

# Easy Model-Building

## Spanner's Special Section for Juniors

I HAVE two new models for you this month. One is the fine Jeep seen in Figs. 1 and 2, which can be built from the parts in Outfit No. 1. The other is the Cabin Monoplane shown in Fig. 3, built from parts in Outfit No. 2.

You should start building the Jeep with the main frame or chassis, which consists simply of a  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  Flanged Plate. Make the sides and top of the bonnet by bending a  $5\frac{1}{2}'' \times 1\frac{1}{2}''$  Flexible Plate to the shape shown in the pictures, and then bolt it to the Flanged Plate. Use the same bolts to fix in place two  $2\frac{1}{2}''$  Strips 1. A  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip is next bolted between the upper ends of these Strips to represent the windscreen frame. Then bolt a Flat Trunnion on top of the Flexible Plate forming the top of the bonnet, using a  $\frac{3}{8}''$  Bolt fitted with two Washers to attach the Plate at the front.

Now fix a  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip 2 between the sides of the bonnet, and attach a  $2\frac{1}{2}''$  Strip 3 to a Fishplate bolted to the Double Angle Strip. Two further Fishplates fixed to the Double Angle Strip are used to complete the front of the radiator. The headlamps are represented by Washers placed on bolts fixed in the end holes of Strip 3. This construction is clearly shown in Fig. 1.

The next step is to make the sides and back of the body. For these you need a  $5\frac{1}{2}'' \times 1\frac{1}{2}''$  Flexible Plate bent as shown in Fig. 2, and bolted to the Flanged Plate. Fix a Flat Trunnion to the back and use the same bolt to support an Angle Bracket. Now fix a  $2\frac{1}{2}''$  Strip 4 to the Angle Bracket to make the rear seat. For the front seats you require two Trunnions bolted together as shown. Attach these to a  $\frac{1}{2}''$  Reversed Angle Bracket 5 bolted to the Flanged Plate. Take two  $5\frac{1}{2}''$  Strips, and arrange these one on each side between the Flexible Plates, as shown at 6 in the pictures.

Now you can fit the wheels. These are 1" Pulleys fitted with Motor Tyres, and they are fixed by their set-screws on  $3\frac{1}{2}''$

Rods passed through the appropriate holes in the flanges of the Flanged Plate forming the main frame of the Jeep. Make the mudguards from  $5\frac{1}{2}''$  Strips arranged as shown and attached to Angle Brackets bolted to the Flanged Plate. You can represent the spare wheel by two Rubber Rings tied together and attached by Cord to the back of the body. Then fit an Angle Bracket at the back by means of a  $\frac{3}{8}''$  Bolt, and you have completed a simple but

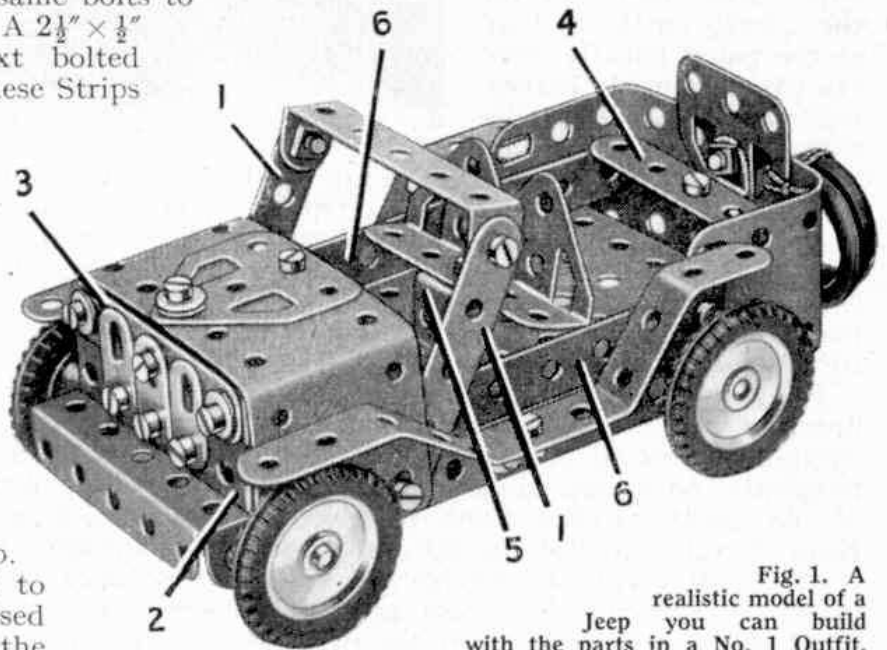


Fig. 1. A realistic model of a Jeep you can build with the parts in a No. 1 Outfit.

delightfully realistic miniature of this well known vehicle.

