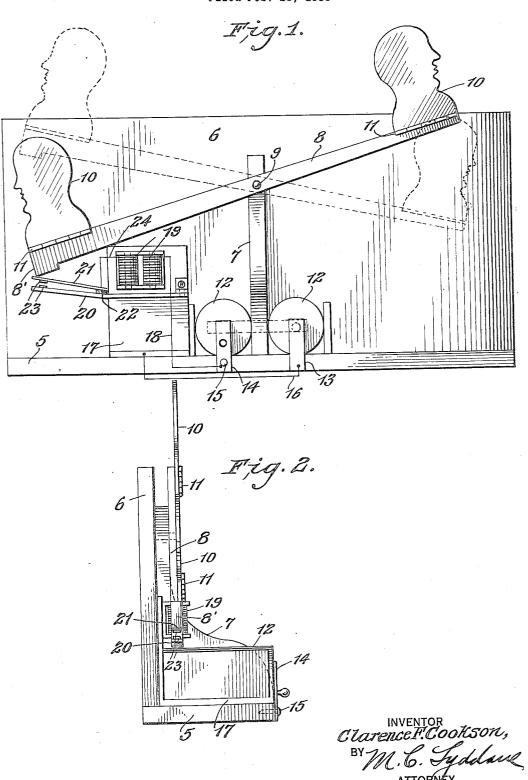
TOY TARGET

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## TOY TARGET

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7 Claims. (Cl. 124—15)

This invention relates to toy targets and has for its primary object to provide a disappearing target, and simple and reliable means for automatically actuating the same.

It is a more particular object of the invention to provide a target carrying member movably supported at one side of an upright panel, and means operatively controlled by said member to move the latter in one direction and project the 10 target carried thereby to an exposed position beyond one edge of the panel at regular intervals.

A further object is to provide electrically actuated operating means for the target carrying member, and a normally open switch in the cir-15 cuit of said operating means engaged and moved to closed position by said member.

In a preferred embodiment of the invention said target carrying member is in the form of a bar, one or more targets being hingedly mount-20 ed on said bar at each side of its pivot, to be alternately moved to an exposed position beyond one edge of the panel by the oscillations of said member.

With the above and other objects in view the 25 invention consists in the improved toy target and in the form, construction and relative arrangement of its several parts, as will be hereinafter more fully described, illustrated in the accompanying drawing and subsequently defined in the 30 appended claims.

In the drawing wherein I have shown one simple and practical embodiment of my invention and in which similar reference characters designate corresponding parts throughout the several 35 views:--

Figure 1 is a rear elevation of my improved toy target.

Fig. 2 is an end elevation thereof.

Referring in detail to the drawing, 5 indicates 40 a suitable base, upon which, at the front edge thereof, a vertical panel 6 is securely fixed. A bracket or brace 7 is securely fixed to the panel 6 at its approximate center and to the base 5.

Upon the upper end of the brace 7 a target 45 carrying member 8 is pivotally mounted intermediate of its ends, by the pin or stud 9, for oscillating motion in a vertical plane. One or more targets may be carried by this member at each side of its pivot. As herein shown, these 50 targets 10, which may be of any desired form, are attached to the member & by means of friction hinges II, said hinges normally sustaining the targets in upright position during the oscillating movements of said member. 55

The above described mounting and arrange-

ment of the member 8 and targets 10 is largely suggestive, my invention residing principally in the provision of automatic operating means for the target carrying member to cause the target to be positioned at regular intervals beyond one  $_{\tilde{a}}$ edge of the panel 6.

For this purpose I prefer to employ an electrically operated device which has been found very reliable and positive in practical operation. As herein shown, electric batteries 12 are ar- 10 ranged on the base 5 at opposite sides of the brace 7 and connected in series. A contact plate 13, fixed to the base 5, is engaged with the positive terminal of one battery and a similar plate 14 is engaged with the negative terminal of the  $_{15}$ other battery. The latter contact plate is preferably pivoted, as at 15, to the base 5, so that it may serve as a movable switch to be engaged with or disengaged from the battery terminal at will, thus enabling the operation of the device 20 to be manually controlled.

The plate 13 is connected by wire 16 to a suitable ground 17, which, in the present instance is in the form of a metal plate, fixed to the base 5 and panel 6. The other contact plate 14 is 25connected by wire 18 to one winding of a pair of electro-magnets 19. These magnets when energized actuate the armature bar 20. The circuit therefor is closed through a switch blade 21 of thin spring steel, positioned above one end of 30 the armature, the inner end of said blade being fixed to the armature and insulated therefrom as shown at 22. The other end of the switch blade and the opposed end of the armature are normally spaced apart and provided with con- 35 tact points 23, preferably of tungsten. The blade 21 is connected by wire 24 to the other electromagnet coil winding.

