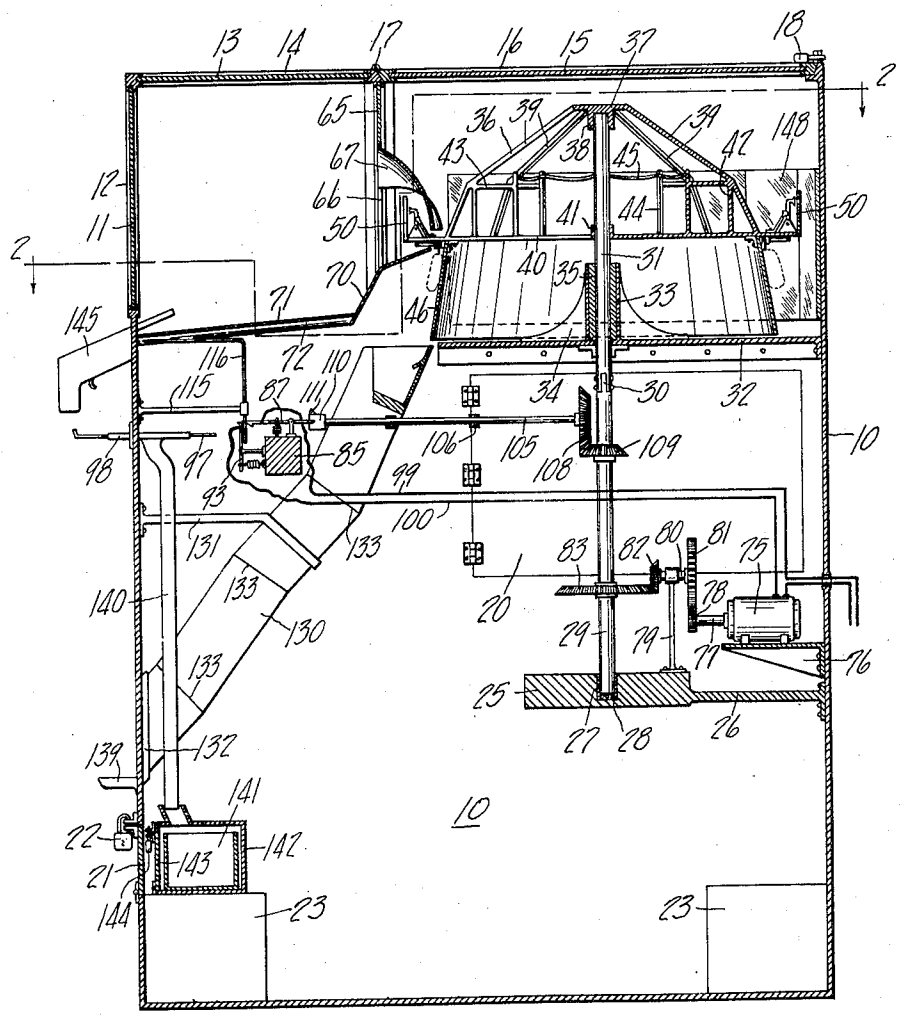
July 2, 1935. F. J. KOLAR 2,006,955

AMUSEMENT DEVICE

Filed Oct. 30, 1933 4 Sheets-Sheet 1

Fig. 1.



INVENTOR.

Frank J. Kolar.

BY

ATTORNEY.

