

SIMPLE MECHANISMS

Simplicity is the keynote of these model building hints supplied by Meccano Magazine readers for other followers of the hobby

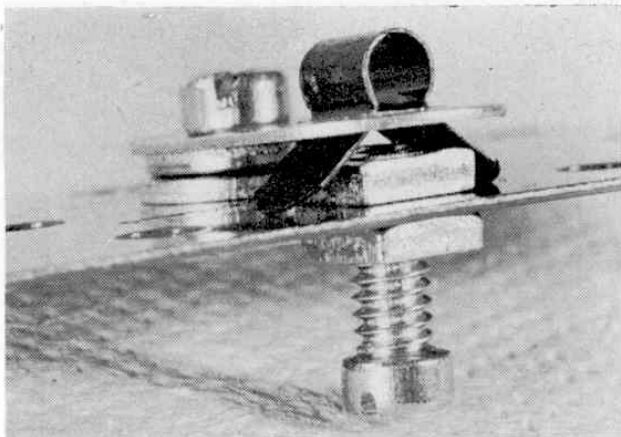
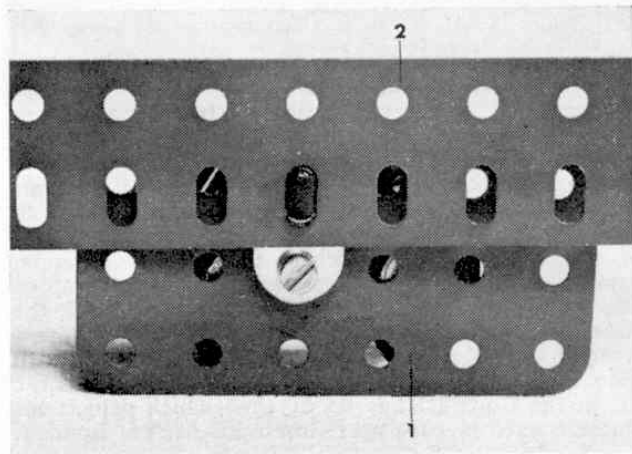
EVERY HOBBY has its pitfalls and Meccano is certainly no exception. I fear, though, that the fault in this case usually lies not with the system but with the user or, more particularly, with the enthusiasm of the user. By this I mean that many of us often get carried away with ourselves when building models. We fall into the trap of trying to introduce too much complexity and this, as you know, can be as much a bad habit as producing inadequate models.

Don't think that I am decrying complicated models—far from it. What I am against is making overly complicated mechanisms just for the sake of complexity. When building models that have working movements, for example, the mechanisms controlling the movements should be made as simple as possible for the job on hand. This, you may think, is common sense, but it is surprising how many people come up with a fantastic unit bristling with Gears, Pinions, Rods and Worms when something quite simple would do the job just as well and probably more efficiently. In this article, therefore, I am featuring some ideas supplied by readers for items that are extremely useful and yet decidedly uncomplicated.

Doorcatch

First out of the bag is a little doorcatch (see Fig. 1) suggested by Mr. R. R. Hutton of Lincoln. From the accompanying illustration you will see that it consists of nothing more than a Spring Clip pressed through the elongated hole of a Fishplate. In operation, the Fishplate is attached to the door of the model being built, the doorframe of which must be so designed that another elongated hole in its outside edge coincides with the Spring Clip. When the door is shut, the "bulge" of the Spring Clip should also press into the latter elongated hole making, as Mr. Hutton says, "a good, firm catch."

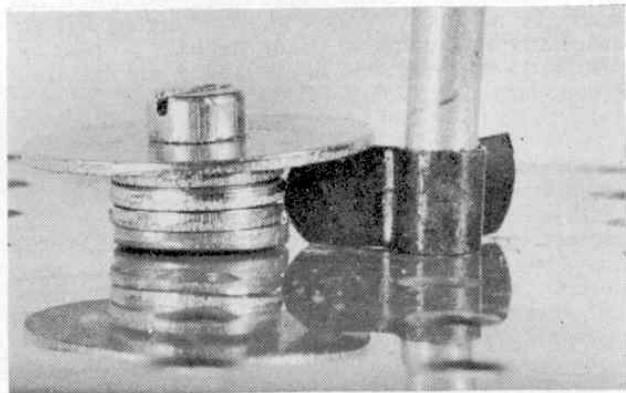
Another view of the doorcatch as it would appear from the inside of a model. The Flat Plate 1 represents the door and the Flat Girder 2, the door frame.



A very simple doorcatch for models designed by Mr. R. R. Hutton of Lincoln.

Control rod damper

Another out-of-the-ordinary use for a Spring Clip has been suggested by Mr. L. R. Atkinson of Putney Heath in London, who produced a most effective damper (Fig. 2) for the control rod of a gearbox or, indeed, of any other mechanism actuated by the sliding movement of a Rod. You will know that when a gear arrangement or drive motion is controlled by a free-sliding Rod a certain amount of trouble can be caused by the Rod moving about on its own causing the drive to engage or disengage prematurely, as the case may be. Mr. Atkinson has overcome the problem in suitable cases by mounting a Spring Clip on the control Rod against the sideplate of the gearbox or model. An arm of the Spring Clip is trapped behind a $\frac{3}{8}$ in. Washer fixed to the sideplate, but spaced from it by three Washers on the shank of the securing Bolt. The grip of the Spring Clip prevents the Rod from sliding on its own, while allowing it to be moved by hand. It's a very simple idea, yet perfectly adequate.



In this mechanism, designed by Mr. L. R. Atkinson of Putney Heath, London, a Spring Clip is used as a damper to prevent the control rod of a gearbox or similar item from sliding of its own accord.

Self-locking lever

Equally simple is another idea from Mr. Atkinson—this time for a self-locking lever (Fig. 3) that makes an ideal gear shift. A Strip 1 serving as the actual lever is pivotally connected to a suitable mounting by a Bolt 2 lock-nutted through its second hole. Pivotaly attached to the lower end of the Strip is a Collar 3 in which a short Rod is fixed. Mounted on the Rod is