

# New Meccano Models

## Balance—Writing Cabinet

OUR two new models this month are of a less usual type and both of them are quite easy to build. The first is a useful balance, shown in Fig. 1, and the second is a combined writing cabinet and calendar, which is seen in Fig. 2.

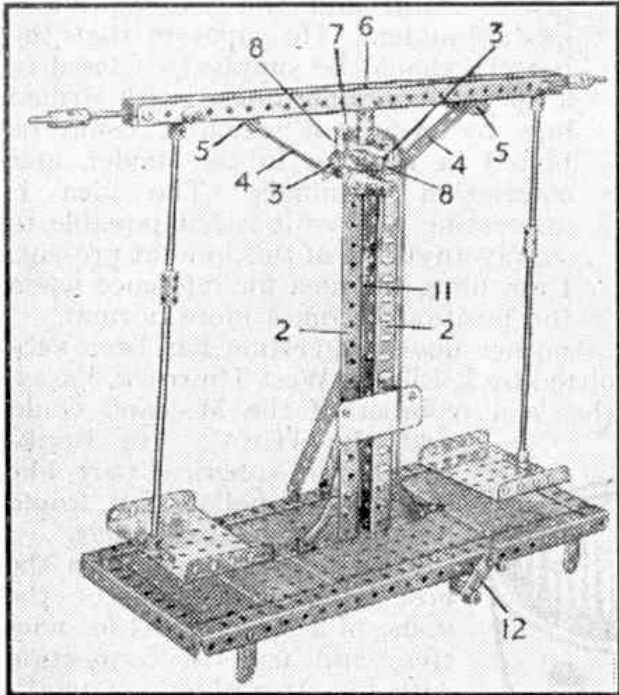


Fig. 1. This fine balance is an excellent subject for model-builders.

The column for the balance is formed by two  $9\frac{1}{2}$ " Angle Girders, fastened to the base by Flanged Brackets and joined at their upper ends by a  $1\frac{1}{2}$ " Strip. The Bolts fixing the  $1\frac{1}{2}$ " Strip also carry two Reversed Angle Brackets 3, to each of which a 3" Strip is attached by an Obtuse Angle Bracket. Two  $1\frac{1}{2}$ " Strips 5 bolted across the upper ends of the Strips 4 form supports on which the beam rests.

The beam is made from two  $12\frac{1}{2}$ " Strips joined at their ends by Double Brackets, a Coupling 4 being fastened between the Strips at their centres. This Coupling is connected by a 1" Rod to a second Coupling pivoting on Rod 7, which is supported in two Couplings 8. Two  $1\frac{1}{2}$ " Rods are locked in the lower ends of the Couplings and their inner ends are joined by another Coupling. The latter is locked on Rod 11, which carries at its lower end a 1" Pulley. A Flat Bracket fixed by a Collar to the Rod of Crank 12,

bears against the Pulley, so that by depressing Crank the beam is lifted off its supports.

Parts required to build the Balance: 2 of No. 1; 2 of No. 2; 2 of No. 4; 6 of No. 6a; 2 of No. 8; 2 of No. 9; 2 of No. 10; 5 of No. 11; 2 of No. 12; 1 of No. 12a; 2 of No. 12c; 1 of No. 13a; 2 of No. 14; 1 of No. 15; 2 of No. 15b; 2 of No. 16a; 2 of No. 17; 1 of No. 18a; 2 of No. 18b; 1 of No. 22; 7 of No. 37; 6 of No. 37a; 3 of No. 38; 2 of No. 53; 4 of No. 53a; 10 of No. 59; 1 of No. 62; 2 of No. 62b; 9 of No. 63; 4 of No. 63c; 2 of No. 70; 3 of No. 81; 4 of No. 126; 1 of No. 147b.

