

# Among the Model-Builders

By "Spanner"

## A Meccano Fancy Dress

Meccano has formed the theme for many a novel fancy dress idea and has helped many youngsters to solve the problem of what to wear at the school or club party. One of the latest efforts in this direction has come to my notice from New Zealand, where young Tommie Hine of Palmerston North recently attended a fancy dress school party dressed as a Meccano boy. He is shown in his "costume" in the upper illustration on this page, and I think that readers will agree that in spite of its simplicity the "get up" is quite effective.

## How to Use Meccano Parts—Sleeve Piece

The arrangement shown in Fig. 1 illustrates two important uses of the Sleeve Piece, Part No. 163. One of the more obvious uses of this part is as a chimney in small models of steam engines, etc., but it is also useful in making small cylinders and in assembling winding barrels for model cranes. The illustration shows one Sleeve Piece used as the cylinder of a miniature steam engine assembly, and another employed as a winding barrel for a hoisting Cord.

For the cylinder two Chimney Adaptors, Part No. 164, are pressed into the ends of a Sleeve Piece that is bolted to a suitable frame. The winding barrel is made by pressing a  $\frac{3}{4}$ " Flanged Wheel over each end of a Sleeve Piece. The Flanged Wheels enable the barrel to be fixed on the winding shaft and

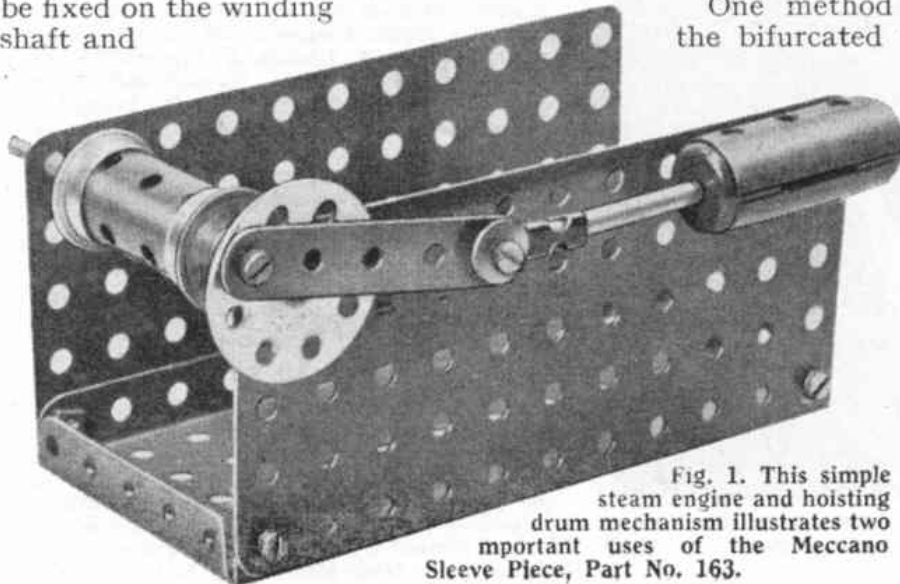


Fig. 1. This simple steam engine and hoisting drum mechanism illustrates two important uses of the Meccano Sleeve Piece, Part No. 163.

their flanges serve to prevent the Cord from slipping off the barrel.

## Attaching Parts to Sprocket Chain

One of the questions that crops up very frequently in my correspondence relates to the problem of attaching Strips or other parts to Meccano Sprocket Chain. It is not practicable to pass a

Meccano bolt through a link in the Chain, and even if this arrangement could be adopted the bolt would prevent the Chain from passing round Sprocket Wheels. Very often however, it is desirable to use parts attached to Sprocket Chain in the assembly of conveyor belts or creeper tracks without interfering in any way with the movement of the Chain round Sprocket Wheels.

One method is to use paper clips of the bifurcated type. Each clip is passed through the part it is desired to attach and through a link in the Chain. The prongs are then opened out, leaving a gap in the centre that allows the Chain to pass freely over a Sprocket Wheel. This arrangement is quite effective, especially in the assembly of creeper tracks, but it may not be suitable for conveyors carrying heavy loads. Fig. 2 shows another way of achieving the



A real Meccano boy! Tommie Hine, Palmerston North, New Zealand, dressed in the novel costume he wore at a school fancy dress party.

same result by making use of the slotted holes in Angle Brackets or Fishplates. In the illustration the Chain is shown fitted with Angle Brackets, but Fishplates can be used with equal success if they are more convenient.

