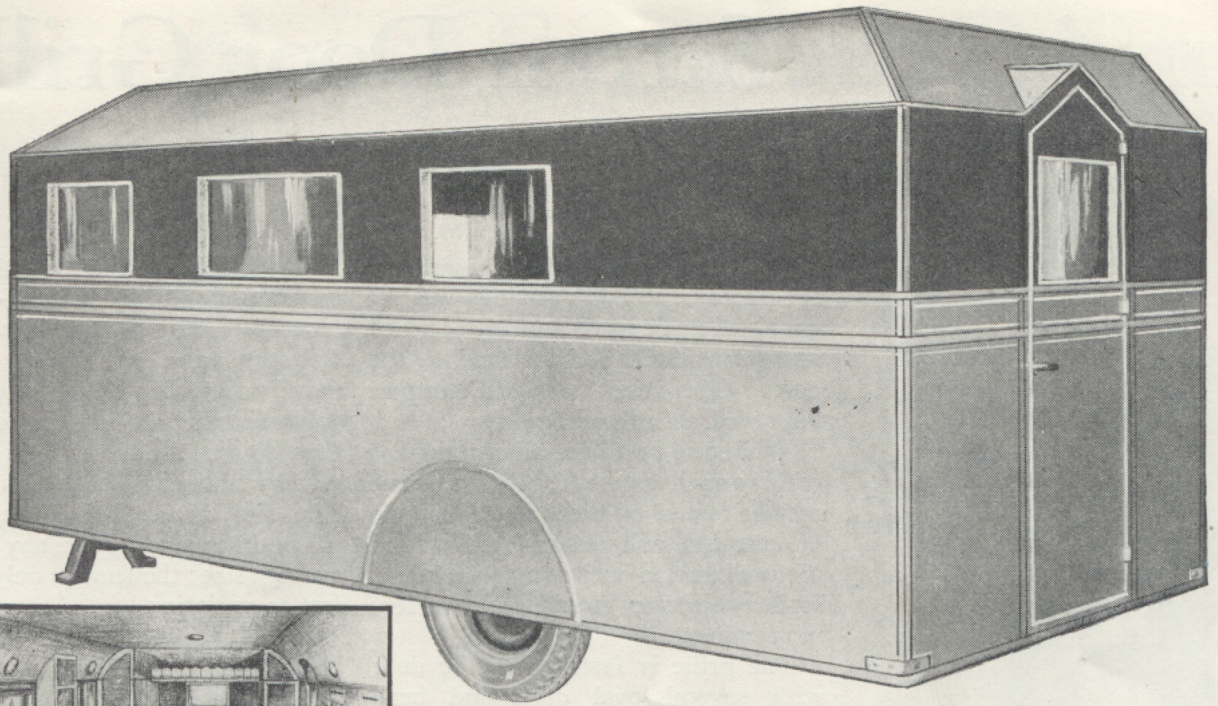


REAR ELEVATION WITH BEDS IN PLACE

- A - SPICE CABINET
- B - WATER TANK
- C - CABINET
- D - STORAGE
- E - STOVE
- F - SINK
- G - CABINET FOR POTS & PANS
- H - STAINLESS STEEL
- I - FOOD STORAGE



FRONT END ELEVATION



molding, at the corners, to let water out.

Molding Trims

Perpendicular moldings should be used where the sheets of material join, and where paneling is desired. Also where the siding joins the door jambs, as shown in Sec. C. This molding is half oval steel, and is fastened with countersunk flat head screws, soldered.

Aluminum molding, shown around

the door in Sec. C, bends readily and gives a finish as well as provides a door stop.

Use only barbed body nails or screws throughout. Screws are better to use, and if bought in quantities are not expensive.

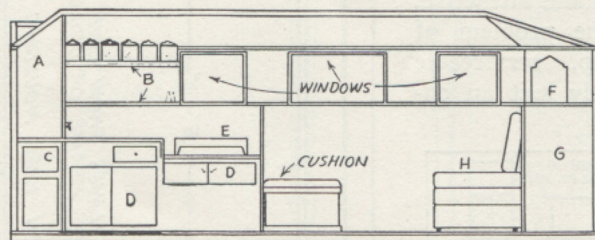
The Interior

We can no more than suggest an idea or two for the interior, inasmuch as the worker will wish to arrange it to suit his own fancy, as well as pocket book. There is no rule for the placement of stove,

beds, studio couch, or any other part of the interior; it is entirely a personal matter.

Two suggestions for interior arrangements are given; accommodations for two persons and for four persons. The inside wood work may be any kind, and painted or stained as desired. Many of the interior fixtures may be constructed of composition board, such as is used for the exterior. It will not split, will take paint, and is very satisfactory for cabinets, cupboards, tables, cushion backs and partitions. It saves space and weight.

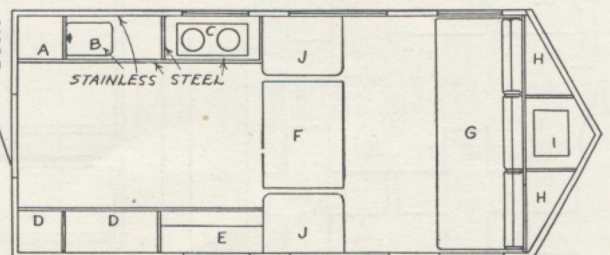
SLEEPING ACCOMMODATIONS FOR TWO PERSONS



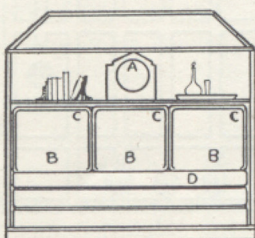
SIDE ELEVATION

- A - WATER TANK
- B - SHELF
- C - ICE BOX
- D - CABINET
- E - STOVE
- F - RADIO
- G - STORAGE
- H - STUDIO COUCH

- A - WATER TANK
- B - SINK
- C - STOVE
- D - CLOTHES CLOSET
- E - DRESSER
- F - FOLDING TABLE
- G - STUDIO COUCH
- H - STORAGE
- I - RADIO
- J - STORAGE UNDER CUSHIONS



FLOOR PLAN



FRONT END ELEVATION

- A - RADIO
- B - CABINETS IN BACK FOR STORAGE
- C - CUSHIONS
- D - STUDIO COUCH