AMONG THE MODEL BUILDERS

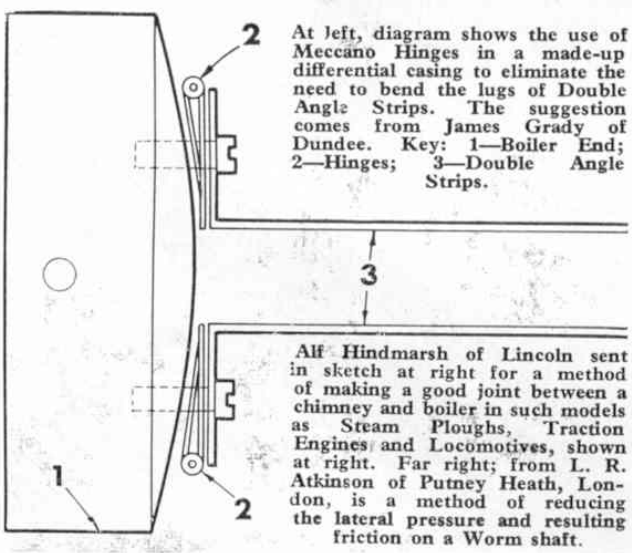
with Spanner

Mantel clock modifications

LAST MONTH M.M. reader Pat. Briggs of Nottingham gave detailed building instructions for a first-class Mantel Clock he had designed and built out of Meccano. Other readers who have since built the Clock or who have studied its design will know that, because of the simplicity and efficiency of the basic movement, the clock motion can be installed in other clocks of, as Mr. Briggs puts it, " more sophisticated appearance." Bert Love has sent me some photographs of just such another clock, this one also built by Pat. Briggs, and I thought it would be ideal to begin my article this month with a look at the new clock. Reproduced here, therefore, are a couple of Bert's photographs showing a traditional-style Carriage Clock incorporating Pat's basic design as featured last month. I leave it to Pat to comment on his first-rate model.

" The ornamentation," he says (and which is clearly shown in the illustration), " is achieved entirely with standard Meccano parts, apart from the dial and hands. A refinement to the original motion is included in this particular clock by making the anchor shaft itself from a 2 in. Elektrikit Pivot Rod, giving further reduction in overall friction and an increase in running time of up to 38 hours. Under these circumstances it is necessary to modify the crutch mechanism by attaching it to the anchor shaft internally and allowing the crutch pins to protrude through the rear of the clock case to engage the pendulum Collar, as shown in one of the accompanying pictures. In this event, the crutch must be of open triangular construction—to prevent fouling of the escapement rod immediately below it—and is made from two 2½ in. Narrow Strips bolted to a Double Arm Crank and spaced by Collars so as to clear the recessed Pivot Bolt."

This, then, is all that needs to be said about the modifications. The basic mechanism was fully described last month and the accompanying pictures are sufficiently detailed to give a good idea of the outer casing design. In effect, therefore, you clock enthusiasts now have two models to keep you busy—always assuming that you did buy last month's M.M.!



At left, diagram shows the use of Meccano Hinges in a made-up differential casing to eliminate the need to bend the lugs of Double Angle Strips. The suggestion comes from James Grady of Dundee. Key: 1—Boiler End; 2—Hinges; 3—Double Angle Strips.

Alf Hindmarsh of Lincoln sent in sketch at right for a method of making a good joint between a chimney and boiler in such models as Steam Ploughs, Traction Engines and Locomotives, shown at right. Far right; from L. R. Atkinson of Putney Heath, London, is a method of reducing the lateral pressure and resulting friction on a Worm shaft.

Differential casing hint

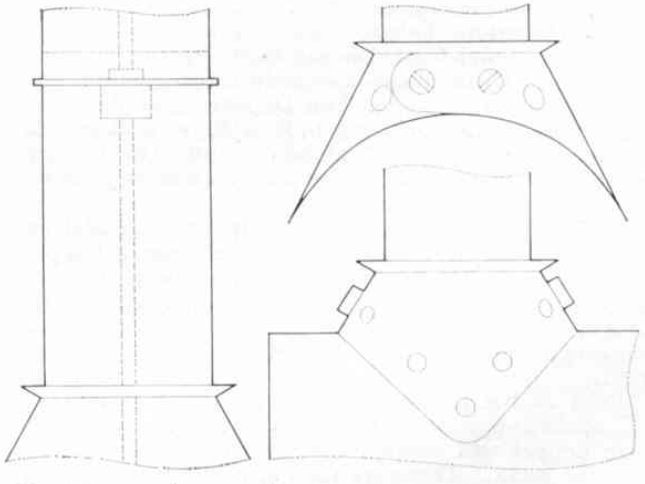
Moving northwards from Nottingham up to Scotland, we have a useful hint on differential casing construction supplied by James Grady of Dundee. " Many Meccano users," he writes, " find that, once a Double Angle Strip is bent, it is difficult to reset it at the original angle. This particularly applies when using Boiler Ends (in conjunction with Double Angle Strips) to form differential casings and the insertion of a Meccano Hinge eliminates having to bend the lug of the Strip."

The accompanying diagram shows how the Hinges are used in this particular construction and, having tried it myself, I can vouch for its success. James goes on to say, however, that, " By using this method, a Strip can also be laid successfully straight across a Boiler End." He's quite right, too!

Boiler/chimney joint

Our next offering comes from Alf. Hindmarsh of Lincoln who recently dropped us a line. " I am in the midst of building a ' Steam Plough ' in Meccano," he wrote, " and have come up against the difficulty of a good joint between the chimney and boiler. This is how I've overcome it . . . (see accompanying diagram). I've utilised two parts 201 Flexible Fusset Plate, curved them, and bolted them to each other. The resulting aperture just takes a 1½ in. Pulley Wheel. One has only to use a suitable Threaded Rod, Cylinders and 1⅛ in. Flanged Wheels to get the desired effect, and the chimney can be made as tall as you like by simply adding Cylinders and Flanged Wheels."

Alf's idea has much to recommend it, particularly as it can be used not only with a Steam Plough, but with almost any model incorporating a chimney and boiler. It would be ideal for Traction Engines and Locomotives, provided they were made to a suitable scale.



Bending and straightening

So as not to confuse you into thinking that the above sub-heading refers to a keep-fit-class, let me explain immediately that Mr. Grady's suggestion reminds me of the numerous letters we regularly receive on the subject of bending and straightening parts such as Strips and Flexible Plates. This is a problem which affects many enthusiasts, some of whom find that they occasionally bend parts beyond repair, so I feel justified in giving a few general pointers here.