

# New Meccano Model

## An Electrically Operated Mobile Crane

OUR new model this month is the attractive mobile crane illustrated in Fig. 1. The model is built with the parts included in Outfit No. 7, and the hoisting and luffing movements are operated from an E20R Electric Motor fitted in the swivelling cabin.

The travelling base should be assembled first, and is made by bolting three  $3\frac{1}{2}'' \times 2\frac{1}{2}''$  Flanged Plates 1 and 2 to two compound  $8\frac{1}{2}''$  strips made from  $5\frac{1}{2}''$  Strips overlapped. The sides of the base are  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  and  $4\frac{1}{2}'' \times 2\frac{1}{2}''$  Flexible Plates overlapped, and they are braced by  $2\frac{1}{2}''$  Strips and compound  $8\frac{1}{2}''$  strips. The sides are connected at each end by a  $3\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip, and the ends are filled in by  $2\frac{1}{2}'' \times 2\frac{1}{2}''$  Flexible Plates and U-section Curved Plates. The Curved Plates are attached to Double Brackets fixed to the Double Angle Strips.

The wheel covers are made from  $2\frac{1}{2}'' \times 1\frac{1}{2}''$  Flexible Plates curved to shape and attached to the base by Obtuse Angle Brackets. Two Formed Slotted Strips 3 are bolted to each  $2\frac{1}{2}'' \times 1\frac{1}{2}''$  Flexible Plate, and the Slotted Strips on each side are connected by 3" and  $2\frac{1}{2}''$  Strips attached by Angle Brackets. A  $5\frac{1}{2}''$  Strip 4 is fixed to Fishplates, and the wheel covers at each end are connected by a

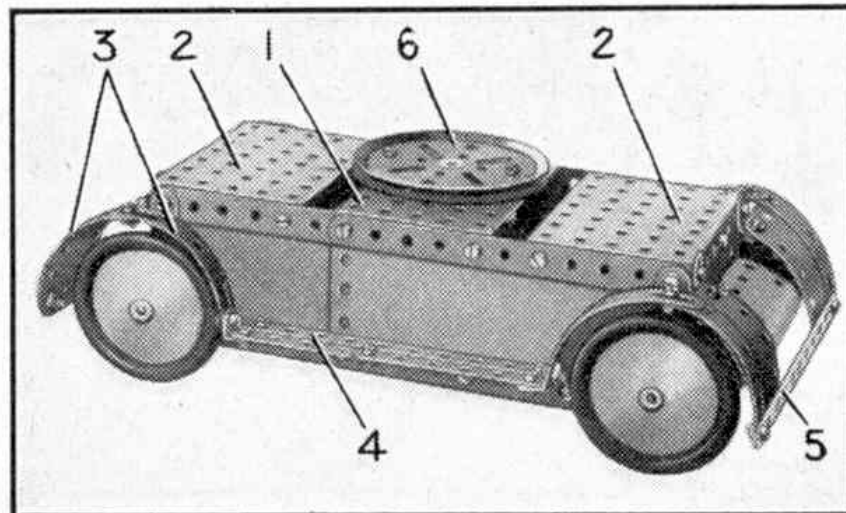


Fig. 2. The undercarriage of the mobile crane.

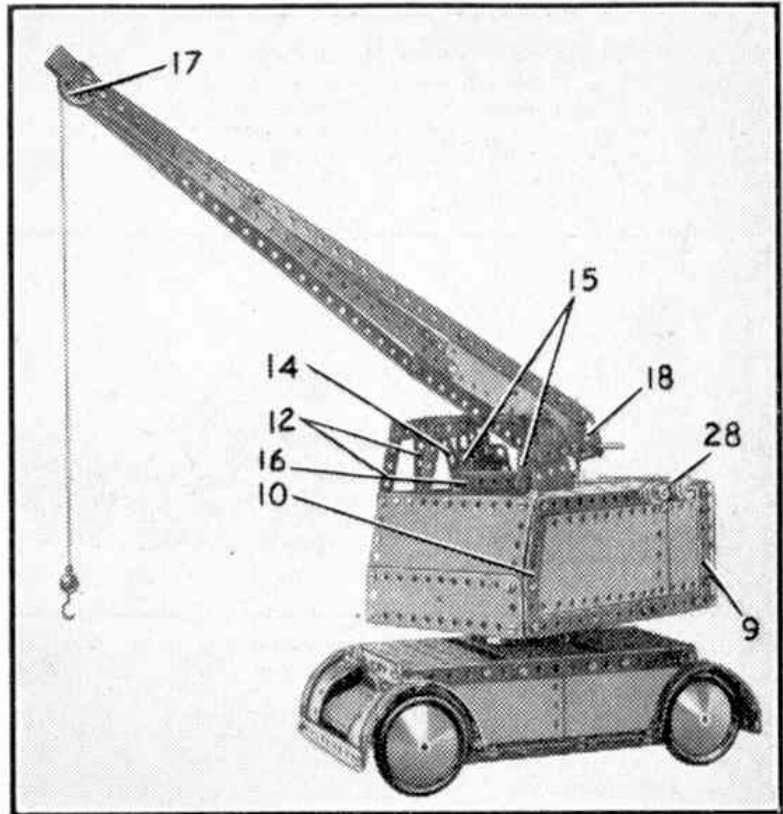


Fig. 1. A modern mobile crane that can be built from Outfit No. 7.

$5\frac{1}{2}''$  Strip 5. A  $3\frac{1}{2}''$  Pulley 6 is attached to the Flanged Plate 1 by  $\frac{3}{8}''$  Bolts.

The cabin is assembled on a platform formed by two  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  Flanged Plates 7 and 8 connected at each side by a  $3\frac{1}{2}''$  Strip overlapping a  $5\frac{1}{2}''$  Strip by two holes. The sides consist of  $3\frac{1}{2}''$  Strips 9 and compound strips 10 connected at their

upper ends by a  $5\frac{1}{2}''$  Strip extended by a  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip 11. Each side is completed by a  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  and a  $2\frac{1}{2}'' \times 2\frac{1}{2}''$  Flexible Plate. These are bolted at one end to the Strips 9, and at the other end they are clamped between strip 10 and two Angle Brackets fixed to the strip. The front of the cabin consists of a  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  and a  $5\frac{1}{2}'' \times 1\frac{1}{2}''$  Flexible Plate bolted to the Flanged Plate 7 and attached to the sides by Angle Brackets.

The driver's turret is made by attaching two  $2\frac{1}{2}''$