July 2, 1935. F. J. KOLAR 2,006,955

AMUSEMENT DEVICE

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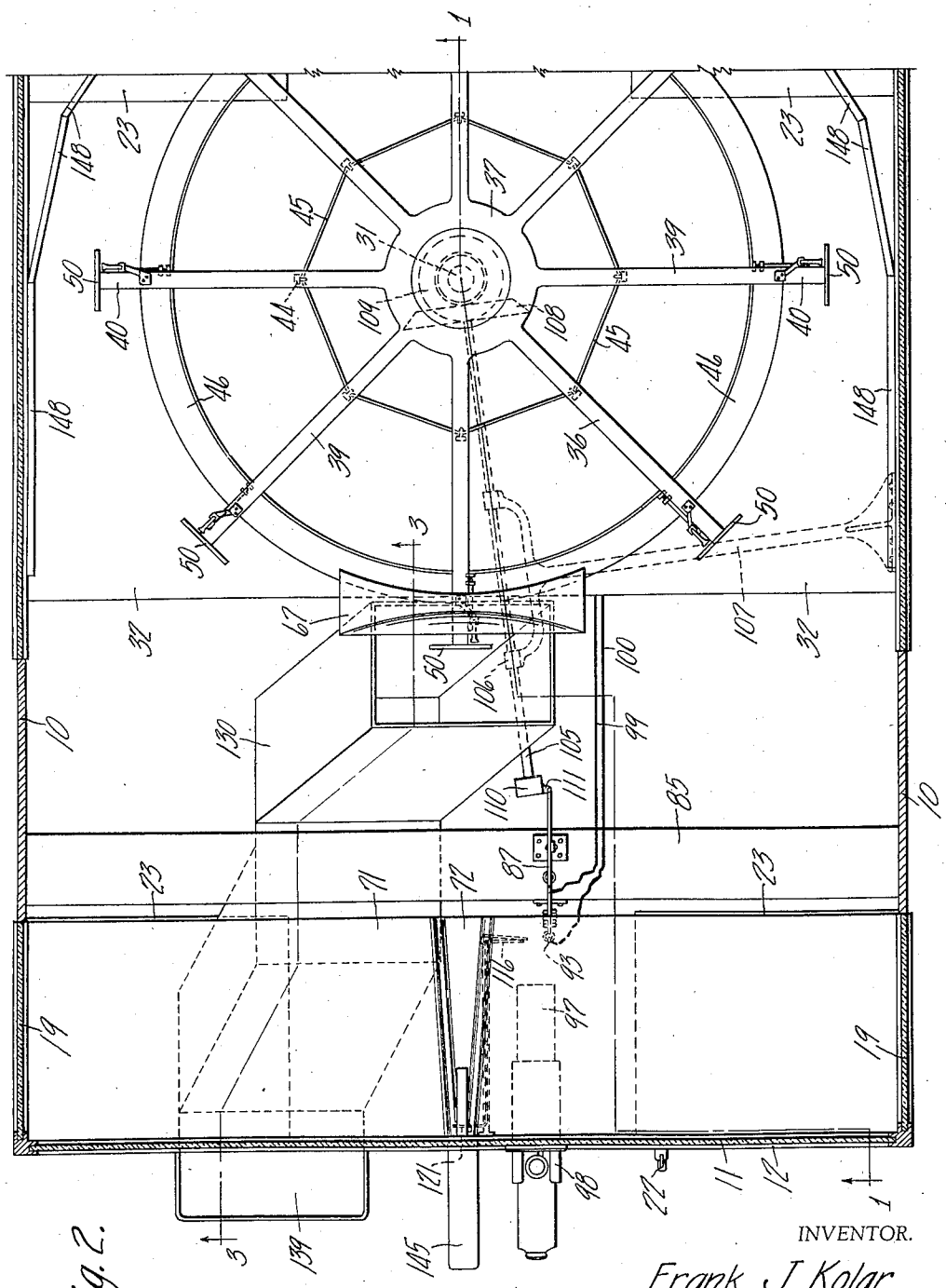


Fig. 2.

INVENTOR.

Frank J. Kolar.

BY George J. Ottsch

ATTORNEY.

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AMUSEMENT DEVICE

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Fig. 3.

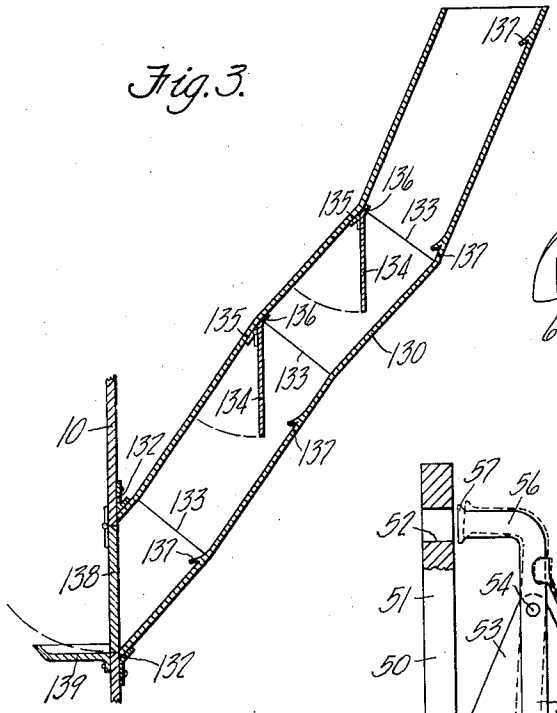


Fig. 5.

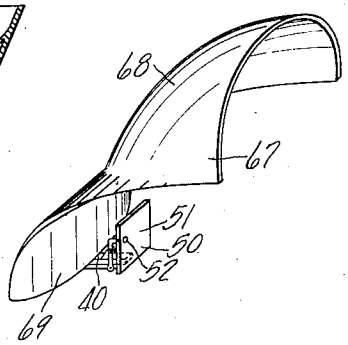
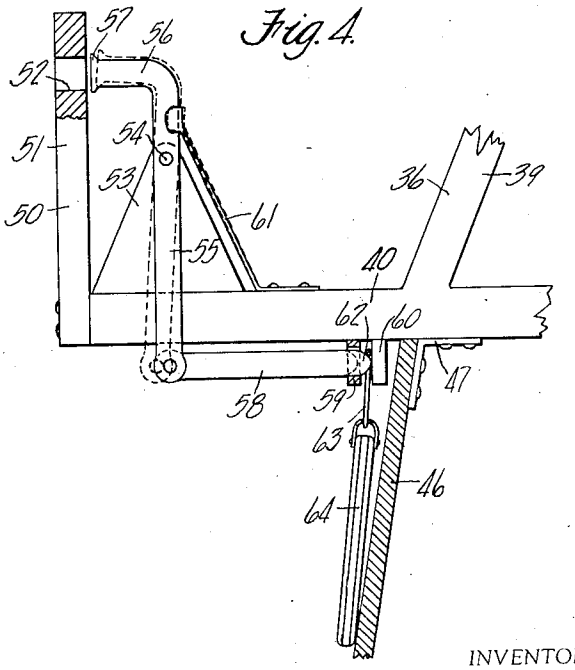


Fig. 4.



INVENTOR.

