

AUTOMATIC TICKET-ISSUING MACHINE

THE machine illustrated in Fig. 1 is designed for issuing tickets on the insertion of a coin in a slot provided. It is actuated by a No. 1 Clockwork Motor and is a most interesting machine to build and operate. Construction should commence with the framework, which is assembled as follows.

Framework

A $12\frac{1}{2}$ " Angle Girder 1, and a $9\frac{1}{2}$ " Angle Girder 2 are connected by two $7\frac{1}{2}$ " Angle Girders 3 and 4, the resulting space being filled in by two $5\frac{1}{2}$ " \times $2\frac{1}{2}$ ", one $5\frac{1}{2}$ " \times $3\frac{1}{2}$ ", and two $4\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plates. The door is built from a $3\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flexible Plate, edged with Strips, which are fastened by Hinges to the Angle Girder 2. A Handrail Support has a Fishplate lock-nutted to its shank to form the catch.

The other side (not shown), is similar in construction

BY SPANNER

with the exception that two $4\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plates are bolted to the outside Angle Girders and a Clockwork Motor is bolted to the Plates through the fourth hole from the $12\frac{1}{2}$ " Angle Girder, and to the bottom Angle Girder 3. Above the Motor a further $4\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plate is fixed. Both sides are joined by four $5\frac{1}{2}$ " Angle Girders 5, 6, 7 and 8, and to the Angle Girders 4 two $5\frac{1}{2}$ " \times $3\frac{1}{2}$ " Flat Plates 9 are bolted.

The Coin Slide

The coin slide is built up from a pair of $9\frac{1}{2}$ " Angle Girders 10, spaced apart by two $7\frac{1}{2}$ " Strips to form a "T" girder, the Strips being placed to form a groove and necessary space for the coin being supplied by using the slotted holes of the Angle Girders. The two "T" girders are now joined but are spaced away from each other by a $1\frac{1}{8}$ " Bolt in the second hole from the top of the Angle Girder, using three nuts, and another $1\frac{1}{8}$ " Bolt in the sixth hole from the bottom. A penny should now be tried in the slot and should run freely. The two $1\frac{1}{8}$ " Bolts are placed in the Angle Girders facing the front of the machine. The slide can now be fixed to the machine by a further two $1\frac{1}{8}$ " Bolts 11 and 12, which are fitted in the second and twelfth holes of the Angle Girders facing the rear of the machine, counting from the top, and in the third hole from the front Angle Girder 2. Three $3\frac{1}{2}$ " Strips 15 are then

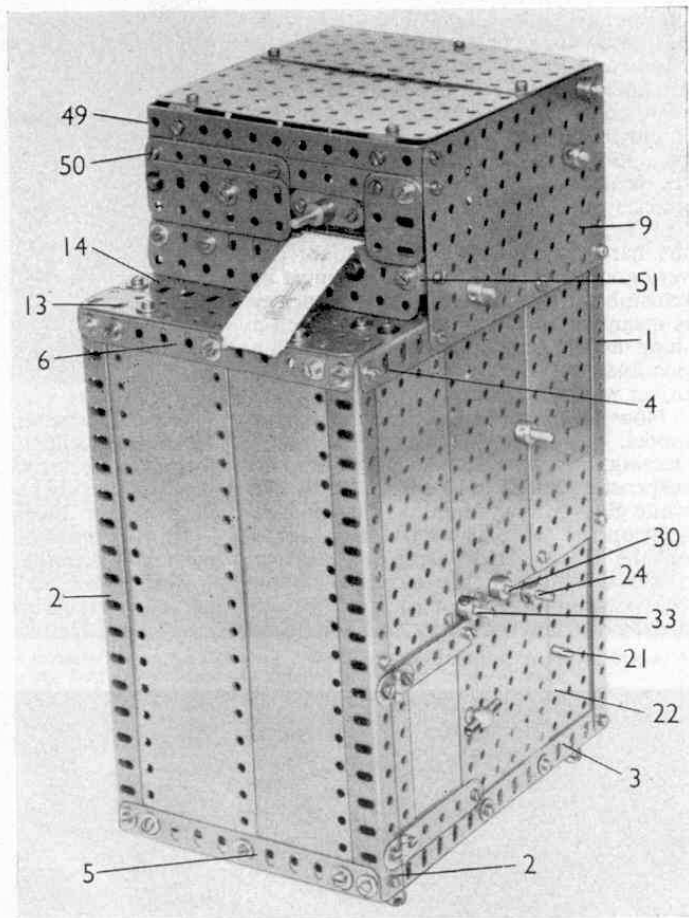


Fig. 1. The Automatic Ticket Machine in its completed state.

bolted in the second hole of the Angle Girder 2 and passed through the slot of the Angle Girders 10. Two $5\frac{1}{2}$ " Flat Girders 13 and 14 are next bolted to the Angle Girder 6, with a space between them so that the mouth of the coin slot is not obstructed. The resulting surplus space is covered by a $2\frac{1}{2}$ " Flat Girder bolted beneath the Flat Girder 14.

The Coin Box

A $2\frac{1}{2}$ " \times $\frac{1}{2}$ " Double Angle Strip 16 is bolted to the Angle Girder 6, forming one side of the box and a $4\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plate 17 is secured to the base Angle Girders to form the base. Two $2\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plates are bolted to Plate 17 by means of two $2\frac{1}{2}$ " Angle Girders to form the two remaining sides and their top corners are held together by an Angle Bracket.

Please note that the $3\frac{1}{2}$ " Strips 15 touch the Plate 17.