

by Spanner

## BUILD A DELIVERY VAN

A COMMON sight in every town and city is the tradesman's van rushing busily about, delivering orders here, picking up merchandise there; zooming from door to door with practised efficiency. The Meccano model described here is reminiscent of the Bedford 15 cwt. van, often used for this type of work.

A simple chassis is built-up from two 12½ in. Angle Girders connected, at the front, to a 5½ in. Strip 1 by Angle Brackets. Bolted across the Girders are another 5½ in. Strip 2, two 5½ in. by 2½ in. Flexible Plates, a 2½ in. by 2½ in. Plastic Plate, and a 5½ in. by 1½ in. Flexible Plate 3. An Angle Bracket is fixed to each end of Strip 2, and to each rear corner of Plate 3. Also fixed to the Girders is a compound 4½ in. strip 4, angled as shown, made up from 3 in. Strips.

Both sides of the model are similarly formed. Attached to a 12½ in. Strip 5 are two 2½ in. by ½ in. Triangular Flexible Plates, a 2½ in. by 2½ in., a 4½ in. by 2½ in. and a 2½ in. by 1½ in. Flexible Plate, followed by a 2½ in. by 1½ in. Plastic Plate, the last overlapped by a 2½ in. Strip 6. A 3½ in. Strip is attached to the lower inside edge of the 2½ in. by 1½ in. Flexible Plate. Bolt 7, holding the first Triangular Flexible Plate in position, also holds an Angle Bracket 8, while Bolts 9 carry Obtuse Angle Brackets.

A compound 9½ in. strip 10 is formed from a 5½ in. and a 3½ in. Strip. To this are attached a 2½ in. Strip, two 2½ in. by 2½ in., one 2½ in. by 1½ in., another 2½ in. by 2½ in. Flexible Plate and, finally, a second 2½ in. Strip 11. The whole arrangement is then fixed to the Obtuse Angle Brackets held by the rear two Bolts 9. At the top, the Plates are edged by a 10½ in. compound strip 12, built up from two 5½ in. Strips, the same bolts also holding the Plates, forming the roof, in place. The roof itself is composed of four 5½ in. by 2½ in. and one 5½ in. by 1½ in. Flexible Plates, strengthened inside by a 5½ in. Strip held by the three Bolts shown in the illustration.

An Obtuse Angle Bracket and a 1½ in. Strip 13 is bolted to the free lug of Angle Bracket 8 on each side. In turn, two 2½ in. by 1½ in. Flexible Plates 14 and 15 are fixed to the spare lugs of each of these Obtuse Angle Brackets. Plates 14 are joined together, but Plates 15 are bolted to 5½ in. Strip 1, at the same time securing Reversed Angle Brackets 16 in position.

Three 3½ in. Rods, held in a 2½ in. by 1½ in. Flanged Plate, serve as the radiator-grille. The Flanged Plate is attached to the chassis members by Double Brackets. Two headlamps are represented by 1 in. Pulleys without boss bolted to Flexible Plates 15, while the front bumper is a 5½ in. Strip, extended at each end by a Formed Slotted Strip, and fixed to Reversed Angle Bracket 16, Fishplates being used as overriders.

An Angle Bracket 17 and 2½ in. Strip 18 are attached to each of the Obtuse Angle Brackets held by the front Bolts 9. The other ends of the Strips are bolted to the roof, the same bolts also holding further Angle Brackets in place. A 4½ in. by 2½ in. Transparent Plastic Plate, overlaid along its lower edge by two 2½ in. Strips, is bolted to these Angle Brackets and Angle Brackets 17. Each of the bolts fixing the Plate to Angle Brackets 17 also secures a Fishplate and to these is bolted a 5½ in. Strip 19. Above the windscreen, a lip is made by attaching a compound 4½ in. strip (obtained from two 2½ in. Strips) to the roof with Obtuse Angle Brackets.

