Breakdown Lorry

A New Model for Outfit No. 5

MODEL-BUILDERS who possess an Outfit No. 5 or one larger should find plenty of interest and pleasure in building the attractive but simple Breakdown Lorry shown in its completed state in Fig. 1 on this page.

The chassis consists of two 12½″ Strips 1 bolted at their rear ends to the lugs of a 2½″ × ½″ Double Angle Strip. The same bolts serve to fix also two Fishplates and two Semi-Circular Plates 2 in which the rear axle is mounted. A second bolt is used to attach the other end of each Semi-Circular Plate to the chassis. At the front ends they are connected by a 1½″ × ½″ Double Angle Strip and a 3″ Formed Slotted Strip. The front wheels are mounted on a built-up Rod consisting of a 4″ and a 1″ Rod joined together by a Rod Connector. The Rod is mounted in two Flat Trunnions bolted to the chassis. These should be fixed in place at the same time as the 1½″ × ½″ Double Angle Strip and the 3″ Formed Slotted Strip and it should be noticed that the holding bolt is used to fix also a 5½″ × 2½″ Flexible Plate and a 2½″ Strip 3 on each side.

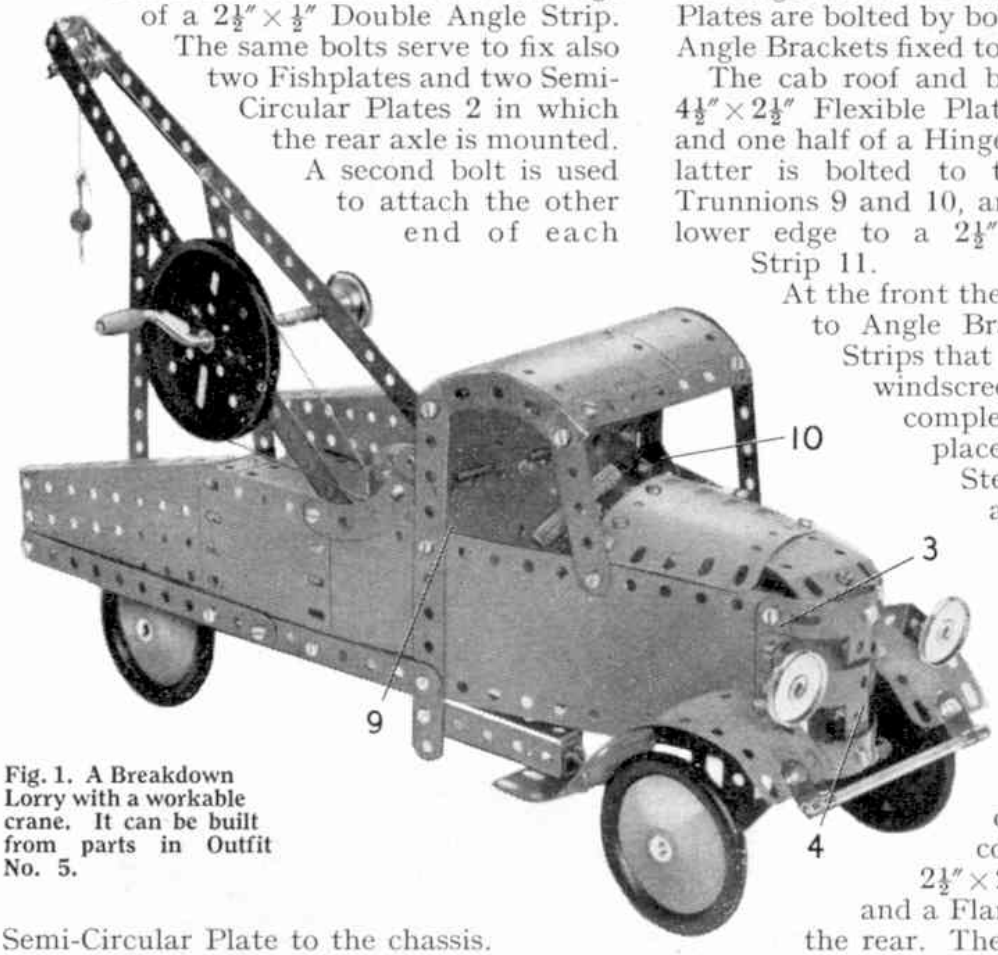

Fig. 1. A Breakdown Lorry with a workable crane. It can be built from parts in Outfit No. 5.

