

Fig. 1. A Steam Wagon that can be built from parts in Outfit No. 4.

## A New Model for Outfit No. 4

### Steam Haulage Wagon

Although not so many of them are seen on our roads today, a steam haulage wagon is a quite fascinating sight on the rather rare occasions when one is fortunate enough to catch a glimpse of one powerfully puffing its way along the highway, hauling a heavy load behind it. Our model, which is seen complete in Fig. 1, is based on one of the most popular types of these vehicles, and it can be built from parts in an Outfit No. 4.

The basis of the chassis is a  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  Flanged Plate to which two  $12\frac{1}{2}''$  Perforated Strips 1 are attached by Fishplates. One end of each Strip is bolted to a  $2\frac{1}{2}'' \times 1\frac{1}{2}''$  Flanged Plate 2, the other ends being joined by a  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip 3. A Flanged Sector Plate 4 is bolted to each of the Strips and two  $5\frac{1}{2}''$  Strips 5 are in turn bolted to them. The rear axle is journalled in the Flanged Sector Plates. The platform of the wagon consists of a framework made from  $5\frac{1}{2}''$  and  $2\frac{1}{2}''$  Strips filled in with Flexible Plates, and is bolted to the Flanged Plate. A  $2\frac{1}{2}''$  Double Angle Strip 9, secured to the Double Angle Strip 3, is attached to the rear of the platform by a Reversed Angle Bracket. A  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double

Angle Strip 6 is bolted to the Strips 1 and to this two Trunnions 7 are attached.  $3\frac{1}{2}''$  Strips 8 are attached to the Trunnions by Angle Brackets. The back of the cab is made up of a Hinged Flat Plate, which is bolted to the Trunnions and the lugs of two  $2\frac{1}{2}''$  Double Angle Strips 10. The front and sides of the cab are filled in with Flexible Plates as shown, those forming the corners being curved, and the plate forming the front is bolted to the Flanged Plate 2. A  $2\frac{1}{2}'' \times 1\frac{1}{2}''$  Triangular Flexible Plate 11 and a Stepped Curved Strip 12 are joined to the Flexible Plate by a Flat Trunnion and bolted to the Double Angle Strip 10 on each side. Two Formed Slotted Strips 13 are also secured to these Double Angle Strips and are joined by a  $2\frac{1}{2}''$  Strip 14. Two  $5\frac{1}{2}''$  Perforated Strips 15 are bolted to the corner Plates and the Formed Slotted Strips. The roof of the cab is also made up of Flexible Plates and Semi-circular Plates bolted to Angle Brackets. The boiler is made from two  $2\frac{1}{2}'' \times 2\frac{1}{2}''$  U-shaped Curved Plates bolted together and secured to the front of the cab. A  $2\frac{1}{2}''$  Rod is held in place by a Pulley fitted with a Tyre at each end of the boiler. The chimney is made of two sets of two  $2\frac{1}{2}''$  Strips attached to Double Angle Brackets, in which is journalled a  $2''$

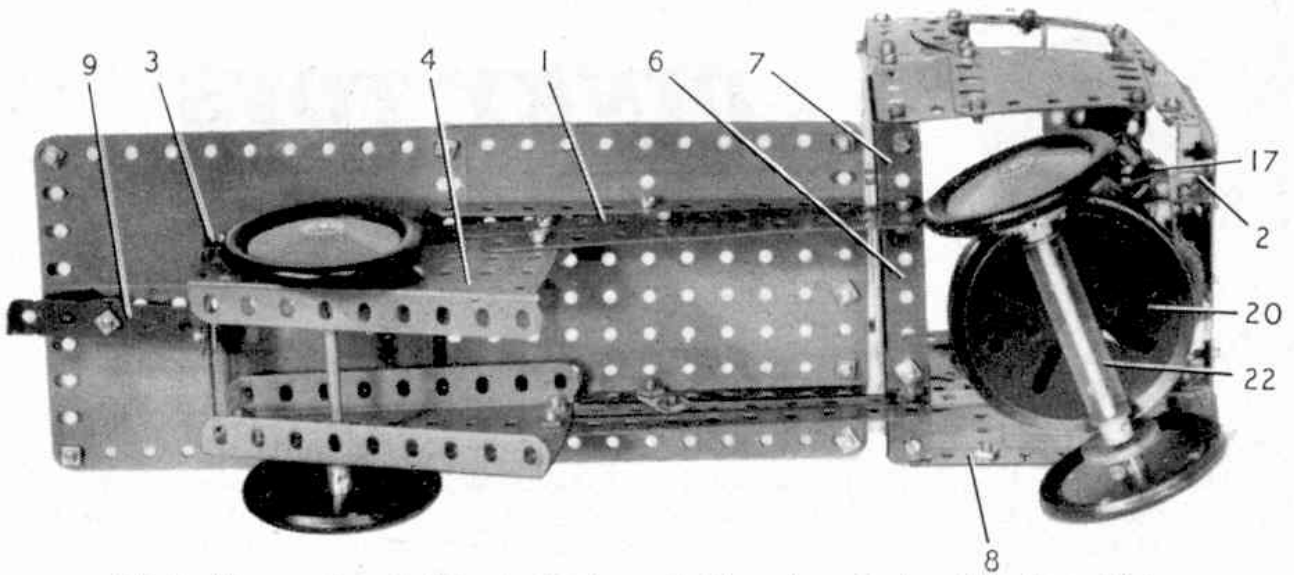


Fig. 2. The arrangement of the steering is seen in this underneath view of the Steam Wagon.

