Among the Model-Builders

By "Spanner"

A Wonderful Meccano Model

MANY *Meccano Magazine* readers will have seen, and perhaps have put a copper or two in, one of the automatic grab crane gift machines that feature in many amusement arcades. Dropping the penny in enables the operator to manœuvre the crane grab in an endeavour to pick up one of the prizes enticingly displayed inside the glass container. Now, a reader of the *Meccano Magazine* has built a model based on one of these machines and, although it is not provided with the glass container in which the prizes are shown in the actual machine, it functions in a very realistic manner when a coin is inserted.

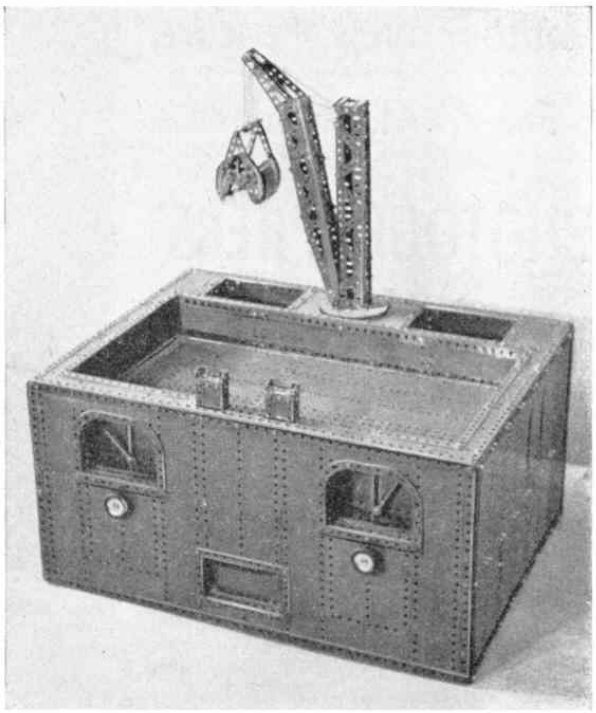
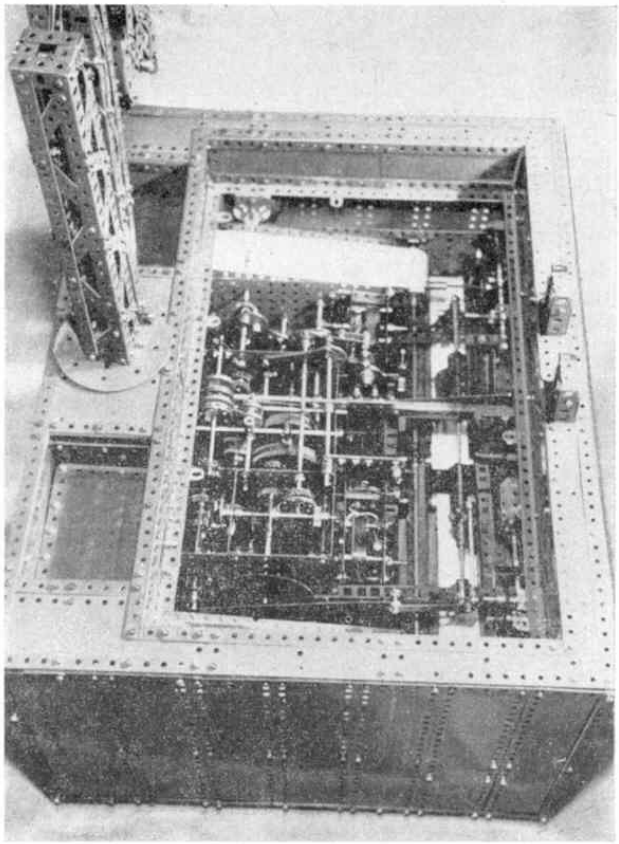
The model is illustrated on this page. It is an excellent example of the adaptability of Meccano, and of the unlimited range of subjects open to a clever model-builder who has the parts available and is prepared to devote the time necessary to think out, and plan for himself, the intricate mechanism required to operate a complicated machine such as this.

The builder of this very attractive and unusual model is J. M. Sturrock who lives at Dundee. He tells me it took him the best part of sixteen months' leisure time to design, build and carry out all the many adjustments required to get the model functioning just right! Sturrock also tells me that when he first planned his model he intended that its details should follow the original machine very closely, but as he thought the construction would be too easy he decided to make it more difficult, and interesting, to construct by designing and incorporating several new mechanisms of his own.

The operation of the model is as follows: On the front of the machine are two small "selector" cranes and two knobs. On turning the left-hand knob the "selector" crane above it swivels. On turning the right-hand knob the jib of the little "selector" crane above it is raised and lowered. Before the penny is inserted in one of the two slots provided, these two "selector" cranes are swivelled to any desired position. On inserting a penny in either of the slots the main crane automatically takes up the same position as that of the two smaller "selector" cranes above the operating knobs. The crane grab is then lowered into the well of the casing in which small gifts of various suitable types can be placed. With practice and skill the two small "selector" cranes can be set so that the crane grab will pick up any desired gift. The grab then closes and is hoisted, and the jib returns to the vertical. The crane then swivels either right or left, and the operator has to guess which way it will go.

If the crane swivels to the left and the penny had been put in the left-hand slot, the penny is automatically returned, but if the crane turns left and the penny was in the right-hand slot, the coin is not returned, and so on. In all cases, however, the operator still gets any gift the grab has picked up, as the grab lowers over one of two discharge doors, the door opens, the grab opens and the gift falls into the machine. A conveyor belt carries it to a door at the front of the machine, which opens and displays the gift together with the penny, if the latter is returned. The crane then reverts to its original position and all doors close. The entire sequence is completely automatic and some idea of the intricate mass of gears and other mechanisms that carry it out can be gained from accompanying illustrations.

I am unable to describe this splendid model in detail, but mention it here to show the scope which is available for ingenious model-builders, who wish to get off the beaten track of ordinary model-building, provided they keep their eyes open for novel subjects and



(Above) The very attractive and ingenious model automatic amusement machine built by Mr. J. M. Sturrock, of Dundee, which is described on this page. (Below) A view of the machine with the top plating removed to show the mass of internal gearing.