You will require the following parts to build the model Jeep: 4 of No. 2; 4 of No. 5; 3 of No. 10; 4 of No. 12; 2 of No. 16; 4 of No. 22; 28 of No. 37a; 24 of No. 37b; 4 of No. 38; 1 of No. 40; 2 of No. 48a; 1 of No. 52; 4 of No. 111c; 1 of No. 125; 2 of No. 126; 2 of No. 126a; 4 of No. 142c; 2 of No. 155; 2 of No. 189.

### Cabin Monoplane

You should start building this model by assembling the two strips 1 that form the main side members of the body or fuselage. Each of these is a  $5\frac{1}{2}''$  Strip, and to them are bolted a  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip at the front and a  $2\frac{1}{2}''$  Strip at the rear. The  $2\frac{1}{2}''$  and the  $5\frac{1}{2}''$  Strip are overlapped two holes.

The next step is to assemble the nose, and for this you will need a  $1\frac{11}{16}$ " radius Curved Plate 2. Bolt this Curved Plate to the front ends of strips 1, using two of the bolts to support Angle Brackets. Now fix a Bush Wheel 3 to these Angle Brackets, and fix a 2" Rod in the Bush Wheel. The propeller is a  $2\frac{1}{2}$ " Strip placed on the Rod and a nut

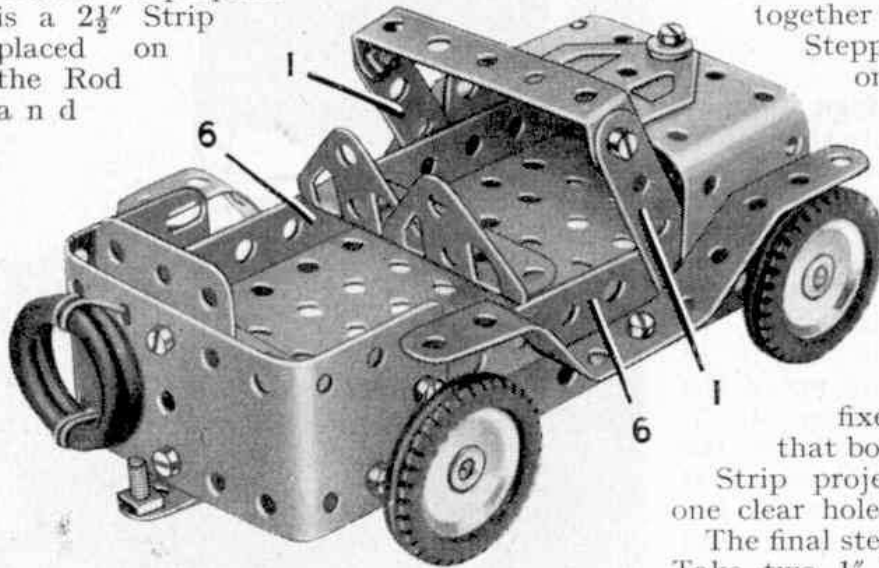


Fig. 2. This rear view of the Jeep shows the arrangement of the spare tyres and the towing hook.

held on it by a Cord Anchoring Spring.

For the rear section of the fuselage you will require a U-section Curved Plate 4 and a  $1\frac{11}{16}$ " radius Curved Plate 5. Bend the Plate 5 to U-shape and bolt the two Plates together as shown. Now fix the rear end of Plate 4 to the strips 1, and support the front end of Plate 5 by Fishplates 6. Bolt a  $2\frac{1}{2}$ " Strip 7 and a Rod and Strip Connector to the Plate 5, and connect Strip 7 to a  $\frac{1}{2}$ " Reversed Angle Bracket fixed to the nose Plate 2.