Frank J. Kolar.

BY George J. Attach

ATTORNEY.

July 2, 1935. F. J. KOLAR 2,006,955

AMUSEMENT DEVICE

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Fig. 6.

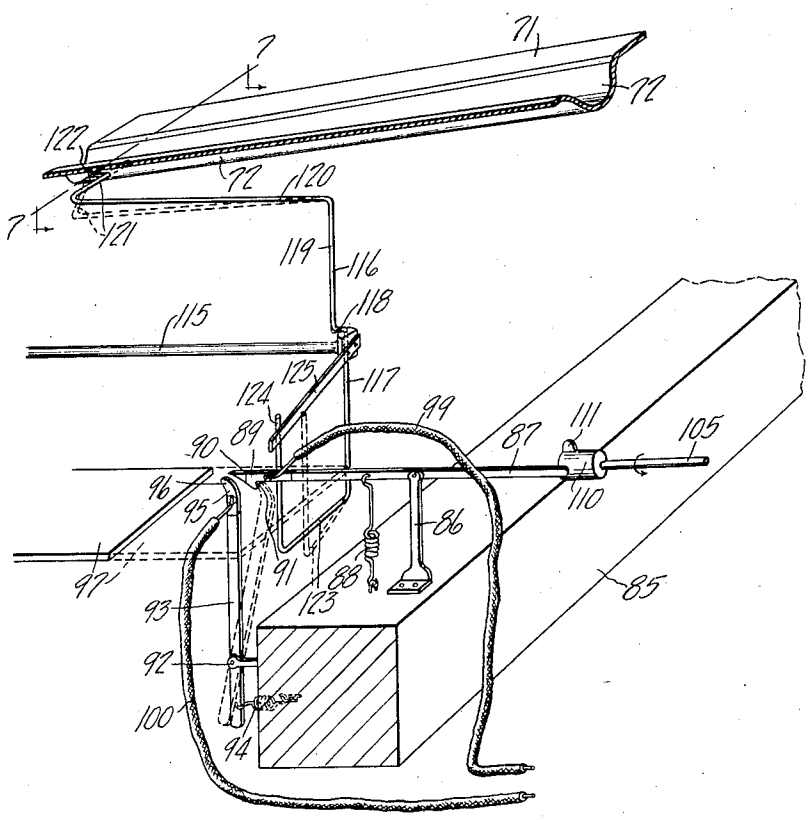
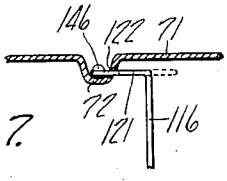


Fig. 7.



INVENTOR.

Frank J. Kolar.

BY George J. Koch

ATTORNEY.

Patented July 2, 1935 2,006,955

UNITED STATES PATENT OFFICE

2,006,955

AMUSEMENT DEVICE

Frank J. Kolar, South Bend, Ind.

Application October 30, 1933, Serial No. 695,829

28 Claims. (Cl. 273—101)

The invention relates to amusement devices, and particularly to devices of this character which require the exercise of skill in their operation, and wherein the successful operator is rewarded with a prize.

The primary object of the invention is to provide a coin-controlled device of this character wherein the operator shoots a gun at moving targets, each of which releasably carries a prize which is delivered to the operator when the target has been properly hit.

A further object is to provide coin-controlled mechanism for energizing the target rotating means and for supplying ammunition to the gun, the operations being performed in predetermined timed relation.

A further object is to provide a novel target construction provided with a shiftable bulls-eye which is operatively associated with means carrying a prize, said bulls-eye releasing said last named means when struck.

A further object is to provide a device of this character with a delivery trough having means for preventing unauthorized access therethrough to the prize.

A further object is to provide a device of this character having a plurality of movable targets with means for exposing all of the targets to the view of the operator at all times.

A further object is to provide a device of this character with means independent of the targets for displaying the prizes.

A further object is to provide a device of this character with a roto mounting a plurality of targets and a novel shield interposed between the rotor and the path of movement of the targets.

A further object is to provide a device of this character with novel means for mounting a plurality of targets.

A further object is to provide novel means for feeding ammunition to the gun.

With the above and other objects in view, the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawings, described and claimed, it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings:

Figure 1 is a longitudinal vertical sectional view of the device taken on line 1—1 of Figure 2.

Figure 2 is a fragmentary horizontal sectional view taken on line 2—2 of Figure 1.

Figure 3 is a vertical sectional view of the delivery chute taken on line 3—3 of Figure 2.

Figure 4 is a view of the target in side elevation, with parts shown in section.

Figure 5 is a perspective view of a target and a shield therefor.

Figure 6 is a perspective view of the control mechanism of the device.

Figure 7 is a vertical transverse sectional view taken on line 7—7 of Figure 6.

Referring to the drawings, which illustrate the preferred embodiment of the invention, the numeral 10 designates a housing whose lower portion is preferably formed of metal and whose upper portion is formed of glass panels. A glass panel 11 is mounted in a suitable reinforcing frame structure 12 carried by the housing at the upper portion of the front thereof, and a glass panel 13, mounted in a frame 14, forms the front portion of the top of the housing. Another glass panel 15, mounted in a frame 16 which is hinged at 17 to frame 14, forms the remainder of the top of the housing, and this hinged panel is adapted to be locked to the housing by a padlock 18. Glass panels 19 may form the upper portions of the sides of the housing. Access doors 20 are formed in the sides of the housing to provide access to the operating parts of the device, and a door 21 is mounted in the front of the housing adjacent the bottom thereof to provide access to the coin receptacle of the machine. Each of the doors 20 and 21 is adapted to be locked by a padlock 22. A heavy weight 23 is mounted on the bottom of the housing at each corner thereof to prevent tampering with the machine by shaking thereof.

