

"Spanner's" Special Section  
for Juniors

# Easy Model- Building

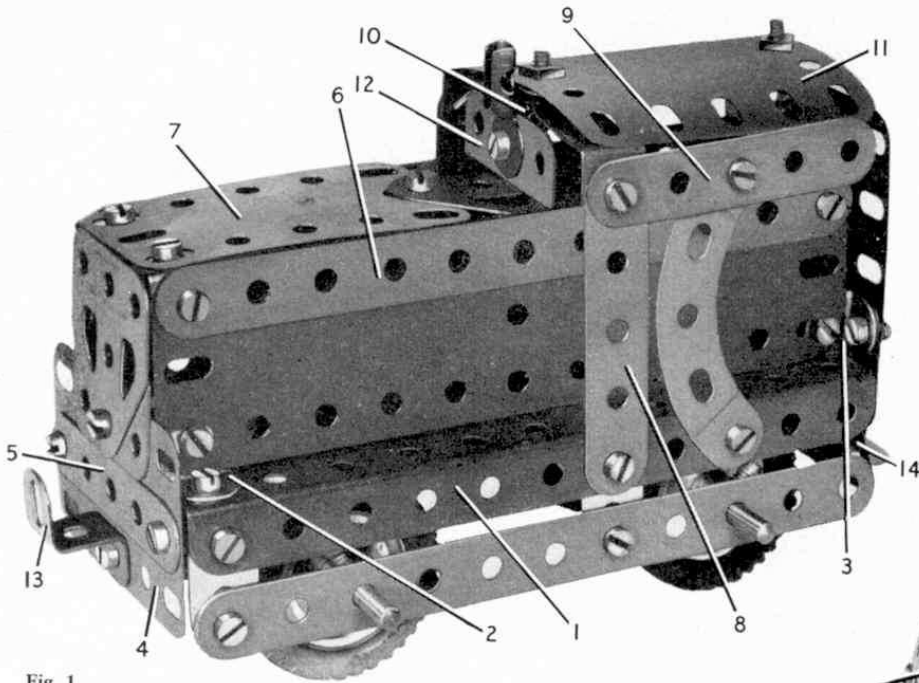


Fig. 1.

An easy-to-build model Diesel Locomotive. All the Parts contained in it are included in Outfit No. 2.

### A Diesel Locomotive built from Outfit No. 2

Owners of an Outfit No. 2 or one larger will have all the parts required to assemble the attractive, but easy-to-build, Diesel Locomotive shown in Fig. 1.

The base of this model is a  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  Flanged Plate 1; on this two  $5\frac{1}{2}'' \times 1\frac{1}{2}''$  Flexible Plates are fixed by Angle Brackets 2. To the back of the Flanged Plate is bolted a  $2\frac{1}{2}'' \times 2\frac{1}{2}''$  Flexible Plate, which is also bolted to the  $5\frac{1}{2}'' \times 1\frac{1}{2}''$  Plate by means of an Angle Bracket 3. A Flexible Plate 4 and a  $2\frac{1}{2}''$  Strip 5 are bolted to the front of the Flanged Plate and to the front of the Plate 4 are fixed two Flat Trunnions as shown. A  $5\frac{1}{2}''$  Strip 6 is bolted across the top of the  $5\frac{1}{2}'' \times 1\frac{1}{2}''$  Flexible Plate, and a  $2\frac{1}{2}'' \times 1\frac{1}{2}''$  Flexible Plate 7 is then fixed by Angle Brackets to the top of the tank as shown. Two  $2\frac{1}{2}''$  Strips 8 are then bolted to the Flanged Plate and these are then joined at the top by a  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip, at the same time attaching the Strips 9. The Strips 9 are braced by  $2\frac{1}{2}''$  Curved Stepped Strips. A second  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip 10 is then bolted to the one already mentioned. This runs from front to rear, and at the rear it is bolted to the  $2\frac{1}{2}'' \times 2\frac{1}{2}''$  Flexible Plate. A  $2\frac{1}{2}'' \times 2\frac{1}{2}''$  Plate 11 is then bolted to the top by  $\frac{3}{8}''$  Bolts. The Plate should be given a slight curve and should be spaced from the Double Angle Strip 10 by two Washers at the front and three at the back. A Trunnion 12 is then attached to the Plate 7 and the Double Angle Strip 10, a Rod and Strip Connector also being attached. Two  $5\frac{1}{2}''$  Strips are then bolted to the bottom of the Flanged Plate by two Fishplates, and the  $3\frac{1}{2}''$  Rods that carry the Wheels are journaled in them. A Reversed Angle Bracket 13 is bolted to the front to form a coupling. A Trunnion is bolted to the rear of the Flanged Plate and to it are attached a  $2\frac{1}{2}''$  Strip 14 and an Angle Bracket to form the rear coupling.

