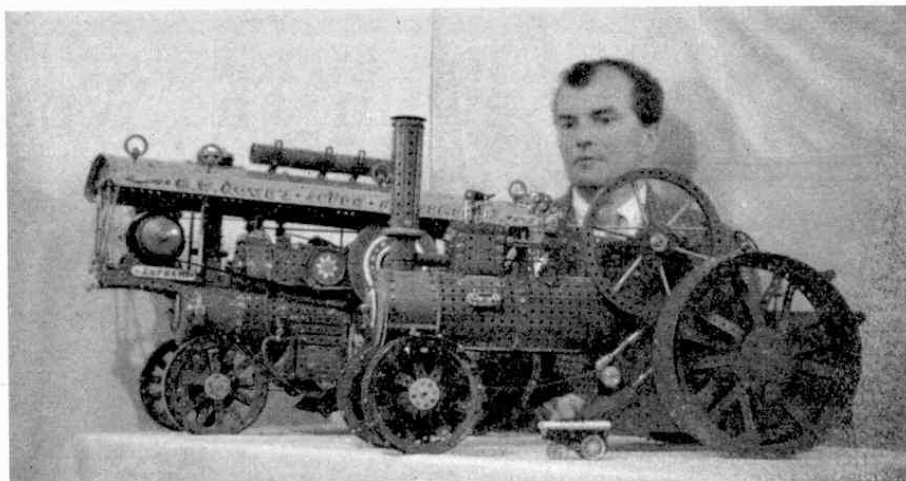


AMONG THE MODEL- BUILDERS



Two fine model Traction Engines and their builder B. W. Rowe, Newton Abbot. Mr. Rowe is a very keen Meccano constructor, and many examples of his work have been illustrated in the "Meccano Magazine" from time to time. His models are always impeccably neat, finely proportioned and full of skilfully executed details.

RATCHET LEVER

Fig. 1 shows a simple ratchet mechanism for control levers in models such as cranes, and it is small enough to be used also in model vehicles as a hand brake lever.

The brake lever is a Rod 1 fixed in a Coupling 2, which is screwed to one end of a short Screwed Rod. This is fitted with a nut and a $\frac{1}{2}$ " Pinion 3, and is then passed through the model framework 4 and fitted with a second nut. The two nuts are tightened to fix the Screwed Rod firmly in place and to prevent Pinion 3 from rotating, but Coupling 2 must be free to pivot.

A bolt 5, fitted with two Washers, is passed through an Angle Bracket 6 and is screwed tightly into one of the threaded holes in a Collar. A $\frac{3}{8}$ " Bolt passed through the Collar is screwed into Coupling 2, leaving the Collar free to turn on the Bolt. A $2\frac{1}{2}$ " Driving Band is slipped over the Bolt 5, through the slotted hole in Angle Bracket 6, round Coupling 2 and over a bolt in the Coupling. This holds the Angle Bracket against the teeth of Pinion 3 to form a ratchet. The ratchet can be released by a lever 7 formed by a Pawl pivoted on a Bolt screwed into a Collar on Rod 1. A short length of wire connects lever 7 and Angle Bracket 6.

FRICTION GRIP TACKLE FOR CRANES

Fig. 2 shows a useful friction grip

for use with block-setting cranes. This is quite simple to build and is suitable as an attachment for small models of this kind.

The apparatus comprises a framework built up from $3\frac{1}{2}$ " Strips 1 bolted to transverse $5\frac{1}{2}$ " Strips 2 and $1\frac{1}{2}$ " Strips 3. The framework is in

The ends of two $2\frac{1}{2}$ " Strips 7 are mounted pivotally on the same Axle Rod between the Pulleys, and are connected at their outer ends, by means of lock-nutted bolts, to $5\frac{1}{2}$ " Strips 8. The latter are free to pivot on bolts 9 passed through the $5\frac{1}{2}$ " Strips 2. A short operating cord 10 passes round one of the $\frac{1}{2}$ " Pulleys 6, and is secured to Strips 2.

By "Spanner"

duplicate, and the two sides are spaced apart by means of Washers placed on the four securing bolts. The $3\frac{1}{2}$ " Strips 4, secured to a Hook 5, are arranged to slide between the Strips 3. They are guided in this movement by means of two $\frac{1}{2}$ " loose Pulleys 6, one on each side, which are mounted on a short Rod and held in place by Collars.

Fig. 1. A simple control lever ratchet mechanism.