Adjacent the back of housing 10 and centrally of the sides thereof a metal block 25 is disposed in spaced relation above the bottom of the housing, in which position it is held by a plurality of arms 26 secured at their ends to the housing. Block 25 is provided with a vertical cylindrical bore which extends partially therethrough and mounts a cylindrical bearing 27 and roller bearings 28. A vertical shaft 29 is mounted at its lower end in bearing 27 and rests upon roller bearings 28. Shaft 29 extends to a point adjacent the horizontal plane of the upper edge of door 20 and is splined at 30 to a second shaft 31. A plate 32, secured at its edges to the sides of the housing, is positioned above the spline 30 and has an opening

therein through which shaft 31 extends. A vertical cylinder 33 is carried by and extends upwardly from plate 32, and a plurality of vertical webs 34 extend between said cylinder and said plate to reinforce said cylinder. A cylindrical bearing 35 disposed in cylinder 33 journals shaft 31.

A frame member 36 is fixedly mounted on the upper end of shaft 31 and comprises a cap 37 carrying a depending cylindrical flange 38 into which the upper end of shaft 31 extends. A plurality of arms 39 extend radially outwardly and angularly downwardly from cap 37. A plurality of radial horizontal arms 40 which are carried at their inner ends by a sleeve 41 mounted on shaft 31 each extend into the same vertical plane as, and are preferably formed integrally with, the arms 39. The arms 40 extend in outwardly spaced relation to the outer ends of arms 39. A dome-like frame structure is thus formed by the sets of arms 39 and 40, and this frame is reinforced by vertical bars 42 extending between arms 39 and 40. Spaced inwardly of and connected to bars 42 by horizontal bars 43 are a plurality of vertical bars 44 which are carried by arms 40 and terminate in spaced relation to and below arms 39. To the upper ends of these bars 44 is secured an endless cable 45, for purposes to be hereinafter set forth. A sheet metal skirt 46 of frusto-conical shape is secured to the frame 36 at its bottom at points below the outer ends of arms 39 by suitable angle brackets 47 carried by arms 40. The skirt 46 terminates in spaced relation above plate 32 at its lower end.

At their outer ends, as best illustrated in Figure 4, the arms 40 of dome frame 36 carry target devices 50. The targets 50 each comprise a vertical plate 51 extending in a plane transverse to the longitudinal axis of arms 40, which plates 51 each have an aperture 52 formed therein. A vertical bracket 53 is carried by arm 40 in rearwardly spaced relation to plate 51, and to this bracket, at 54, is pivoted a lever arm 55 which is normally vertically positioned and which has a forwardly extending portion 56 terminating in a head 57 positioned adjacent the plate 51 and in registration with the aperture 52. At its lower end the lever arm 55 is pivotally connected with one end of a rod 58 which extends rearwardly and horizontally therefrom. A pair of spaced lugs 59 and 60 depend from arm 40 in closely spaced relation adjacent skirt 46, the lug 59 having an opening therein through which rod 58 loosely extends. A spring 61 is carried by arm 40 and extends angularly upwardly therefrom to bear upon lever 55 above the pivot 54 thereof to normally urge the end of rod 58 against the lug 60. The rod 58 is provided with a tapered end 62 on which a wire loop member 63 hangs. The loop member 63 is positioned between lugs 59 and 60 and serves to carry a prize 64 which rests against the downwardly outwardly inclined adjacent face of the skirt 46.

In forwardly spaced relation to the extreme forward portion of the path of movement of targets 50 is positioned a vertical transverse partition 65 which is formed of glass and depends from the top of the housing to a point below the horizontal plane of the bottom of targets 50. At its center the partition 65 is cut-away at 66 to a point spaced above the horizontal plane of the top edge of the targets 50, the cut-away being of a width substantially equal to the spacing of adjacent targets 50. In the cut-away is mounted a shield 67, best illustrated in Figure 5. The shield 67 is preferably formed of sheet metal and is provided with an upper portion 68 which is bent to form a hood extending above the target and to present a concave face to the front of the housing. The shield extends rearwardly and downwardly from partition 65 to a point above and rearwardly of the path of travel of the targets, whence it is reversely bent to form a lower portion 69 having a curvature complementary to the adjacent path of travel of the targets. The lower edge of shield 67 is spaced above arm 40 of dome frame 36. A glass plate 70 is disposed below shield 67 and target 50 and inclines forwardly and downwardly from a point spaced closely below arm 40 and adjacent skirt 46 to a point spaced forwardly of partition 65 where it abuts the rear edge of a sheet metal plate 71 which inclines toward and engages the front of the housing and which inclines downwardly from its sides to its center. Plate 71 is provided with a trough 72 extending longitudinally and centrally thereof and which tapers from the rear to the forward end thereof, for purposes to be hereinafter set forth.

