

### SPRING HORNBLOCKS.

To be able to fit these hornblocks into a mainframe a cutout is required in the frame to the dimensions shown in fig. 1.

The principal of these hornblocks is that the weight of the model is used to compress the springs but the amount of this compression is limited by the amount that the top screw is screwed down. That is the model will ride on the bearing butting against the adjustment screw. By doing this the sit of the model (Height) can be adjusted at any time allowing a twisted chassis to be built with the full adjustment being used to make the loco sit level. On an 0-6-0 chassis the weight would be taken on the four outside hornblocks by adjusting the screw so that the bearing is restricted at the midway travel mark with the two middle horns having their screws retracted as far as possible so as to allow a slight upward movement of the bearing where needed on uneven track. Contrary to some peoples belief this amount of travel in the hornblock does not need to be very much as any movement required of the loco axle is spread over the entire chassis.

### Assembly.

Take the brass fret and solder the small diameter of the turned steel nut into the large etched hole in the middle of each guide. Whilst still leaving the fret intact file a flat on one side of each of these steel nuts so as to clear the mainframe when the guide is soldered into place - another way would be to file a notch into the top of the mainframe cutout. Note that when fitting the guide into the frame it should be flush with the outside of the frame.

Cut these guides from the fret and bend into a 'U' shape - it may help if one of the bearings is held in what would be the top and fold round this. Solder the guide into the frame keeping solder well away from the steel nut. Drill the two small holes out on the bend lines so that the brass wire will pass through with ease (No.76 or slightly bigger may help).

Insert screws into the steel nuts from the top and turn until a little of the screw projects into the bearing space. Take a length of the brass wire and bend into the shape shown in sketch 2. This should fit snugly into the etched grooves in the guide - refer to sketch 4 for guidance. For location of the spring it may help if a notch is filed into the top of each bearing per sketch 3 but this is not essential.

Place spring over the section of screw projecting into the guideway and place the bearing on top of this - I find it helps if a dab of vasaline is put on each end of the spring during this stage to stop it taking off into the carpet for ever !!! The formed wire is then inserted from the bottom and pushed in so that the ends come through the small holes in the etched guide. Push wire in so that the spring is just under tension and bend the ends of the wire over.