The arrangement is very simple and consists of doubling two links of the Chain so that they can be pushed through the slotted hole. A short piece of stiff wire is then passed

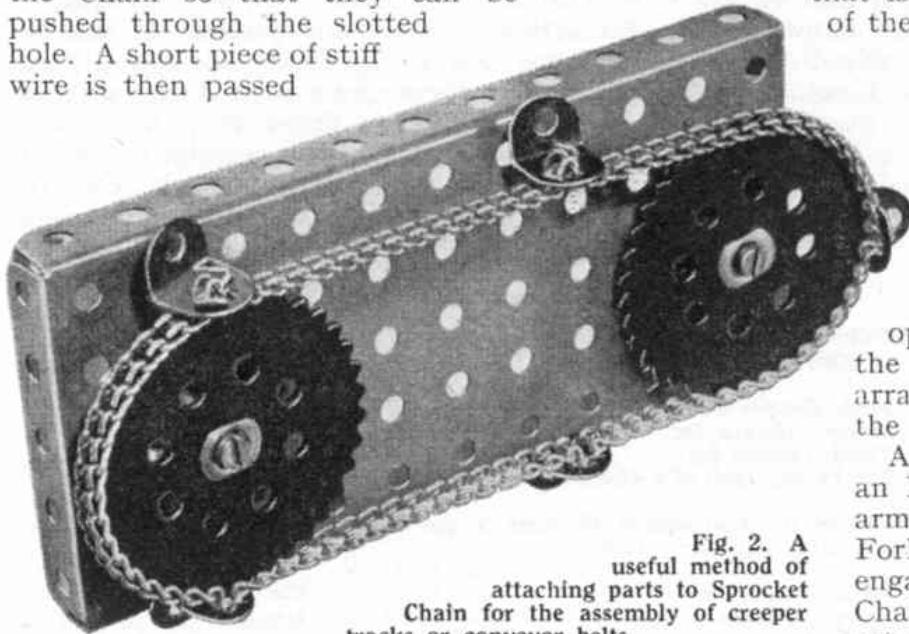


Fig. 2. A useful method of attaching parts to Sprocket Chain for the assembly of creeper tracks or conveyor belts.

through the doubled links, above the part to be held in place, and the ends of the wire are twisted so that it cannot slip out of place. The Fishplate or Angle Bracket will be found to be held in position securely, yet the Chain will pass freely over the Sprocket Wheels that support it and transmit the drive.

**A Novel Intermittent Motion Device**

The ingenious mechanism shown in Fig. 3 is intended mainly to operate as an intermittent feed arrangement, on the lines of the mechanisms required to draw a film through the gate of a projector. There are several ways in which this movement can be obtained, but the device illustrated is particularly interesting in view of the unusual method employed. In spite of the novel arrangement the mechanism is reliable and operates very smoothly, and no doubt model-builders will be able to find many applications for it in models that require an intermittent feed device.

Two 57-tooth Gears are fixed on Rods mounted parallel to each other so that the Gears are in constant mesh. One of these Rods is used as the driving shaft of the machine. An arm 1, made from a 4" Stepped Curved Strip and a 2½" Curved Strip overlapped three holes, is freely mounted on a Pivot Bolt that is fixed by two nuts in one of the Gears. The arm is spaced from the Gear by a Collar.

The arm 1 is free to slide in a Slide Piece 2 that is pivotally mounted on a 3/8" Bolt passed through the second 57-tooth Gear. To ensure smooth operation of the mechanism the two Gears should be arranged exactly as shown in the illustration.

A Centre Fork 3 is held in an End Bearing bolted to the arm 1 as shown. The Centre Fork forms a claw that engages a length of Sprocket Chain when the mechanism is set in motion.

When the 57-tooth Gears are rotated they impart an unusual combined reciprocating and circular movement to the Centre Fork 3. On its driving stroke the Centre Fork engages the Sprocket Chain and travels in a straight line until the stroke is completed, drawing the Chain with it. The Centre Fork is then raised clear of the Chain, and travels backward until it again descends and engages the Chain for another stroke.

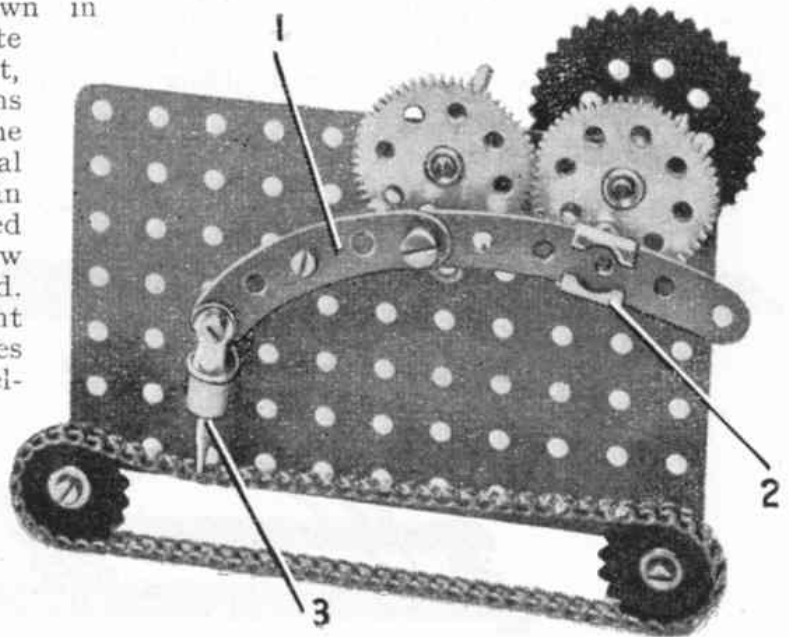


Fig. 3. The novel intermittent feed mechanism described on this page.