An electric motor 75 is mounted on a suitable support 76 secured to the housing below plate 32, and its armature shaft 77 carries a small gear 78. A standard 79 is suitably carried by the housing, as by block 23, and journals a shaft 80 which carries a large gear 81 in mesh with gear 78, and a small bevel gear 82 which meshes with a large bevel gear 83 carried by shaft 29 to provide a speed reduction driving connection between the motor and said shaft.

The operation of the motor 75 is controlled by a switch, which is best illustrated in Figure 6. The switch is mounted upon a bar 85 extending transversely of the housing below the plate 71. A bracket 86 is mounted on the upper face of bar 85 and pivotally mounts, at its upper end, a lever 87 which is normally horizontally positioned by a spring 88 extending therefrom to the bar 85 in forwardly spaced relation to bracket 86. The lever 87 is preferably formed of non-conducting material, and carries a head 89 at its forward end in spaced relation to spring 88, which head is formed of electrical conducting material. The outer end of head 89 of lever 87 is provided with a forwardly upwardly inclined lower edge 90, the lower rear portion of the head as defined by edge 90 terminating below the remainder of the head to form a shoulder 91. On the side of bar 85 is mounted a horizontal bracket 92 on whose outer end is pivotally mounted a lever 93 formed of insulating material and normally maintained in vertical position by a spring 94 extending therefrom to the bar 85 at a point below bracket 92. A head 95 formed of electrical conducting material is carried by the upper end of lever 93 and is provided, at its outer end, with a forwardly upwardly directed nose 96. The heads 89 and 95 of levers 87 and 93 are normally positioned in closely spaced relation, and lever 93 is adapted to be pivoted against the action of spring 94 by a movable plate 97 carried by a coin-operated device 98, which engages lever 93 above its pivot bracket 92 and below head 95, whereby the heads 89 and 95 are brought into contacting engagement. The movement of plate 97 of coin device 98 is proportioned and regulated to pivot lever 93 sufficiently to bring

nose 96 thereof beneath and into interlocking engagement with the shoulder 91 of lever 87. Head 89 of lever 87 has electrical connection with a flexible conductor 99, and head 95 of lever 93 has electrical connection with a flexible conductor 100, and these conductors 99 and 100 form a control circuit for the motor 75, whereby the circuit is normally open and is closed only when the lever heads 89 and 95 are brought into contacting engagement or are interlocked.

Means are provided for opening the motor control circuit, which, as best illustrated in Figures 1 and 2, comprises a shaft 105 journalled in suitable bearings 106 carried by a bracket 107 suitably supported by the housing. The shaft 105 extends from a point adjacent lever 87 to a point adjacent shaft 29 and carries a bevel gear 108 at its rear end, which gear 108 meshes with a bevel pinion 109 carried by shaft 29. At its forward end the shaft 105 carries a cylinder 110 positioned adjacent the rear end of lever 87, and from this cylinder projects a lug 111, which lug, upon rotation of shaft 105, depresses the rear end of lever 87 to release the interlocking engagement of the nose 96 of lever 93 from the shoulder 91 of lever 87. Above and to one side of the coin device 98 a bracket 115 is secured to the front wall of housing 10. This bracket journals a wire member 116, best shown in Figure 6. Wire member 116 comprises a lower vertical portion 117 journaled for rotation in bracket 115, a perpendicularly bent portion 118 overlying said bracket and vertically positioning member 116, a vertical portion 119 preferably off-set from portion 117, a portion 120 extending forwardly and horizontally from the upper end of portion 119 to a point adjacent the housing, and a portion 121 extending laterally and horizontally from the forward end of portion 120 and through a horizontal slot 122 formed in the side of the trough 72 adjacent the front wall of the housing 10, the last named portion 121 of the member 116 normally extends transversely across the trough 72 in closely spaced relation to the bottom thereof to form a stop in said trough. The lower end of portion 117 of member 116 extends below the horizontal plane of plate 97 of coin device 98 and carries a portion 123 extending laterally horizontally therefrom, and from the outer end of portion 123 extends an upwardly directed portion 124 which extends into the path of movement of plate 97 of coin device 98. The upper end of portion 124 of member 116 extends above the horizontal plane of said plate 97 and is engaged by a spring member 125 which normally holds said member in operative position with portion 121 disposed in said trough 72 as described.

A delivery chute 130, preferably of rectangular cross section, best shown in Figure 3, is mounted in the housing by a bracket 131 which engages an intermediate portion thereof and by a flanged fitting 132 receiving the lower end thereof at the front wall of the housing. The chute 130 is provided with a plurality of bends 133 therein, for purposes to be hereinafter set forth, and extends from the lower portion of the front wall of the housing and preferably from one side of the center thereof, angularly upwardly to a point below the skirt 46 and centrally below shield 67. A plurality of plates 134 are disposed in the chute and are pivoted to the chute at their upper ends at 135 in spaced relation from the lower discharge end of the chute and from each other. These plates are of a dimension to closely fit into the chute to close at least the major portion thereof, though their lower edges may be spaced from the lower wall of the chute, as illustrated. Flanges 136 are carried by the plates at their upper ends and normally bear against the adjacent wall of the chute to prevent rearward pivoting of said plates. At spaced points in the chute, and also preferably spaced from the plates 134 and from the discharge end of the chute, a plurality of flanges 137 are provided, which flanges extend at an angle to at least one wall of the chute, preferably the bottom wall as illustrated, and form pockets which are open toward the discharge end of the chute to bar access through the chute of articles inserted through the discharge end thereof. A door 138, hinged at its upper end to the housing 10 for movement outwardly only, permits delivery of articles from the chute, and a horizontal delivery plate or pan 139 projects outwardly from said housing below the door 138 to receive articles delivered through the chute.

