

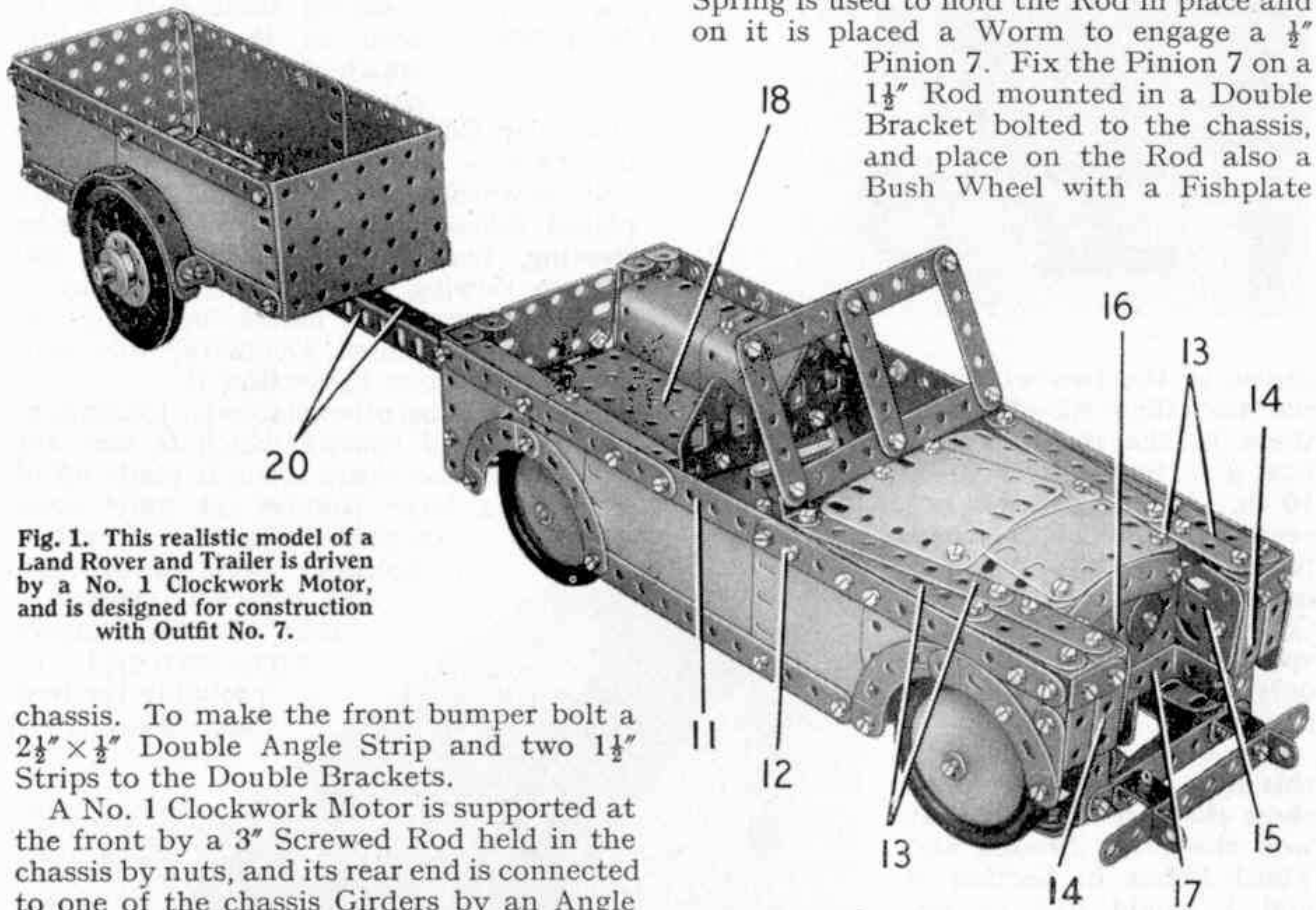
# New Meccano Model

## Land Rover and Trailer

**O**UTFIT No. 7 contains all the parts required to build the Land Rover and Trailer shown in Fig. 1 on this page. To make the chassis of the Land Rover bolt two  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strips between the ends of two  $12\frac{1}{2}''$  Angle Girders. At the rear end attach a Large Fork Piece by a  $\frac{1}{2}''$  Bolt to form the coupling for the trailer, and to the front bolt two Double Brackets. Use the bolts holding the Double Brackets to fix also two Fishplates 1. These will be used later to attach the body to the

and a  $\frac{1}{2}''$  Reversed Angle Bracket bolted to the chassis, and with three Washers space the Collar from the lug of the Reversed Angle Bracket. On the lower ends of the  $1\frac{1}{2}''$  Rods fix Cranks, and connect them with a  $3\frac{1}{2}''$  Strip attached by lock-nutted bolts.

