

New Meccano Models

Omnibus—Simple Weighing Machine

OUR larger model this month is the fine working double-deck omnibus shown in Figs. 1 and 2. It is driven by an E120 Electric Motor, and its construction forms a pleasant pastime. The chassis is shown in Fig. 2. Two $12\frac{1}{2}$ " Angle Girders 1 are connected together at each end by a $5\frac{1}{2}$ " Strip, the bolts at one end being used to fix in position one flange of the Electric Motor 2, the other flange of the Motor being bolted to a Flanged Sector Plate 3.

The mechanism that transmits the drive to the rear axle is now fitted. This is accomplished by first bolting a Reversed Angle Bracket 4 to the chassis, the bolt carrying three Washers on its shank for spacing purposes. The Bracket 4 forms a bearing for one end of the $11\frac{1}{2}$ " Rod 5, which is journalled also in the Double Angle Strips and Double Bent Strip forming the sides of the dummy differential casing. Rod 5 carries a Worm 6 that meshes with a $\frac{1}{2}$ " Pinion fastened on the $5\frac{1}{2}$ " Rod used for the rear axle. The differential casing is prevented from moving endways by Collars.

The radiator is a $2\frac{1}{2}$ " \times $1\frac{1}{2}$ " Flanged Plate attached to Flanged Sector Plate 3 by an Angle Bracket, and it carries the second Flanged Sector Plate that forms the bonnet. A $3\frac{1}{2}$ " Strip is bolted across the $2\frac{1}{2}$ " \times $1\frac{1}{2}$ " Flanged Plate and is used to

support the mudguards.

The near side of the bonnet is built up with a $2\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flexible Plate and two $2\frac{1}{2}$ " \times $1\frac{1}{2}$ " Flexible Plates, one of the

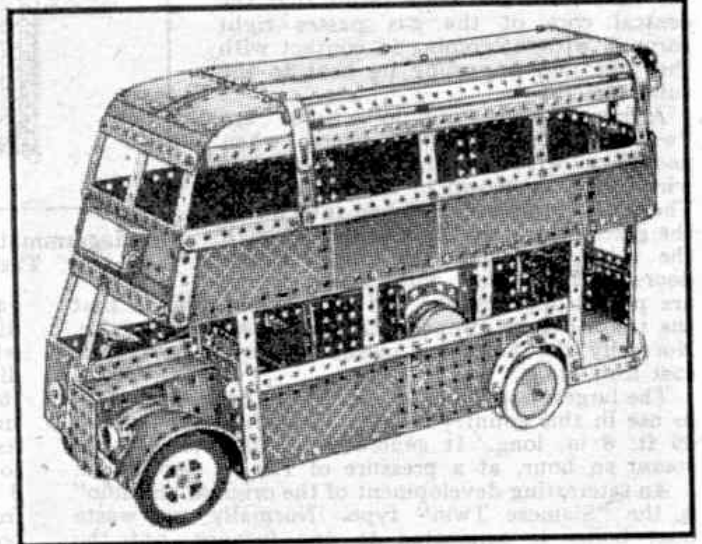


Fig. 1. General view of a fine model omnibus driven by an E120 Electric Motor.

latter being bolted to a Trunnion 7, shown in Fig. 2, while the other is curved as shown in Fig. 1. The off side of the bonnet is built up to form the driver's cab.

The construction of the body is now begun. Four Angle Brackets are bolted to the ends of the $5\frac{1}{2}$ " Strips of the chassis, and $5\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flexible Plates are bolted to the forward pair. To these Plates $5\frac{1}{2}$ " Strips are bolted, which in turn are attached to the horizontal $12\frac{1}{2}$ " Strips. The $5\frac{1}{2}$ " Strips are the window sashes, and their lower ends carry the remaining Plates that form the sides of the bus.

Angle Girders 9 extended by $12\frac{1}{2}$ " Strips form the main members of the upper deck, and a $5\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flanged Plate 8 is bolted in position to provide a roof for the driver's cab. The Plates enclosing the upper deck are now added. Plate 10 is half of a Hinged Flat Plate from which the centre pin has been removed; the other half of the Plate is used in a similar position on the opposite side of the model. The sides are connected at the front by $5\frac{1}{2}$ " \times $1\frac{1}{2}$ " Flexible Plates and Angle Brackets. Strip 11 is a compound strip made by overlapping two $5\frac{1}{2}$ " Strips six holes.

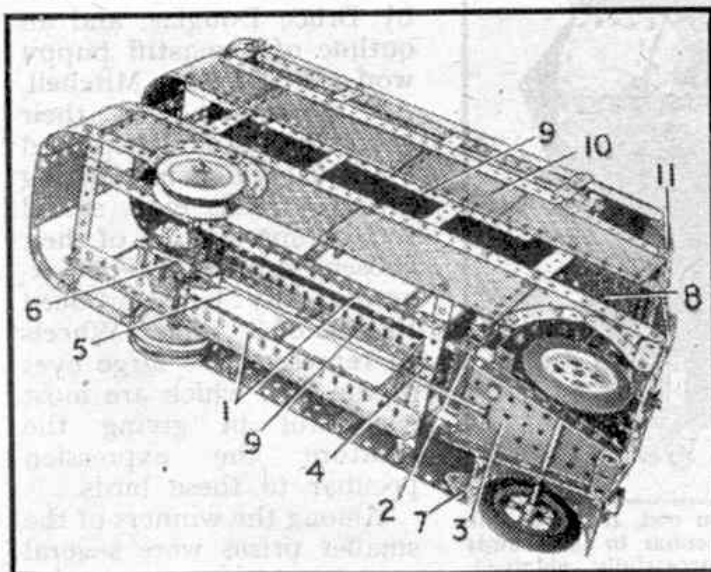


Fig. 2. Underneath view of the Meccano omnibus.