Among the Model-Builders

By "Spanner"

CENTRIFUGAL CLUTCH

Figs. 1 and 2 show a simple centrifugal clutch that can be incorporated in many models driven by an Electric Motor. A clutch of this kind takes up the drive only when the input shaft reaches a given speed, the actual speed being determined by the weight of the driving members and the strength of the springs used to hold them in the "off" position.

An E20R Electric Motor is bolted to a Flanged Plate 1, and a ½" Pinion on its shaft meshes with a 57-tooth Gear on a Rod 2 mounted in the Motor side-plates. Rod 2 is fitted with a Face Plate 3, and four ½" Pulleys 4 are mounted on 1½" Bolts free to slide in the slotted holes of the Face Plate. The Pulleys are fixed on the Bolts by nuts, and the Bolt shanks are passed through the slotted holes and are fitted with lock-nuts. Driving Bands are looped round opposite pairs of Pulleys so that they are pulled by the Bands towards the centre of the Face Plate.

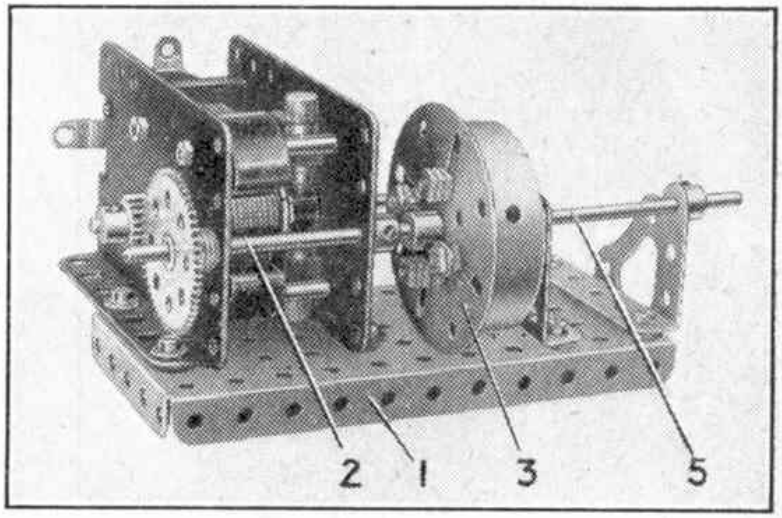

Fig. 1. A novel form of centrifugal clutch that takes up the drive only when the input shaft reaches a pre-determined speed. Details are given on this page.

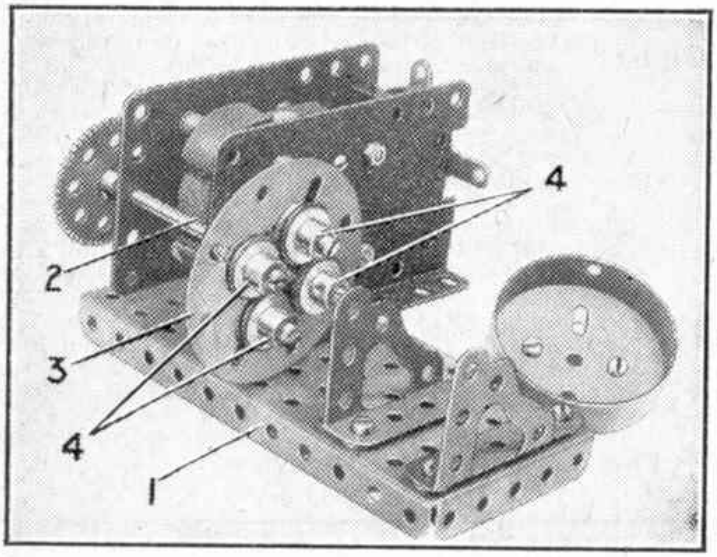

Fig. 2. The centrifugal clutch showing the interior construction.

The driven shaft is a Rod 5 mounted in Flanged Brackets fixed to the base. The Brackets are spaced from the Flanged Plate by Washers on each bolt to bring Rods 2 and 5 exactly into line. Rod 5 carries a Boiler End fixed to a Bush Wheel, and is positioned so that the Boiler End slips over the Pulleys 4.

A NOVEL USE FOR MECCANO GEARS

Mr. O. Roberts, Cardiff, has made use of Meccano Gears in a somewhat unusual way in a model ticket-issuing machine he constructed recently. The tickets in this machine are stored as a continuous roll of paper, and are issued by inserting a coin in a slot. Suitable paper for the job was obtained quite easily from stationers supplying rolls for adding and calculating machines, but it was found that when the ticket was torn off after issue a jagged edge resulted, and frequently the next ticket in the roll was spoilt by the tear. Some form of perforation similar to that used in postage stamps was obviously called for, and Mr. Roberts found that a Meccano 1½" Gear provided an easy solution to the problem. The Gear was mounted on a travelling arm and arranged to roll under fairly heavy pressure across the paper at the desired point, immediately before the ticket was ejected. The resulting perforations made by the teeth of the Gear allowed the ticket to be torn cleanly from the roll. The perforating action was found to be improved when a fairly resilient pad such as a sheet or two of blotting paper was placed underneath the roll at the point of contact with the Gear.

AN ITALIAN BOY'S BLOCK-SETTING CRANE

The lower illustration on this page shows a young Italian model-builder and a giant block-setting crane he built recently. This keen Meccano user is the nine-year old son of Ing Maggi Giuseppe, Milan, and he is to be congratulated on having completed so early in his career, a complicated model of this kind.

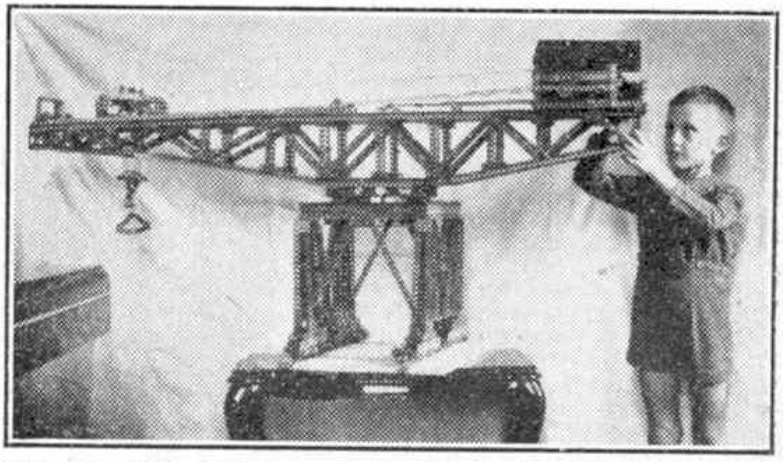

Fig. 3. Ing Maggi Giuseppe, Milan, and his young son are keen Meccano enthusiasts, and in this picture we see the boy putting the finishing touches to a model of a giant block-setting crane.