The radiator grille consists of two more 3″ Formed Slotted Strips bolted at their centre holes to a 2½″ Strip 4. The 2½″ Strip is bolted at its upper end to an Angle Bracket 5 that serves as a means of attachment for the top of the bonnet. The bonnet top is formed from two 2½″ × 2½″ Flexible Plates and a 1½″ × 2½″ Flexible Plate. The latter is bolted at the front to the Angle Bracket 5 and the larger Flexible Plates are bolted by bolts 6 and 7 to Obtuse Angle Brackets fixed to each side of the cab.

The cab roof and back consists of two 4½″ × 2½″ Flexible Plates curved to shape and one half of a Hinged Flat Plate 8. The latter is bolted to the flanges of two Trunnions 9 and 10, and is attached at its lower edge to a 2½″ × ½″ Double Angle Strip 11.

At the front the cab roof is attached to Angle Brackets fixed to 2½″ Strips that form the sides of the windscreen. The cab is completed by fixing in place at each side a 2½″ Stepped Curved Strip, a 5½″ Strip and a 3½″ Strip. The steering wheel is a 1″ Pulley with Tyre held by a bolt to an Obtuse Angle Bracket fixed to the top of the bonnet by the bolt 12. Each side of the vehicle is completed with two 2½″ × 2½″ Flexible Plates and a Flanged Sector Plate at the rear. The crane is supported on a base consisting of a 5½″ × 2½″ Flanged Plate 13. This is attached at its front and rear ends to Fishplates bolted to the chassis. The other half of the Hinged Flat Plate 14 is bolted as shown to the top of the Flanged Plate, and the Flanged Plate is extended at its front end by a 2½″ × 1½″ Flanged Plate 15.

The sides of the crane jib are 12½″ Strips attached at their lower ends to the chassis by bolts 16. The upper ends are bolted to a Double Bracket. The jib is supported by two 5½″ Strips 17. A Crank Handle with grip is mounted in the jib as shown and is held in place by a 3″ Pulley and a 1″ Pulley.

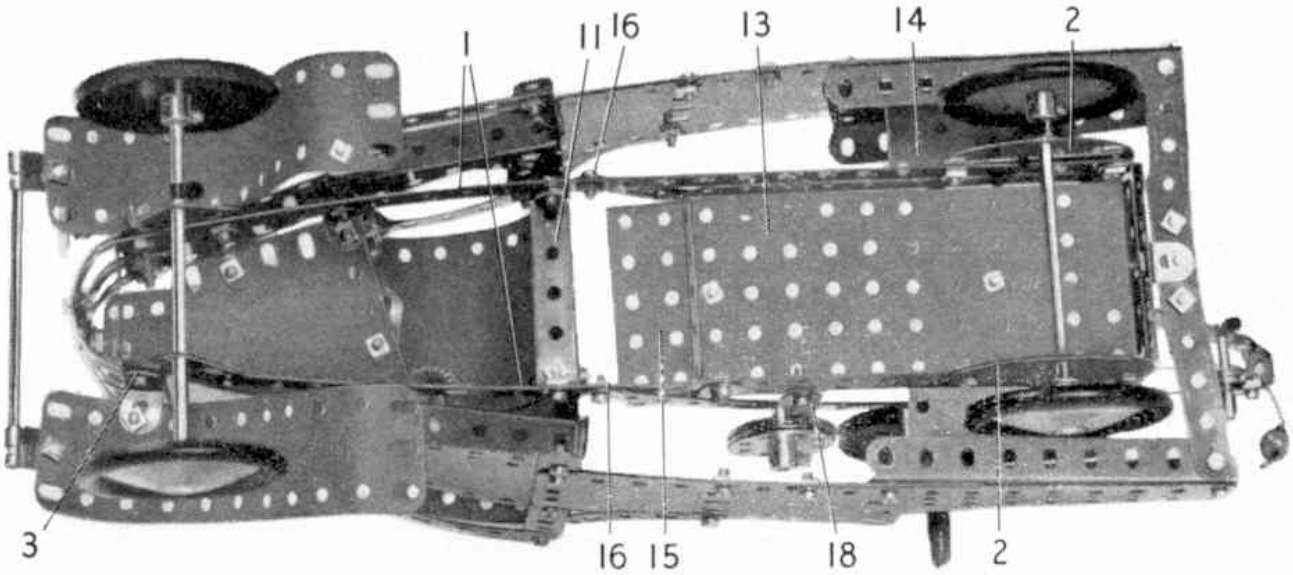

Fig. 2. An underneath view of the Breakdown Lorry.

A $\frac{1}{2}''$ loose Pulley is mounted on a 1″ Rod at the jib head. A length of Cord is tied to the Crank Handle and then led over the $\frac{1}{2}''$ Pulley and fitted with a small Loaded Hook.