For the steering column mount a  $3\frac{1}{2}''$  Rod in two made-up brackets formed as indicated at 5 and 6 (Fig. 2). The bracket 5 consists of a  $\frac{1}{2}''$  Reversed Angle Bracket and an Obtuse Angle Bracket, and bracket 6 is made from a  $\frac{1}{2}''$  Reversed Angle Bracket and an Angle Bracket. A Cord Anchoring Spring is used to hold the Rod in place and on it is placed a Worm to engage a  $\frac{1}{2}''$  Pinion 7. Fix the Pinion 7 on a  $1\frac{1}{2}''$  Rod mounted in a Double Bracket bolted to the chassis, and place on the Rod also a Bush Wheel with a Fishplate



**Fig. 1.** This realistic model of a Land Rover and Trailer is driven by a No. 1 Clockwork Motor, and is designed for construction with Outfit No. 7.

chassis. To make the front bumper bolt a  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip and two  $1\frac{1}{2}''$  Strips to the Double Brackets.

A No. 1 Clockwork Motor is supported at the front by a 3" Screwed Rod held in the chassis by nuts, and its rear end is connected to one of the chassis Girders by an Angle Bracket. Fix a  $\frac{1}{2}''$  Pulley on the Motor driving shaft and connect it by a 10" light Driving Band to a 1" Pulley on a  $3\frac{1}{2}''$  Rod 2. A  $\frac{1}{2}''$  Pinion on this Rod is used to drive a 57-tooth Gear 3 on the rear axle, for which you should use a  $4\frac{1}{2}''$  Rod and fix it in position with a Collar. Extend the brake and reverse levers of the Motor by 1" and 2" Rods respectively held in Rod and Strip Connectors.

Each of the front wheels is free to turn on a  $\frac{3}{4}''$  Bolt screwed into a Collar 4 fixed on a  $1\frac{1}{2}''$  Rod. Support this Rod in a Fishplate

bolted to it. Fix a bolt in the Fishplate by means of a nut and then screw on the bolt a Collar 8. Now push a Threaded Pin through one end of a  $2\frac{1}{2}''$  Strip 9 and fix it in the Collar 8. Pass a bolt through the other end of Strip 9 and screw it into a Collar on a Pivot Bolt. Then screw the Pivot Bolt into a Collar 10.

To form each side of the body overlap a  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  and a  $2\frac{1}{2}'' \times 2\frac{1}{2}''$  Flexible Plate four holes. Strengthen the lower edges of these Plates with a  $5\frac{1}{2}''$  Strip and the upper

