

by **Spanner**

TOYS IN MECCANO

ONE of the main advantages of Meccano is that within a box of Meccano components are literally hundreds of different toys! Whether you want a working model of a motor car, swing bridge or aeroplane, you can build it with Meccano. This month, for the younger Meccano modellers, I am showing how to build two toys which can provide hours of fun, the first being a target pistol, which fires washers, and the second, a skittle game.

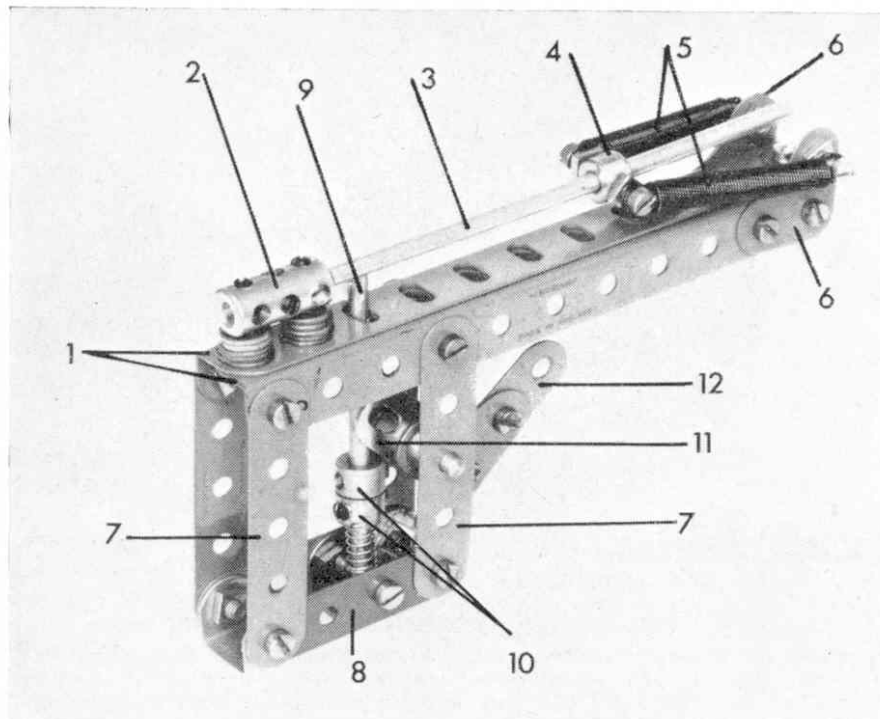
Both models fall into the toys' category and both are easily constructed in under an hour. The first model I will describe is the target pistol and the building instructions are as follows:

Two 5½ in. Angle Girders 1, to which a Coupling 2 is fixed by two ½ in. Bolts, are joined together to act as a barrel. Washers on the shanks of each bolt space the Couplings from the Girders. A 5 in. Rod 3 carrying a loose Collar 4 is secured in the Coupling. Two Tension Springs 5 are then mounted on bolts fixed in the tapped bores of Collar 4. Each bolt is prevented from locking the Collar to Rod 3 by a nut on its shank. At their other ends, the Springs are mounted on ⅜ in. Bolts held by nuts in 1 in. Corner Brackets 6, fixed to Girders 1.

To complete the handle or butt, two 2½ in. Strips 7 are bolted to one flange of each Angle Girder 1. These Strips are connected by a 2 in. Strip 8, then each side of the butt is joined at the bottom by three ½ in. by ½ in. Double Brackets.

A release mechanism is built-up from a 3 in. Rod 9, mounted in the barrel and the centre Double Bracket of the butt. This Rod carries two Collars 10 and a Compression Spring, fitted beneath the lower Collar and arranged in such a way as to ensure that the Rod is forced upwards. The mechanism is actuated by a trigger, built up from a Double Arm Crank 11, extended by a 1 in. Corner Bracket and a 1½ in Strip 12. The Double Arm Crank is mounted, together with a Collar and a Washer, on a 1 in. Rod 12, journaled in front 2½ in. Strips 7.

When the trigger is pulled, one arm of the Crank pushes against the top Collar on Rod 9, thus forcing the Rod downwards. To load, the trigger is



A simple target gun which fires washers from your Meccano outfit. It's quite safe!

pulled, Collar 4 forced back to Coupling 2, and the trigger released. Rod 9 is then forced upwards by the Compression Spring and holds the Collar in place. The Washer to be shot is slipped on to Rod 3.

Parts required

4 of No. 5	1 of No. 16b	1 of No. 62b
2 of No. 6	1 of No. 18b	1 of No. 63
1 of No. 6a	23 of No. 37a	2 of No. 111a
2 of No. 9	19 of No. 37b	2 of No. 111c
3 of No. 11	16 of No. 38	1 of No. 120b
1 of No. 15	2 of No. 43	3 of No. 133a
	3 of No. 59	

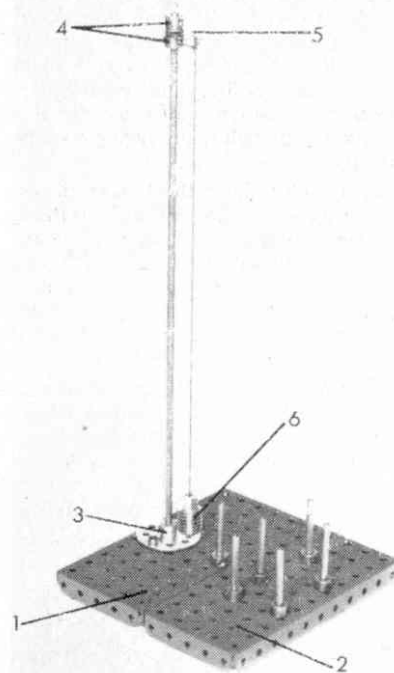
Making skittles

Skittles, the forerunner of ten-pin bowling, has been an English sport for hundreds of years. A novel variation on the full-size game is table skittles and my other model is a simple Meccano version of this skilful amusement.

Two 5½ in. by 2½ in. Flanged Plates 1 and 2 are bolted together to form the base. An eight-hole Bush Wheel 3 is bolted to Plate 1, a Washer on the shank of each Bolt being used to space the wheel from the Plate. An 11½ in. Rod is fixed in the boss of Bush Wheel 3 and, on the top of this Rod, are mounted two Collars 4, two Washers and a Fishplate 5.

The Washers are held between the Collars and the Fishplate is placed between the two Washers, but care must be taken to ensure that the Fishplate is not held tightly. A length of Cord carrying a Worm 6 is tied to Fishplate 5. I secured the Worm to the Cord by passing the Cord through the Worm and then tying a Washer on the end.

Each skittle consists simply of a 1½ in. Rod held in a Collar. For the purpose



A game of skittles can provide hours of fun and is very simply made in Meccano.

of the model illustrated, I built up six skittles and the following parts required list has been prepared accordingly. You, of course, may not wish to have this amount.

Parts required

1 of No. 10	1 of No. 32	5 of No. 38
1 of No. 13	4 of No. 37a	1 of No. 40
6 of No. 18a	4 of No. 37b	2 of No. 52
1 of No. 24		8 of No. 59