A brake is provided by two Wheel Discs and a Bush Wheel bolted to the end of a $3\frac{1}{2}''$ Strip 18. The Strip is pivoted at its lower end on a $\frac{3}{8}''$ Bolt that is lock-nutted to the flange of the Flanged Plate 13. A length of Cord is passed around the 3″ Pulley and its ends are gripped between the Wheel Discs, which act as weights and keep the Cord taut around the 3″ Pulley.

Each mudguard is a $5\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate bolted to an Angle Bracket attached to the vertical $2\frac{1}{2}''$ Strips 3 on each side of the vehicle. The running boards are made up of two $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strips bolted together at one end and bolted to the $5\frac{1}{2}''$ Strip. An Angle Bracket joins the running boards and mudguards together. The bumper is a $3\frac{1}{2}''$ Strip held by two Rod and Strip Connectors bolted to the front edges of the mudguards.

The headlamps are 1″ Pulleys joined to Reversed Angle Brackets which are bolted to the $2\frac{1}{2}''$ Strips 3.

Parts required to build the model Breakdown Lorry: 4 of No. 1; 8 of No. 2; 2 of No. 3; 8 of No. 5; 3 of No. 10; 1 of No. 11; 8 of No. 12; 4 of No. 12c; 2 of No. 15b; 1 of No. 16; 1 of No. 18a; 1 of No. 18b; 1 of No. 19b; 4 of No. 22; 1 of No. 23; 1 of No. 24; 2 of No. 24a; 5 of No. 35; 81 of No. 37a; 79 of No. 37b; 4 of No. 38; 1 of No. 48; 6 of No. 48a; 1 of No. 51; 1 of No. 52; 2 of No. 54; 1 of No. 57c; 4 of No. 90a; 3 of No. 111c; 2 of No. 125; 2 of No. 126; 2 of No. 126a; 1 of No. 142c; 4 of No. 147; 1 of No. 188; 2 of No. 189; 4 of No. 190; 2 of No. 191; 2 of No. 192; 1 of No. 198; 2 of No. 200; 2 of No. 212a; 2 of No. 214; 3 of No. 215.

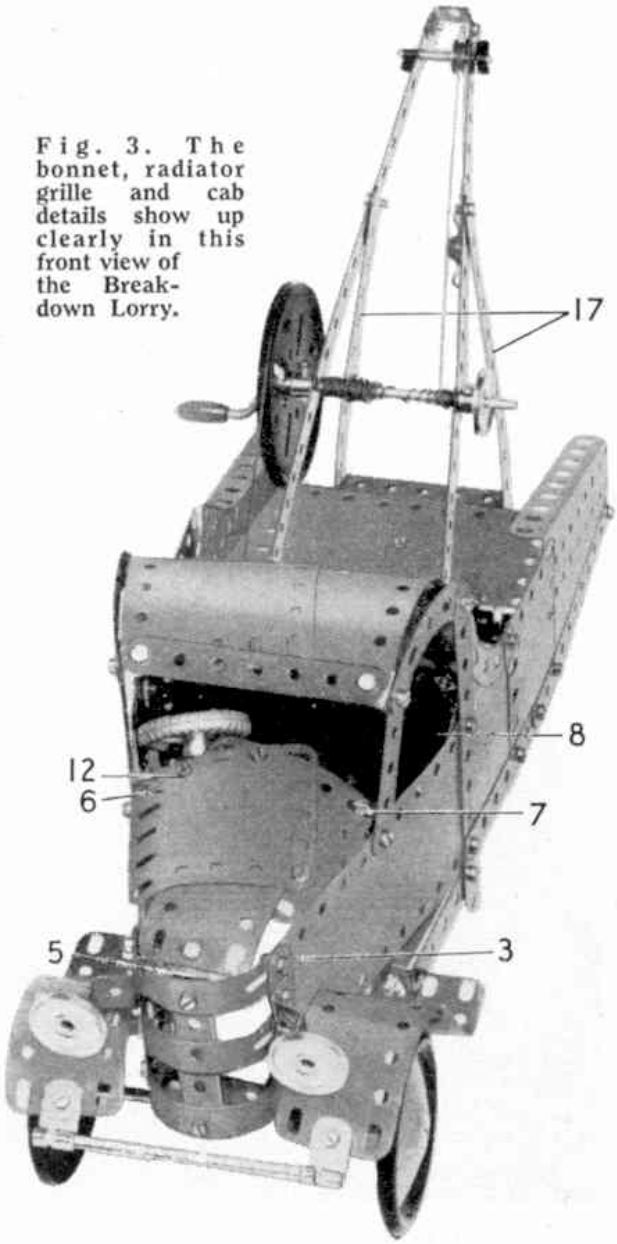

Fig. 3. The bonnet, radiator grille and cab details show up clearly in this front view of the Breakdown Lorry.