

New Outfit Models

A Tricycle and a Fine Double-Decker Bus

THE models described this month are designed to provide interesting subjects for both small and large Outfits. They include a simple tricycle built from Outfit No. 0, a novel portable garage crane that can be built from the contents of Outfit No. 2, a No. 4 Outfit steam river tug, and a realistic double-decker bus that makes good use of the parts in Outfit No. 7. All are easily built, and will provide really good fun both in building and operation.

The tricycle is illustrated in Fig. 3, and is very easy to assemble. First, the short crossbar is built by bolting three Flat Brackets together in the manner shown. These are then bolted to the Flat Trunnion that forms the saddle, the bolt holding also two Trunnions that in turn are attached to a $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strip by means of an Angle Bracket. The Double Angle Strip provides bearings for the $3\frac{1}{2}''$ Rod that forms the rear axle.

The front fork consists of two $2\frac{1}{2}''$ Strips joined by two Angle Brackets. The $\frac{3}{8}''$ Bolt joining the latter parts is first slipped through the Flat Bracket of the crossbar, and then a nut is screwed on its shank. After passing the Bolt through the holes in the Angle Brackets, a second nut is placed on it and the $2\frac{1}{2}''$ Curved Strip representing the handlebars is then bolted to one of the Angle Brackets. The front wheel, a Bush Wheel, is carried on the shank of two bolts passed through the $2\frac{1}{2}''$ Strips that form the forks, and two washers are used to prevent it from rubbing against the Strips.

Parts required to build the model tricycle: 2 of No. 5; 3 of No. 10; 4 of No. 12; 1 of No. 16; 2 of No. 22; 1 of No. 24; 11 of No. 37; 2 of No. 37a; 2 of No. 38; 1 of No. 48a; 1 of No. 90a; 1 of No. 111c; 2 of No. 126; 1 of No. 126a; 2 of No. 155a.

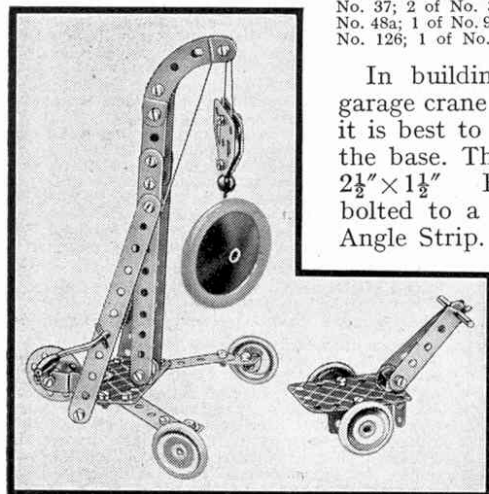


Fig. 2. This simple model represents a portable crane of the type used in motor garages. It can be built with Outfit No. 2.

In building the portable garage crane shown in Fig. 2 it is best to commence with the base. This consists of a $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate bolted to a $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strip. Two $2\frac{1}{2}''$ Strips are bolted to the free corners of the Flexible Plate, each $2\frac{1}{2}''$ Strip being extended by a Flat Bracket, and to the Flat Brackets are

bolted Angle Brackets to carry 1" Pulleys fitted with Rubber Rings. The rear wheel is a Bush Wheel mounted on bolts held in a Cranked Bent Strip that is attached by an Angle Bracket to the $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate. The jib post is composed of $5\frac{1}{2}''$ Strips extended three holes by $2\frac{1}{2}''$ Strips. Curved Strips are bolted to the latter and are joined by a lock-nutted $\frac{3}{8}''$ Bolt.

The stays for the jib post are $5\frac{1}{2}''$ Strips, which are bolted to the Double Angle Strip of the base and to the $5\frac{1}{2}''$ Strips of the jib. The pulley block is made from two Flat Trunnions, the broad ends of which are spaced apart by three washers. The narrow ends of the Flat Trunnions carry a small Loaded Hook. The hoisting cord is tied to the $\frac{3}{8}''$ Bolt at the jib head and is led through the pulley block. It is then taken back over the $\frac{3}{8}''$ Bolt and wound around the Crank Handle journalled in the stays.

The small bogie is made from a $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate, bearings for the wheel axle being provided by two Trunnions. The drawbar consists of $2\frac{1}{2}''$ Strips joined to the Flexible Plate by Angle Brackets.

Parts required to build the model portable crane: 4 of No. 2; 6 of No. 5; 3 of No. 10; 8 of No. 12; 2 of No. 17; 1 of No. 19g; 4 of No. 22; 1 of No. 24; 4 of No. 35; 32 of No. 37; 3 of No. 37a; 4 of No. 38; 1 of No. 40; 1 of No. 44; 1 of No. 48a; 1 of No. 57c; 2 of No. 90a; 4 of No. 111c; 2 of No. 126; 2 of No. 126a; 4 of No. 155a; 1 of No. 176; 1 of No. 187; 2 of No. 188.

The steam tug shown in Fig. 1 is a particularly good example of the interesting work that can be done with a No. 4 Outfit and is simple to build. The sides of the hull consist of two pairs of $12\frac{1}{2}''$ Strips, which are joined at the bows by Angle Brackets and at the stern by pairs of Formed Slotted Strips that overlap each other by half their length. The $12\frac{1}{2}''$ Strips of each pair forming the sides are connected to each other by two Flat Brackets. The Bolts 1 hold Angle Brackets, to which is attached a Hinged Flat Plate that forms the deck. The Plate is extended by Flanged Sector Plates. At the bows the spaces between the Sector Plate and the hull are closed with $3\frac{1}{2}''$ and $2\frac{1}{2}''$ Strips, and the stern is made with $2\frac{1}{2}'' \times 2\frac{1}{2}''$ Flexible Plates and a Semi-Circular Plate.

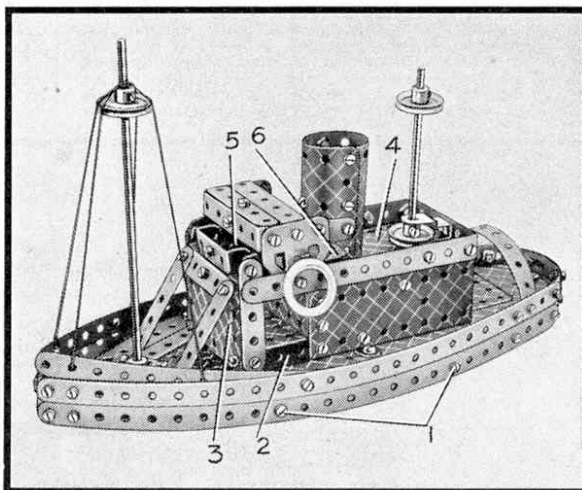


Fig. 1. A sturdy model of a steam tug, which can be built with the parts contained in Outfit No. 4.

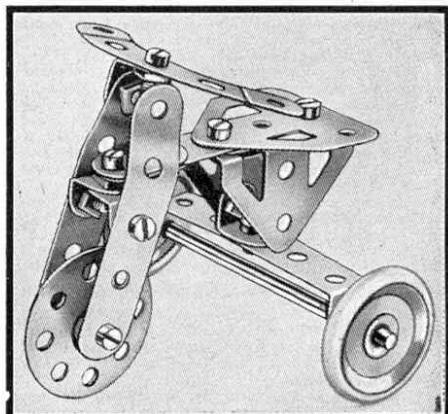


Fig. 3. A good subject for Outfit No. 0. This tricycle is easy to assemble and can be steered by the handlebars.