Two "Easy-to-Build" Models

By "Spanner"

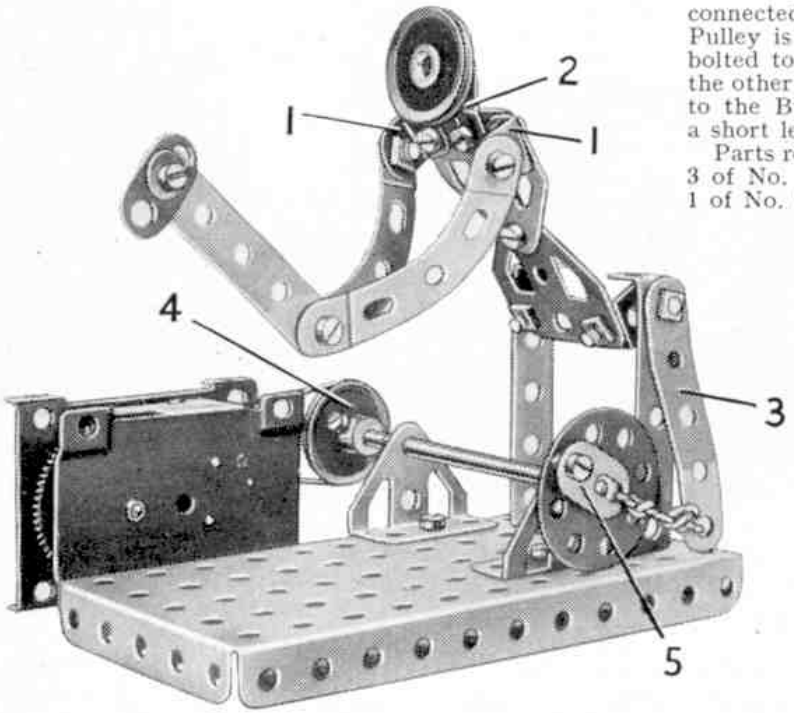

Fig. 1. "Rocky, the road repairer." This simple working model can be built from Outfit No. 0.

ROAD NAVVY—MOVABLE CRANE

Some years ago I illustrated in the *M.M.* several very simple workable models representing people engaged in various tasks or sports. I was very pleased to find that these proved very attractive to my younger friends and I received lots of letters asking me to design some more models of this kind. I am always glad of course to meet the wishes of my readers as far as possible, and therefore I have designed another mechanical figure that I hope they will like. This one is the result of my efforts recently to amuse a young relative who was paying a visit to my home. It represents a road navvy at work, and is most amusing to watch in action when it is set working by the *Magic* Motor with which it is fitted.

The man's legs are 2½" × ½" Double Angle Strips, and it will be seen that they are bolted direct to a 5½" × 2½" Flanged Plate that forms a base for the model. Two Flat Trunnions bolted together at their pointed ends represent his body, and his arms are 2½" stepped Curved Strips attached to Angle Brackets 1. The hammer is a 2½" Strip with a Fishplate for a head, and it is bolted between the ends of the man's arms. The 1" Pulley representing the man's head is fixed by its set-screw on a bolt passed through a Fishplate 2.

An Angle Bracket is bolted through its round hole to each corner of the lower Flat Trunnion, and in its slotted hole a ⅜" Bolt is fixed by a nut. The Bolts are then passed through the upper holes of the 2½" × ½" Double Angle Strips and fitted with lock-nuts, so that the man's body is able to move freely on the legs. A 2½" Strip 3 is clamped tightly to one of the ⅜" Bolts by the lock-nuts.

To complete the model the *Magic* Motor is bolted in position and its pulley is connected by a Driving Band to a 1" Pulley 4. This Pulley is fixed on a 3½" Rod mounted in Trunnions bolted to the base, and a Bush Wheel is fastened at the other end of the Rod. A Fishplate 5 is lock-nutted to the Bush Wheel, and is connected to Strip 3 by a short length of cord.