Parts required to build the Diesel Locomotive: 4 of No. 2; 6 of No. 5; 4 of No. 10; 7 of No. 12; 2 of No. 16; 4 of No. 22; 42 of No. 37a; 40 of No. 37b; 5 of No. 38; 2 of No. 48a; 1 of No. 52; 2 of No. 90a; 2 of No. 111c; 1 of No. 125; 2 of No. 126; 2 of No. 126a; 4 of No. 142c; 2 of No. 188; 2 of No. 189; 2 of No. 190; 2 of No. 212.

### A Model Slotting Machine for Outfit No. 4

This is a model of a machine used by engineers for shaping pieces of metal fixed to a worktable. The metal is cut by a

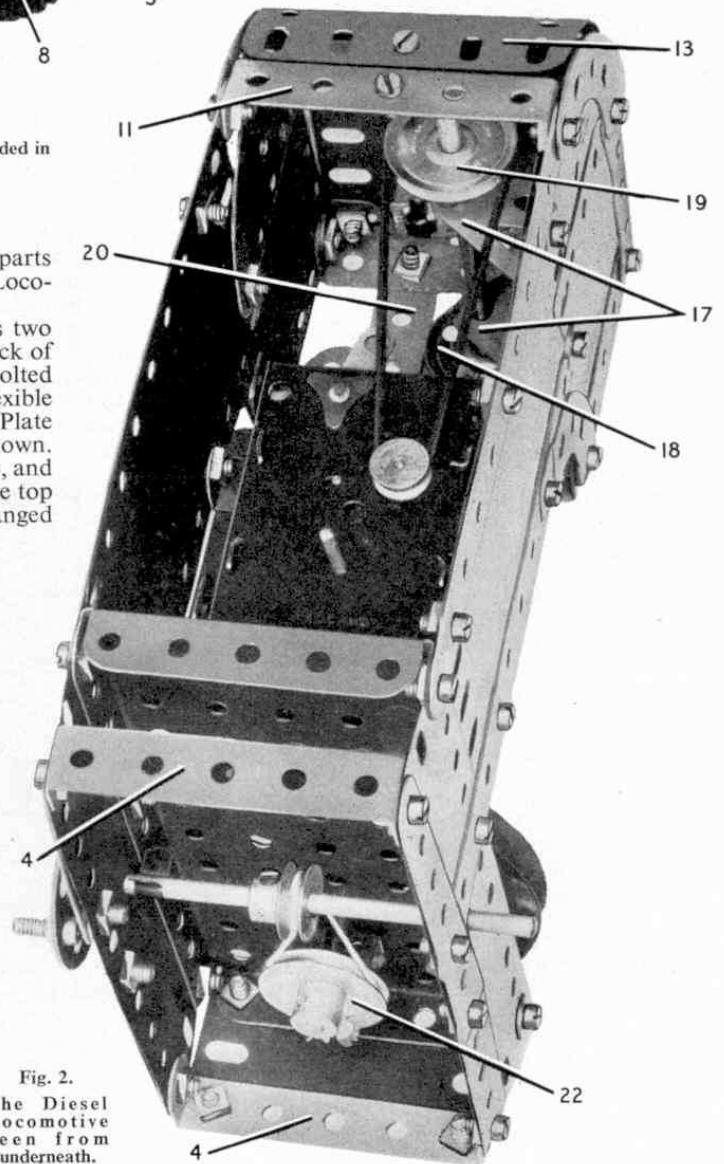


Fig. 2.

The Diesel Locomotive seen from underneath.