



AMONG THE MODEL BUILDERS with 'Spanner'

COMPACT ROLLER RACE

BECAUSE OF THEIR IMPORTANCE in Meccano modelling, Bert Love devotes this month's Chapter of his Meccano Constructor's Guide to crane turntables, roller races and associated mechanisms. Here, in this article—and at the danger of trying your patience too far!—I have a couple more mechanisms in this line I would like to present. The first, a very simple and compact unit, I feature, not because it is an entirely original idea—it isn't—but because this particular version of a known principle is designed by an 11 year-old enthusiast, C. J. Clotworth of Belfast, Northern Ireland. It just shows you don't need to be growing rather long in the tooth as a modeller before you have enough experience to think of useful ideas!

The Roller Race, itself, is amazingly effective in operation, yet it consists of little more than three $1\frac{1}{2}$ in. Rods 1 inserted one into each arm of a 3-way Rod Connector 2, each Rod being fitted with a free-running $\frac{1}{2}$ in. Pulley 3, held in place by Collars. The whole assembly is mounted between two 3 in. Pulleys 4, Pulleys 3 running on the inside lips of these 3 in. Pulleys. A Rod 1 journalled in the bosses of the Pulleys, and running through the centre of the Rod Connector,

serves to centralise the roller assembly, but remember that at least one of the Pulleys must be completely free on the Rod otherwise the mechanism will not function. That's all there is to it—well done C.J.C.!

ROLLER RACE 2

Our second roller mechanism is really only an extension of the first, with six rollers instead of the original three. As before, each roller is supplied by a free-running $\frac{1}{2}$ in. Pulley without boss 1, mounted on a $1\frac{1}{2}$ in. Rod 2 held in a 3-way Rod and Strip Connector 3, but, in this case, there is no need for the Pulleys to be held in place by Collars as they will be self-locating. Of course, as there are six rollers, two 3-way Rod and Strip Connectors must be used and these must be placed Rod-side to Rod-side so that the Rods interlock on the same level. The resulting "spider" is mounted between two Wheel Flanges 4, the grooves of Pulleys 1 engaging firmly with the flanged parts of the Wheel Flanges and at the same time keeping the Pulleys in place on the Rods.

Although not shown in the accompanying illustration, Bush Wheels or other suitable parts are bolted to the Wheel Flanges to provide centre bosses so that a