The switch blade 21 is positioned in the plane of the relatively heavy end portion 8' of the target 40 carrying member 8. In the downward gravity movement of this end of the member 8 it strikes upon the switch blade, as indicated in full lines in Fig. 1, and depresses the same. Thus the contact points 23 are engaged with each other and the 45 circuit closed to energize the magnet coils. The armature 29 is instantly pulled upwardly and throws or kicks the heavy end of member 8 upwardly to approximately the position shown in broken lines in the drawing, so that the target 50 mounted on this end of said member is exposed above the upper edge of the panel 6. The target mounted on the opposite end of member 8 is at the same time lowered behind the panel and disappears from view. The switch blade 21, of 55

course, immediately returns to normal position when relieved of the pressure of the member 8 and breaks the circuit. When said member again returns to the full line position the target on the opposite end thereof is projected above the upper edge of the panel 6.

During such momentary exposures of the disappearing targets a person stationed in front of the panel 6 endeavors to hit the target with a projectile discharged from a toy pistol or thrown with the hand. When a target is hit by the projectile it falls rearwardly to a pendant position with respect to the member 8.

From the above description it will be seen that

15 I have provided a toy target of the disappearing
type, with simple, inexpensive and reliable means
for automatically operating the same. Of course,
if desired, a plurality of the targets 10 may be
carried by the member 8 at each side of its pivot.

20 Also instead of using the batteries 12, electric
current may be supplied from any other convenient source. The panel 8 may bear upon its front
surface any appropriate decorative of printed
matter.

The illustrated construction may be manufactured at comparatively small cost and is not liable to get out of order. However, it will be understood that the operating means for the target carrying member as above described is merely illustrative of one embodiment and various alternatives thereof are possible. Accordingly I reserve the privilege of resorting to all such legitimate changes therein as may be fairly incorporated within the spirit and scope of the invention as claimed.

I claim:

1. A toy target comprising, in combination with a vertical panel, a member mounted at the rear side of said panel for movement relative there-to, a target carried by said member, electrically controlled means for operating said member, a circuit therefor, and a normally open switch in said circuit, engaged and actuated to closed position by said member in its movement in one direction to energize said first named means and reverse the movement of said member, whereby the target is positioned beyond one edge of the panel.

2. A toy target comprising, in combination with a vertical panel, a member pivotally mounted intermediate of its ends at the rear side of said panel for oscillatory movement in a vertical plane, targets carried by said member at opposite sides of its pivot, said member moving by gravity in one direction, and means operatively

controlled by said member to automatically oscillate said member and alternately position the targets at opposite sides of its pivot above the upper edge of the panel.

3. A toy target comprising, in combination with a panel, a member pivotally mounted intermediate of its ends at the rear side of said panel for oscillatory movement in a vertical plane, targets carried by said member at opposite sides of its pivot, said member moving by gravity in one direction to expose a target at one side of its pivot above the upper edge of the panel, and means operatively controlled by said member at the end of such gravity movement thereof to reverse the movement of said member and position the target 15 at the other side of said pivot above the upper edge of the panel.

4. A toy target comprising, in combination with a panel, a member pivotally mounted intermediate of its ends at the rear side of said panel for 20 oscillatory movement in a vertical plane, targets carried by said member at opposite sides of its pivot, said member moving by gravity in one direction, an electrically actuated element to oscillate said member in the opposite direction, and 25 a normally open switch controlling the operation of said element, engaged and actuated to closed position by said member, whereby the targets at opposite sides of the axis of said member are alternately positioned above the upper edge of the 30 panel.

5. In combination, a movable member, electrically controlled means for operating said member, a circuit therefor and a normally open switch in said circuit, engaged and actuated to 35 closed position by said member in its movement in one direction, to energize said electrically controlled means and reverse the movement of said member.

6. In combination, a pivotally mounted mem-40 ber moving by gravity in one direction, means for moving said member in the opposite direction, and operating means for said first named means, including a part engaged and actuated by said member in the gravity movement thereof.

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7. In combination, a pivotally mounted member moving by gravity in one direction, means for moving said member in the opposite direction, electrical means for operating said last named means, a circuit therefor, and a switch in said 50 circuit carried by said first named means, and engaged and actuated to closed position by said member in the gravity movement thereof.

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