Rod fitted with a Rod Connector and held in place by a Spring Clip. The two components are held together by a piece of Cord and the chimney is connected to the boiler by the Rod Connector. The Bush Wheel, forming the steering wheel, is carried on a 4" Rod journalled in a Stepped Bent Strip 16 and a 1½" × ½" Double Angle Strip 17 bolted to the Perforated Strip 1. A 3" Pulley 18 is attached by Angle Brackets 19 to the

chassis, and a 1½" Rod, held in another 3" Pulley 20, is journalled in it and held in position by a 1" Pulley 21. A 2½" × ½" Double Angle Strip 22 is secured to the 3" Pulley 20 and carries the front axle. The model is completed by taking a length of Cord and winding it for several turns around the 4" Rod. The ends of the Cord are then passed around the Pulley 20 and tied together to form an endless belt.

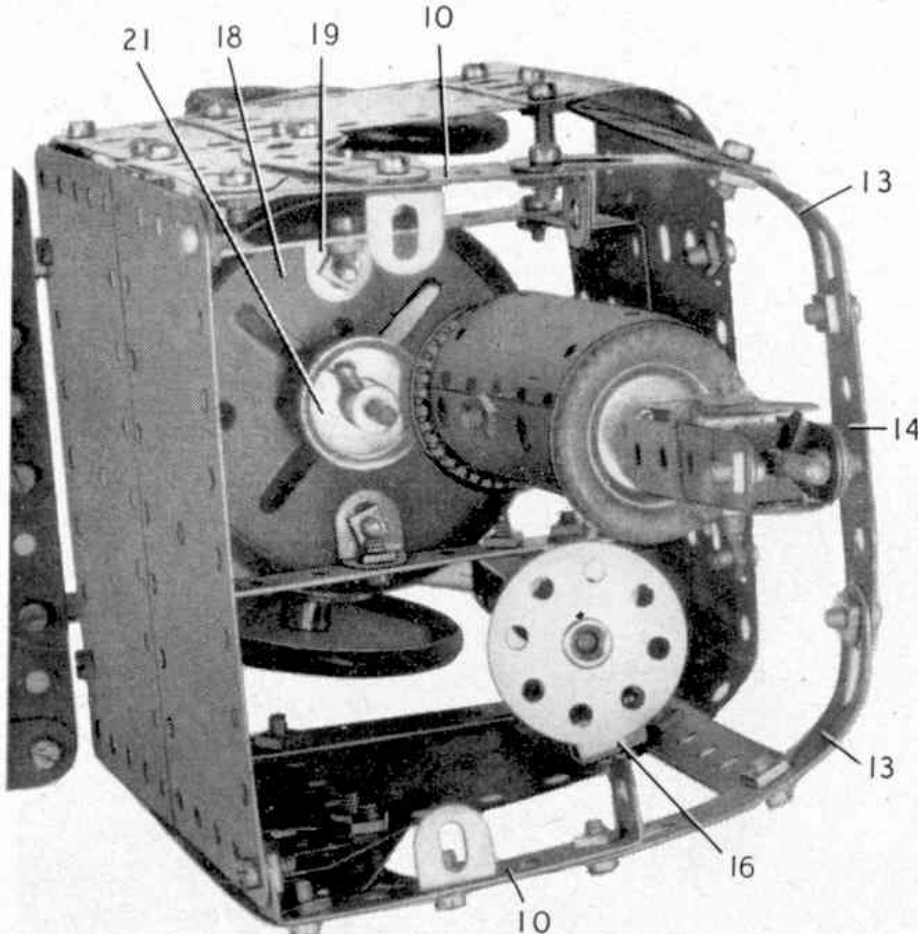


Fig. 3. Looking into the cab with the roof plates removed.

*Parts required to build model of Steam Wagon:* 2 of No. 1; 8 of No. 2; 2 of No. 3; 9 of No. 5; 2 of No. 10; 2 of No. 11; 6 of No. 12; 2 of No. 15b; 2 of No. 16; 1 of No. 17; 1 of No. 18a; 2 of No. 19b; 5 of No. 22; 1 of No. 24; 2 of No. 35; 87 of No. 37a; 81 of No. 37b; 3 of No. 38; 1 of No. 44; 1 of No. 48; 6 of No. 48a; 1 of No. 51; 1 of No. 52; 2 of No. 54; 2 of No. 90a; 6 of No. 111c; 1 of No. 125; 2 of No. 126; 2 of No. 142; 4 of No. 187; 2 of No. 188; 2 of No. 189; 4 of No. 190; 1 of No. 191; 2 of No. 192; 1 of No. 198; 2 of No. 199; 2 of No. 200; 1 of No. 213; 2 of No. 214; 2 of No. 215; 2 of No. 221.