The coin operating device 98 has connection with a coin chute 140, through which coins pass to a coin receptacle 141 which is disposed in a box 142 having a hinged door 143 adapted to be locked by padlock 144. The box 142 is disposed adjacent door 21 of housing 10.

A gun 145 is mounted for limited universal movement in the front of housing 10 and adjacent trough 72. This gun shoots balls 146 illustrated in Figure 7.

A mirror 148 is mounted in housing 10 opposite and in spaced relation to dome frame 36, and extends rearwardly from a point in spaced relation to partition 65 along both sides of the housing to a point rearwardly of shaft 31, whence it extends behind said dome frame whereby the whole mirror is of U-shape. The mirror is of a size and shape to expose to the view of the operator at the front of the machine all of the target devices 50 and all of the prize articles 64 carried by the dome frame.

In the operation of the machine a coin is inserted in the coin device 98, which permits the plate 97 to be pressed inwardly to the dotted line position illustrated in Figure 6, whereupon the coin falls through chute 140 into receptacle 141. The inward pressing of coin plate 97 serves to pivot lever 93 into interlocking engagement with lever 87 to close the motor circuit through conductors 99 and 100, whereby the dome frame 36 is rotated. In timed relation to the closing of the motor controlling switch, the coin plate pivots the member 116 against the action of spring 125 to withdraw portion 121 thereof from trough 72 to the dotted line position illustrated in Figure 6, whereby the balls 146 in the trough may roll into the gun 145. This operation is so timed that the targets 50 carried by dome frame 36 are always in motion before the gun can be operated.

As the targets move into the range of the gun, the latter may be aimed and operated to shoot the balls 146 thereat. Those balls which strike the target plates 51 fall therefrom onto the glass plate 70, down which they roll to plate 71 and into trough 72 thereof; and those balls which miss plates 51 and strike shield 67, likewise fall therefrom to plate 70 and roll into trough 72. In neither of these cases is the target device 50 actuated. Those balls which are shot through the aperture 52 in plate 51 of the target, which is the bulls-eye of the target, strike the head 57 of lever 55 and pivot the same against the action of spring 61 to forwardly shift rod 58. The for-

ward shifting of rod 58 to the dotted line position illustrated in Figure 4 permits the wire member 63 to slide off of and between the tapered end 62 of the rod and the lug 60 by gravity, whereupon the wire and the article 64 carried thereby slide down the skirt 46 and into the delivery chute 130, through which they pass to the delivery pan 139. It will be readily seen from Figure 2 that the relative position of the bulls-eye of the target and the associated lever mechanism may be variously positioned on each target 50, and likewise the size of the aperture 52 of plate 51 may be varied in the different targets, whereby the operator must make a different aim at each target and whereby the prizes offered for successful shooting of the gun will require varying degrees of expertness of marksmanship.

After the dome frame 36 has rotated a predetermined number of times, as determined by the ratio between gears 108 and 109, the shaft 105 rotated by said gears brings the lug 111 carried thereby to a position to depress lever 87 and thereby release the interlocking engagement of nose 96 of lever 93 with shoulder 91 of lever 87 to open the motor circuit, whereupon rotation of dome frame 36 stops. The parts of the switch operating device are so proportioned that lug 111 does not release the switch levers from interlocking engagement until just prior to disengagement thereof with lever 87, which disengagement is effected by the continued rotation of shaft 29 under the momentum of frame 36 for a short period after the motor control circuit is opened. In this way lug 111 does not interfere with the subsequent actuation of the switch levers to closed circuit or interlocking engagement by coin plate 98. Likewise, the switch opening mechanism is timed to so open the motor circuit that the targets nearest gun 145 will be positioned at opposite sides of shield 67, that is, whereby one target has just passed out of and the next is just coming into the range of the gun, when the frame 36 stops. By stopping the targets in such positions the apertures 52 of plates 51 thereof will not be exposed to permit balls which may remain in the gun after the dome frame has stopped rotating to pass therethrough to actuate the target device. For this purpose the size of cut-out in glass partition 65 may be made small enough to position the same between the gun and the stationary targets, or any other suitable means preventing striking of the bulls-eye when the targets are stationary may be employed.

It will be seen that the housing is constructed to provide a clear view of the dome frame 36 and targets 50 to the operator at all times. Thus, the top of the housing is formed of glass panels 13 and 15, a glass front panel 11 is provided, and also glass side panels 19. The partition 65 behind which dome frame 36 is disposed is formed of glass, the targets 50 move in front of shield 67, and the ball collecting plate 70 beneath which the articles 64 carried by the targets 50 pass is also formed of glass, whereby full visibility of the parts of the machine which the operator must see is insured. Likewise, the mirror 148 exposes to view even those targets which are temporarily at the rear of the machine, so that the operator may watch a target at which he particularly desires to shoot and be prepared to shoot as soon as it comes within the range of the gun. For display purposes, the various prizes offered for successful operation of the machine may be carried by the cable 45 mounted in the dome frame 36 to be visible through the top of the housing. However, while the targets and prizes are thus always visible, the operating and controlling parts of the device are hidden by plates 32 and 71, and are also inaccessible to tamperers.