To make the tail unit take a  $\frac{3}{8}$ " Bolt and pass it through the end hole of one of the strips 1. Next place on the Bolt an Angle Bracket, a Washer, two Fishplates, a Washer and another Angle Bracket. Pass the Bolt through the second strip 1 and hold the parts

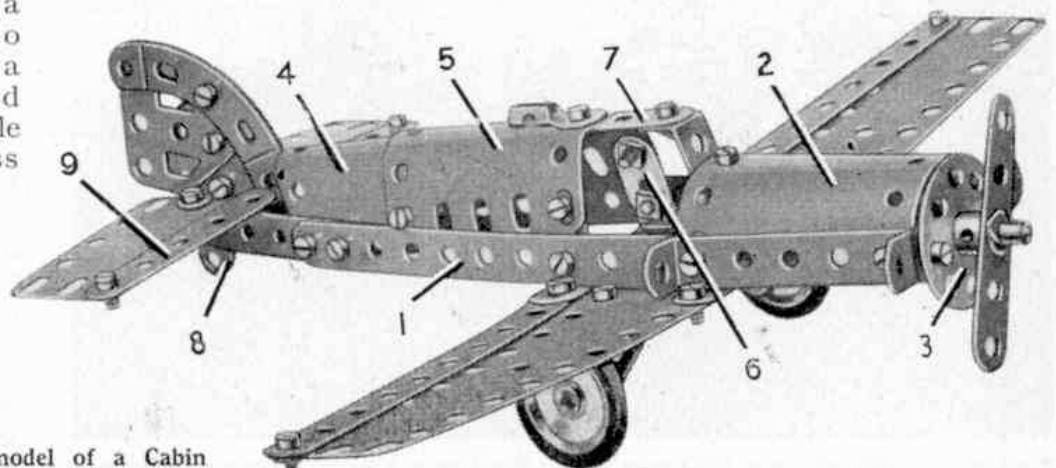


Fig. 3. A fine model of a Cabin Monoplane you can build with a No. 2 Outfit.

tightly in place by a nut, taking care that one Fishplate points upward, while the other hangs down to form the tail skid 8. The next job is to bolt a  $2\frac{1}{2}$ "  $\times$   $1\frac{1}{2}$ " Flexible Plate to each Angle Bracket as shown, with a  $2\frac{1}{2}$ " Strip 9 fixed to the front edge of each Flexible Plate. The tail fin and rudder are made with two Flat Trunnions bolted together as shown, with two  $2\frac{1}{2}$ " Stepped Curved Strips fixed to one of them. Then bolt these parts tightly to the upright Fishplate mentioned previously.

For each wing you need a  $5\frac{1}{2}$ "  $\times$   $1\frac{1}{2}$ " Flexible Plate and a  $5\frac{1}{2}$ " Strip. Bolt these together at their outer ends and then attach them to Angle Brackets fixed to the strips 1. Take care that both the Flexible Plate and the Strip project inside the fuselage by one clear hole each.

The final step is to fit the landing wheels. Take two 1" Pulleys and fit them with Rubber Rings. Now fix each Pulley on a  $\frac{3}{8}$ " Bolt passed through the hole at the pointed end of a Trunnion, and bolt the Trunnions to the wings.

If you carry out this job correctly you will find that the wheels are held in place quite firmly, but the Pulleys and their Bolts will be able to turn freely in the holes in the Trunnions.

Parts required to build the Cabin Monoplane: 4 of No. 2; 6 of No. 5; 4 of No. 10; 8 of No. 12; 1 of No. 17; 2 of No. 22; 1 of No. 24; 34 of No. 37a; 33 of No. 37b; 7 of No. 38; 2 of No. 48a; 2 of No. 90a; 3 of No. 111c; 1 of No. 125; 2 of No. 126; 2 of No. 126a; 2 of No. 155; 1 of No. 176; 2 of No. 188; 2 of No. 189; 1 of No. 199; 2 of No. 200; 1 of No. 212.