Parts required to build the Road Navvy: 2 of No. 5; 3 of No. 10; 4 of No. 12; 1 of No. 16; 2 of No. 22; 1 of No. 24; 1 of No. 35; 18 of No. 37; 4 of No. 37a; 2 of No. 38; 2 of No. 48a; 1 of No. 52; 2 of No. 90a; 2 of No. 111c; 2 of No. 126; 2 of No. 126a; 1 *Magic* Clockwork Motor.

AN ATTRACTIVE MOBILE CRANE

Of all the many different models it is possible to build with Meccano, I doubt if any has greater interest for a youngster, than a crane! How well I remember in my own young days, the fun I got from building and playing with simple Meccano cranes! I am afraid some of my early efforts were a bit rickety, because I always wanted to have a tall jib, and to build this from my small Outfit I had to use up nearly all my parts and so had hardly any left to provide a good steady supporting structure! However, rickety and spidery though they were, my cranes gave me lots of fun. I remember that I used to perch them on the edge of a table so that I could hook up small objects off the floor, and how exasperated I was when after raising the load almost to table level the Cord slipped on the winding handle and down it crashed again, often taking the crane itself along with it! I feel sure that this will not happen with the simple three-wheeled crane I am illustrating in Fig. 2. I have designed this so that every owner of an Outfit No. 3 can make it, and I can assure you that it is quite strong and workmanlike.

The main piece of the model is a 5½" × 2½" Flanged Plate fitted at the front with a 2½" × 2½" Flexible Plate. This Plate

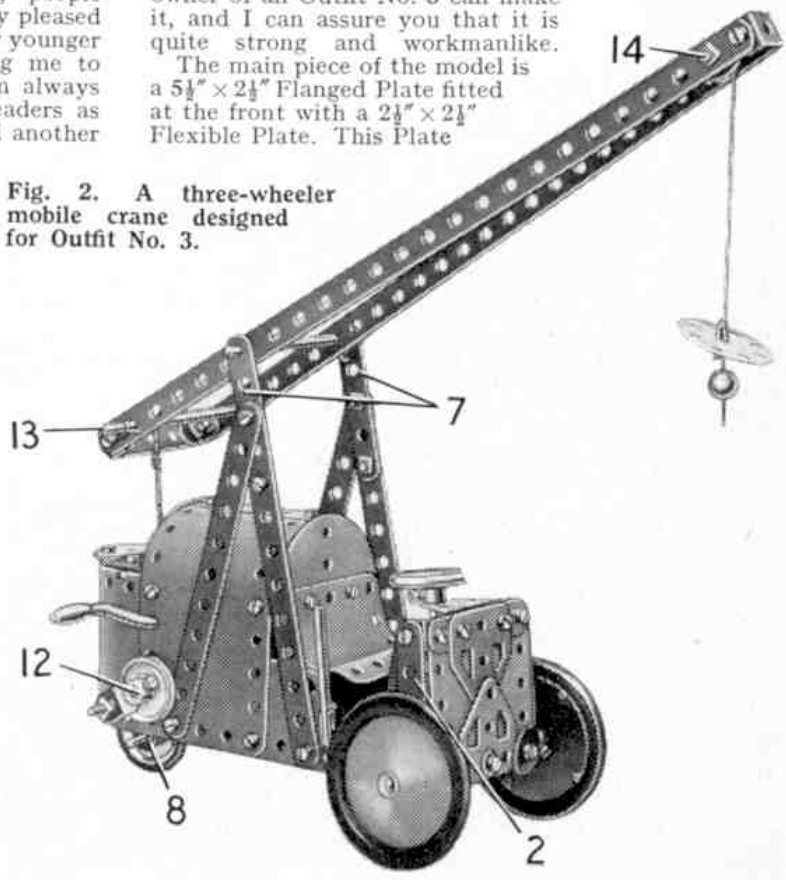

Fig. 2. A three-wheeler mobile crane designed for Outfit No. 3.