The construction of delivery chute 130, with its bends 133, pivoted plates 134 and flange traps 137, render the prizes safe from pilferage, as by means of bent wires inserted through the discharge end of the chute. The bends of the chute prevent a pilferer from reaching therethrough to the prizes, and the plates 134 and trap flanges 137 form stops which prevent insertion of a wire through the chute and into engagement with the prizes and the target devices.

Access to the dome frame 36 to repair the target devices and to replenish the prizes may be had through the top of the housing by unlocking and swinging open the panel 15. And access to the operating and controlling mechanism of the machine may be had through doors 20 and 21 of the housing. It will also be seen, that for purposes of assembly of the device or for removal of dome frame 36 for repairs, the spline connection between shafts 29 and 31 is releasable, whereby the dome frame may be mounted in or removed from the device as a unit through the opening provided by swinging top panel 15 to open position.

The invention having been set forth, what is claimed as new and useful is:—

1. In an amusement device, a housing, a rotatable member, a delivery chute extending from a point adjacent said rotatable member to the exterior of said housing, and a target carried by said rotatable member including a pivoted lever, a rod carried by said lever and normally bearing at its end upon a lug, and an article carrying member normally supported by the end of said rod, pivoting of said lever shifting said rod into spaced relation to said lug whereby said last named member slides between said rod and lug and into said chute.

2. In an amusement device, a housing, a rotatable member, a delivery chute extending from a point adjacent said rotatable member, a target device carried by said rotatable member and including a shiftable member, and an article carrying member normally releasably supported by said shiftable member, movement of said shiftable member releasing said last named member for movement through said chute.

3. In an amusement device, a target comprising a support, a plate mounted on said support and having an aperture therein, a bracket carried by said support rearwardly of said plate, a lever pivoted to said bracket and having a portion thereof disposed adjacent said aperture, a spring bearing upon said lever, a rod pivoted to said lever, a pair of spaced lugs carried by said support, one of said lugs having an aperture therein through which said rod extends, said rod being normally pushed against the other lug by said spring, and a member positioned between said lugs and loosely depending from said rod, pivoting of said lever shifting said rod away from said last named lug to release said member, the shifting of said rod being guided by said lug aperture.

4. In an amusement device, a target comprising a support, a plate carried by said support and having an aperture therein, a spring pressed lever pivoted to said support and having a

portion disposed adjacent said aperture, a pair of spaced lugs carried by said support, one of said lugs having an aperture therein, a rod pivoted to said lever and extending through said lug aperture into engagement with the other lug, the lug-engaging end of said rod being tapered, and a member positioned between said lugs and supported by the tapered end of said rod, said last named member sliding from the tapered end of said rod when said lever is pivoted to longitudinally shift said rod into spaced relation said lug guided by said lug aperture.

5. In an amusement device, a target comprising a support, a plate carried by said support and having an aperture therein, a spring pressed lever pivoted to said support and having a portion disposed adjacent said aperture, a rod pivoted at one end to said lever, means slidably supporting the other end of said rod, said rod having a tapered end, a stop carried by said support against which the tapered end of said rod bears, and a member carried by the tapered end of said rod, pivoting of said lever shifting said rod from said stop under control of said rod support whereby said member slides from said tapered rod end.

6. In an amusement device, a target comprising a support, a plate mounted on said support and having an aperture therein, lever mechanism pivoted rearwardly of said plate to said support with a portion thereof disposed adjacent said aperture, said lever mechanism including a rod having a tapered end, a stop carried by said support against which said tapered rod end normally bears, and a member carried by the tapered end of said rod pivoting of said lever mechanism shifting said rod away from said stop whereby said member slides from said tapered rod end.

7. In an amusement device, a target comprising a support, lever mechanism pivoted to said support and including a rod having a tapered end, a stop carried by said support against which said tapered rod end normally bears, and a member carried by said tapered rod end pivoting of said lever mechanism shifting said rod away from said stop whereby said member slides from said tapered rod end.

8. In an amusement device, a rotor including a plurality of radially extending arms and a downwardly outwardly flaring skirt carried by said arms, a target device carried by each arm outwardly of said skirt, and an article carrying member carried by each target device adjacent said skirt.

9. In an amusement device, a plurality of target devices, an article carrying member carried by each target, and a rotor mounting said targets, said rotor comprising a set of radially extending arms each mounting a target at its end, a set of upwardly directed arms each extending inwardly from a point of one of said first named arms in spaced relation to the end thereof, supporting means carried by and positioned between said sets of arms, and a cable interconnecting said supporting means.

10. In an amusement device, a plurality of target devices, an article carrying member carried by each target, and a rotor mounting said targets, said rotor comprising a set of radially extending arms each mounting a target at its end, a set of upwardly directed arms each extending inwardly from a point of an arm of the first set adjacent said targets, and a depending skirt carried by said first set of arms in inwardly disposed relation to said targets.

11. In an amusement device, a plurality of target devices, a rotor mounting said targets, and a shield positioned rearwardly of said targets, said shield comprising a plate bent forwardly and upwardly above said targets to provide a hood therefor having a forwardly concaved face.

