

New Meccano Model

Articulated Tank Lorry

OUTFIT No. 8 provides all the parts to build the attractive Articulated Tank Lorry shown in Fig. 1. The chassis of the lorry consists of two 12½" Angle Girders connected at their ends by 2½" × 1" Double Angle Strips. Each of the leaf springs is formed by a 4½", a 3½" and a 2½" Strip bolted together, with Angle Brackets fixed to the ends of the 4½" Strip. A Fishplate is lock-nutted to the rear Angle Bracket of each spring.

The Fishplates of the rear pair of springs are passed over a Rod mounted in the next-to-end holes of the chassis Girders, and are held on the Rod by Spring Clips. The Angle Brackets at the front ends of the rear springs are pivoted on a Rod supported in Trunnions fixed to the chassis, and this Rod also is fitted with Spring Clips. The arrangement of the front springs is similar to those at the rear except that I' Triangular Plates are used in place of Trunnions.

Triaugular Plates are used in place of Trunnions. The rear axle is a 5" Rod mounted in a $3\frac{1}{2}$ " $\times \frac{1}{2}$ " Double Angle Strip bolted to the springs and is held in

place by Collars. The front axle beam is made by overlapping two 2½" Strips three holes and bolting them to the springs, the bolts securing also a ½" Reversed Angle Bracket 1 at each end. At one side a 1½" Rod 2 is mounted in the 2½" Strip and the Reversed Angle Bracket, and is fitted with a Collar 3 and a Crank 4. A second Collar placed above the Reversed Angle Bracket holds the Rod in place. On the other side the 1½" Rod is replaced by a 2" Rod, and this also is fitted with a Collar 3 and a Crank 4 and is held in place by another Collar. A Coupling 5 is fixed on the upper end of the 2" Rod, and the Cranks 4 are connected by a 3" Strip pivoted on lock-nutted Bolts. The front wheels are free to turn on ½" Bolts screwed into the Collars 3, but each wheel is spaced from its Collar by two Washers.

A 3" Strip 6 is pivoted at one end on a \(\frac{1}{2}" \) Bolt fixed by two nuts in a 1\(\frac{1}{2}" \) Contrate 7. Three Washers are placed on the Bolt to space the Strip from the teeth of the Contrate. The Contrate is fixed on the upper end of a 2" Rod supported in a 1\(\frac{1}{2}" \) Strip bolted above the slotted holes of one of the chassis Girders, and in a Double Bent Strip held by the same bolts underneath this Girder. The Contrate is spaced from the Girder by four Washers. The other end of the Strip 6 pivots freely on a Threaded Pin held in the Coupling 5. The

lower bearing for the steering column is a 1" × 1" Angle Bracket bolted to the chassis Girder in front of the Contrate 7 and held by bolts 8. The steering column itself should not be fitted until the cab is assembled.

The cab is made by fixing across the chassis a $4\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strip 9 and a $5\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strip held by bolts 10. The floor is a $4\frac{1}{2}'' \times 2\frac{1}{2}''$ Flexible Plate. Each side of the cab consists of a $2\frac{1}{2}'' \times 2\frac{1}{2}''$ and a $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate bolted to the lugs of the Double Angle Strips, and extended towards the rear by an opened-out U-section Curved Plate 11

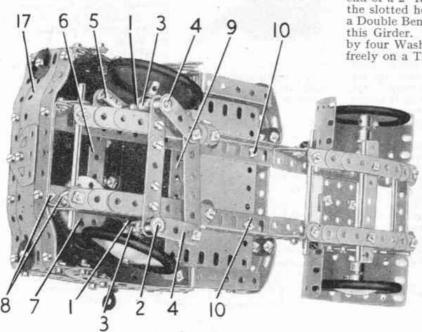


Fig. 2. This underneath view of the lorry shows details of the springs and the steering mechanism.