To complete the body, only the door now remains to be built. A 1½ in. by ½ in. Double Angle Strip is bolted to 2½ in. Strip 11 and another 1½ in. by ½ in. Double Angle Strip 20 is pivotally connected to this by a 2 in. Rod, held in place by a Spring Clip. A door, built-up from two 4½ in. by 2½ in. Flat Plates and a Flat Trunnion 21, is fixed to Double Angle Strip 20 by a Fishplate. A Threaded Pin 22 is mounted in

position, then an Angle Bracket 23 is bolted to the rear off-side wing. The door is secured by lifting it slightly and slipping Flat Trunnion 21 behind the lug of this Angle Bracket.

### Steering Arrangement

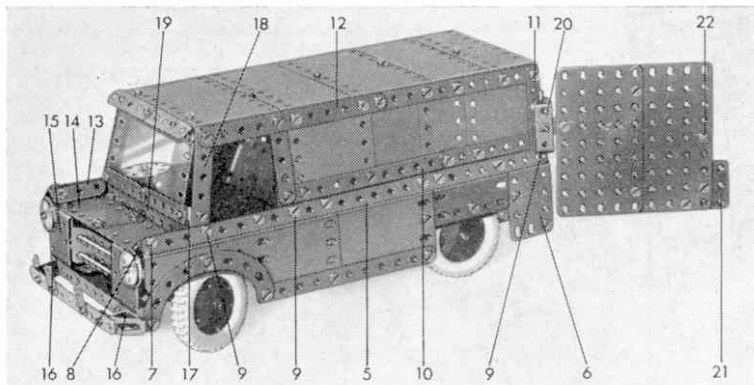
Two stub-axle constructions are similarly built. A ¾ in. Bolt is used to fix a 1½ in. Strip 24 to a Double Bracket, which is then lock-nutted through the end hole of compound strip 4. Another compound 4½ in. strip 25, made up from two 2½ in. Strips, is lock-nutted between Strips 1 and a Fishplate 26 is tightly fixed to it. The axles themselves are 1½ in. Rods mounted in the lugs of the Double Brackets and held by 2½ in. Road Wheels and Collars.

Acting as the steering column is a 2 in. Rod journalled in the lugs of a 1 in. by ½ in. Double Bracket fixed to Strip 19. An 8-hole Bush Wheel is mounted on each end of the Rod, the upper one serving as the steering wheel. A ½ in. Bolt secured through one hole in the lower Bush Wheel fits into the elongated hole of Fishplate 26, but note that it is *not* bolted to the Fishplate. Both front wheel arches are edged by two 2½ in. Stepped Curved Strips.

The rear axle is a 5 in. Rod, journalled in the chassis members and held by Collars, on which two 2½ in. Road Wheels are mounted.

Finally, a seat is produced from two 5½ in. by 1½ in. Flexible Plates connected by Angle Brackets, and is fixed to the floor with two compound 1 in. by 1 in. reversed angle brackets, each composed of two 1 in. by 1 in. Angle Brackets.

**Parts required:**—2 of No. 1; 14 of No. 2; 4 of No. 3; 2 of No. 4; 14 of No. 5; 4 of No. 6a; 2 of No. 8; 6 of No. 10; 4 of No. 11; 1 of No. 11a; 15 of No. 12; 4 of No. 12a; 12 of No. 12c; 1 of No. 15; 3 of No. 16; 2 of No. 17; 2 of No. 18a; 2 of No. 22a; 2 of No. 24; 7 of No. 35; 145 of No. 37a; 136 of No. 37b; 15 of No. 38; 2 of No. 48; 1 of No. 51; 2 of No. 53a; 4 of No. 59; 4 of No. 90a; 1 of No. 111a; 4 of No. 111c; 1 of No. 115; 2 of No. 125; 1 of No. 126a; 4 of No. 187; 8 of No. 188; 4 of No. 189; 8 of No. 190; 2 of No. 191; 6 of No. 192; 1 of No. 193c; 2 of No. 194; 1 of No. 194a; 2 of No. 215; 4 of No. 221.



Above: The completed Delivery Van. Below: An underneath view showing the steering arrangement and chassis.