12. In an amusement device, a plurality of targets, a rotor mounting said targets, and a shield positioned rearwardly of said targets, said shield being formed of sheet metal having its lower portion rearwardly bent complementary to the adjacent portion of the path of travel of said targets and having its upper portion reversely forwardly bent to form a hood for said targets.

13. In an amusement device, a housing having a transparent upper portion, a rotor mounted in said housing, a target carried by said rotor, a shield positioned rearwardly of said target and extending forwardly upwardly over said target, an inclined plate formed of transparent material positioned beneath said target and shield, a member releasably carried by said target and extending below and visible through said plate, and a second inclined plate extending from the lower end of said transparent plate and having a trough formed therein, and a ball member adapted to be projected at said target and to roll over said inclined plates to said trough after striking said target or said shield.

14. In an amusement device, a housing having a transparent upper portion, a rotor mounted in said housing, a target carried by said rotor, a shield positioned rearwardly of said target, a member releasably depending from said target, and a transparent inclined plate disposed below said target and shield and above said member, said target and member being visible through said housing and inclined plate.

15. In an amusement device, a housing having a transparent portion, a rotor mounted in said housing, a target carried by said rotor, a member releasably depending from said target, a transparent inclined plate positioned below said target and forwardly of said member, and a mirror positioned adjacent said rotor at the sides and back thereof, said target and member being visible at all points of their movement through said transparent housing portion and plate and through said mirror.

16. In an amusement device, an inclined delivery chute having upper and lower walls and having a plurality of bends formed therein, a vertical plate pivoted to the upper wall of said chute in spaced relation to the discharge end of said chute, said plate terminating in spaced relation to said lower wall and being of a width substantially equal to the interior width of said chute, a flange carried by said plate and normally engaging said upper chute wall to prevent pivoting of said plate toward the feed end of said chute, and a flange fixedly carried by and extending transversely of the lower wall of said chute in spaced relation to said plate, said flange extending at an angle to said wall to provide a pocket, said plate and pocket serving to bar passage of articles through said chute from the discharge to the feed ends thereof.

17. In an amusement device, an inclined chute, a plate pivoted in said chute, said plate conforming in shape to the adjacent inner contour of said chute to normally close the major portion

thereof, means operatively associated with said plate for limiting pivotal movement thereof in the direction of the free end of the chute, and a flange fixedly carried by said chute and extending angularly inwardly thereof in spaced relation to said plate to form a pocket open toward the discharge end of said chute.

18. In an amusement device, a rotor, a target device carried by said rotor and including a shiftable member, means normally holding said shiftable member stationary, and an article carrying member normally supported by said shiftable member, movement of said shiftable means against the action of said means for holding said shiftable member stationary releasing said article carrying member.

19. In an amusement device, a target device including a shiftable member, a stop against which one end of said shiftable member normally bears, and depending article carrying means including a curved member supported by said shiftable member adjacent said stop, movement of said shiftable member in spaced relation to said stop releasing said means for movement between said shiftable member and said stop.

20. In an amusement device, a target device including a substantially horizontal shiftable member, a stop, said shiftable member having a tapered end normally bearing on said stop, and depending article carrying means normally supported by said shiftable member and engaging said tapered end and said stop, movement of said shiftable member into spaced relation to said stop releasing said means.

21. In an amusement device, a target comprising a support, means shiftably carried by said support and including an arm, a lug carried by said support, a spring engaging said means to urge the end of said arm against said lug, and depending article carrying means supported by the end of said arm and by said lug, movement of said shiftable means against the action of said spring moving said arm into spaced relation to said lug to release said article carrying means for passage between said arm and lug.

22. In an amusement device, a rotor including a set of radial arms, a target device carried by each arm and including a shiftable member, and an article carrying member releasably supported by each shiftable member.

23. In an amusement device, a rotor, a target device carried by said rotor and projecting outwardly thereof, said target device including a shiftable member and an article carrying member releasably carried by said shiftable member.

24. In an amusement device, a plurality of target devices, an article carrying member releasably supported by each target device, and a rotor mounting said target, said rotor comprising a set of radially extending arms, and a set of arms each extending upwardly and inwardly from one of said first arms adjacent a target.

25. In an amusement device, a plurality of targets, means movably mounting said targets, and a shield positioned rearwardly of the path of movement of said targets, said shield extending in vertically spaced relation above the path of movement of said targets.

26. In an amusement device, a movable target, means for moving said target, a shield positioned rearwardly of the path of movement of said target, a member releasably depending from said target, and a transparent inclined plate disposed below said shield and the path of movement of said target and in front of said member, said member being visible through said plate.

27. In an amusement device, a target shiftable in a predetermined path of movement, a shield positioned rearwardly of said path of movement, a transparent inclined plate positioned below said path of movement, and an article carrying member releasably depending from said target rearwardly of said plate and visible through said plate.

28. In an amusement device, a delivery chute comprising a plurality of relatively angularly disposed sections, a plate pivotally mounted in said chute for movement toward the discharge end thereof only, said plate normally closing all but a minor portion of said chute at a point spaced from and invisible from the discharge end of said chute, and a flange fixedly carried by said chute and extending angularly inwardly thereof in spaced relation to said plate to form a pocket open toward the discharge end of said chute, said flange being positioned at the transverse portion of said chute not closed by said plate.

FRANK J. KOLAR.