The useful writing cabinet is shown in Fig. 2. At the front of the model two  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flat Plates are joined together by Flat Brackets, and a  $2\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flat Plate is also attached by Flat Brackets to the  $11$ "  $\times$   $2\frac{1}{2}$ " compound Flanged Plate so formed. This  $3\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flanged Plate and the  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flanged Plate at the other end are joined to  $3\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flanged Plates and  $9\frac{1}{2}$ " Angle Girders 1 at each side. Each side is then filled in with  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flat Plates and  $12\frac{1}{2}$ " and  $9\frac{1}{2}$ " Strips that are bolted to the Angle Girders 1. The upper ends of these Strips are secured to  $1\frac{1}{2}$ ",  $2\frac{1}{2}$ " and  $3\frac{1}{2}$ " Strips.

The inkwells are held in a framework consisting of  $2\frac{1}{2}$ " Strips bolted to the Flanged Plates at the front of the model, and to a  $15$ " compound Strip 8 that is secured, together with two similar Strips, to the Flanged Plates at each side. The covers for the inkwells are  $3$ "  $\times$   $1\frac{1}{2}$ " Flat Plates fitted with Meccano Hinges. The pens are placed in the slot at the left-hand side of the inkwells.

The lower front part of the model is filled in with  $15$ " compound Strips consisting of  $12\frac{1}{2}$ " and  $3\frac{1}{2}$ " Strips overlapped.

The leaflets denoting the day, month and date are contained in pockets consisting of  $1\frac{1}{2}$ " and  $2\frac{1}{2}$ " Strips and  $2\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strips attached to the front of the model by Double Brackets and  $\frac{1}{2}$ " Reversed Angle Brackets. The back of the cabinet is filled in with  $12\frac{1}{2}$ " Strip Plates.  $5\frac{1}{2}$ "  $\times$   $3\frac{1}{2}$ " and  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flat Plates are secured to Angle Brackets bolted to the  $5$ " compound strips and the Strip Plates at the back. The slots in which the writing paper is placed are divided off by compound flat plates.

The upper portion of the front consists of two  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " and a  $3\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flanged Plate and a  $2\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strip fixed to the sides. The remaining space is filled in by  $15$ " compound strips of various lengths suitably overlapped.

Parts required to build the Writing Cabinet: 18 of No. 1; 16 of No. 1a; 7 of No. 2; 17 of No. 3; 21 of No. 5; 6 of No. 6a; 2 of No. 8; 2 of No. 8a; 4 of No. 10; 8 of No. 11; 44 of No. 12; 2 of No. 12a; 360 of No. 37; 12 of No. 38; 4 of No. 48a; 5 of No. 52; 10 of No. 52a; 4 of No. 53; 6 of No. 53a; 7 of No. 70; 3 of No. 73; 2 of No. 108; 7 of No. 114; 4 of No. 125; 1 of No. 192; 6 of No. 197.

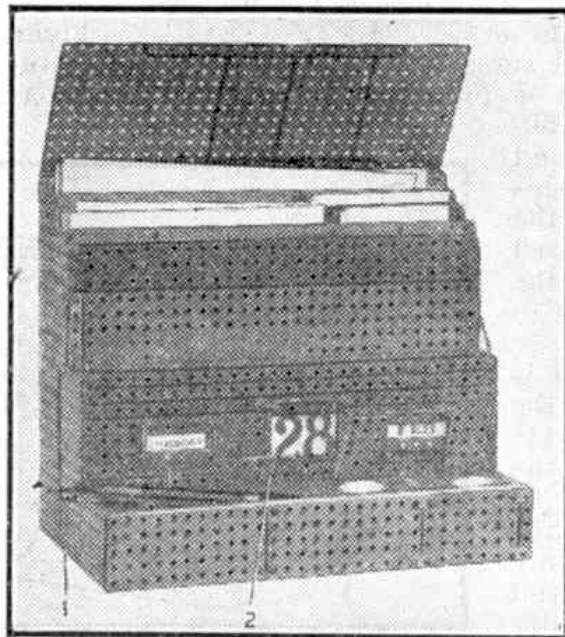


Fig. 2. A combined writing cabinet, letter rack and calendar.