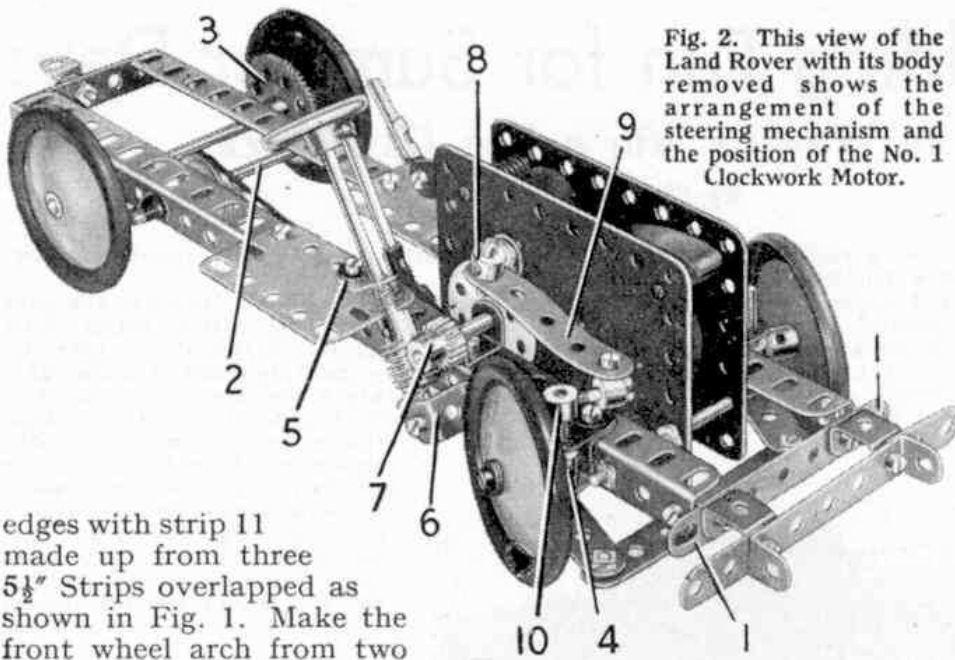


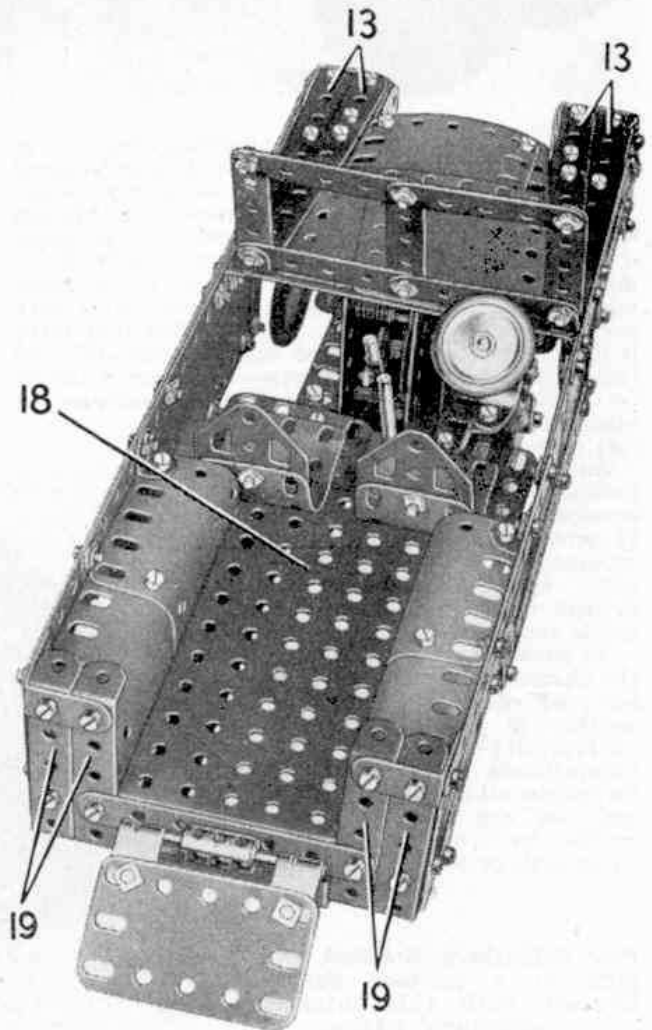
Fig. 2. This view of the Land Rover with its body removed shows the arrangement of the steering mechanism and the position of the No. 1 Clockwork Motor.

edges with strip 11 made up from three  $5\frac{1}{2}$ " Strips overlapped as shown in Fig. 1. Make the front wheel arch from two  $2\frac{1}{2}$ " Stepped Curved Strips. The plating above it consists of two  $2\frac{1}{2}$ "  $\times$   $1\frac{1}{2}$ " Triangular Flexible Plates. For the rear wheel arch also you should use two  $2\frac{1}{2}$ " Stepped Curved Strips, but in this case the plating is formed by a  $2\frac{1}{2}$ "  $\times$  2" and a  $2\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Triangular Flexible Plate.

You should now connect the sides of the body at the centre with a strip made from two 3" Strips overlapped three holes. Attach this to Angle Brackets held by a bolt 12 on each side, and use the bolt that connects the strip and the Angle Brackets to support also two made-up strips 13. Make each of these from a  $3\frac{1}{2}$ " and a  $2\frac{1}{2}$ " Strip, and at the front end of the outer one fix a  $1\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strip. At the front end of the inner strip 13 fix a  $2\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strip 14. Now connect the two Double Angle Strips on each side with a 1"  $\times$  1" Angle Bracket, and bolt the latter to the front end of strip 11. Fix a Trunnion to each of the Double Angle Strips 14 and to it bolt a Flat Trunnion 15.

The radiator is a  $2\frac{1}{2}$ "  $\times$   $1\frac{1}{2}$ " Flanged Plate 16 and you should connect it by Angle Brackets to the inner pair of strips 13. Bolt a  $2\frac{1}{2}$ " Curved Strip along the upper edge of the Flanged Plate, and to the lower edge attach a  $2\frac{1}{2}$ "  $\times$  1" Double Angle Strip 17 by means of a Fishplate. Make the top of the bonnet by curving slightly four  $2\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flexible Plates and arrange them as shown. They should be connected to the radiator by Angle Brackets and attached by  $\frac{3}{8}$ " Bolts to the strip across the centre of the body.

Fig. 3. A semi-plan view of the Land Rover, showing interior details of the body and the assembly of the hinged tailboard.



Space the Plates from the strip by three Washers on each of the Bolts.

For the boxes over the rear wheels use an opened-out U-section Curved Plate and a bent  $1\frac{1}{16}$ " radius Curved Plate bolted together. Attach each box to the side of the body by means of an Angle Bracket, and bolt it also to a  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flanged Plate 18 that forms part of the floor. Now join two  $2\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strips 19 on each side by a Fishplate and one arm of a 1"  $\times$  1" Angle

Bracket. Use the other arm of the 1"  $\times$  1" Angle Bracket and a  $\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Angle Bracket to attach the Double Angle Strips 19 to the side of the body. Bolt the inner one of each pair of Double Angle (Continued on page 342)