Oct. 23, 1962 J. W. RYAN 3,059,930

TARGET SIMULATING A FAST DRAW GUNMAN

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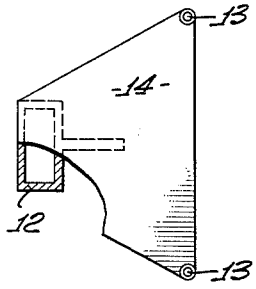


FIG. 2.

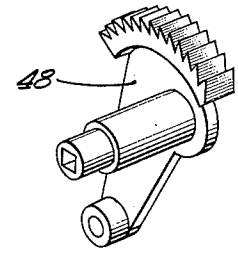


FIG. 6.

FIG. 1.

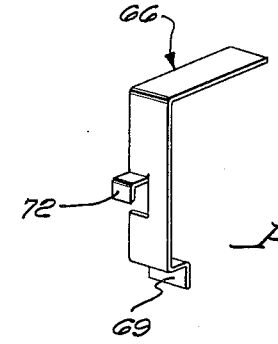


FIG. 8.

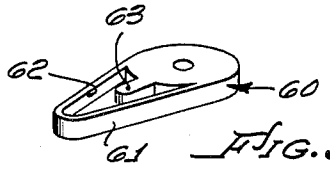


FIG. 9.

JOHN W. RYAN,
INVENTOR.
Herzig & Jessup,
ATTORNEYS.
BY Albert M. Herzig

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TARGET SIMULATING A FAST DRAW GUNMAN

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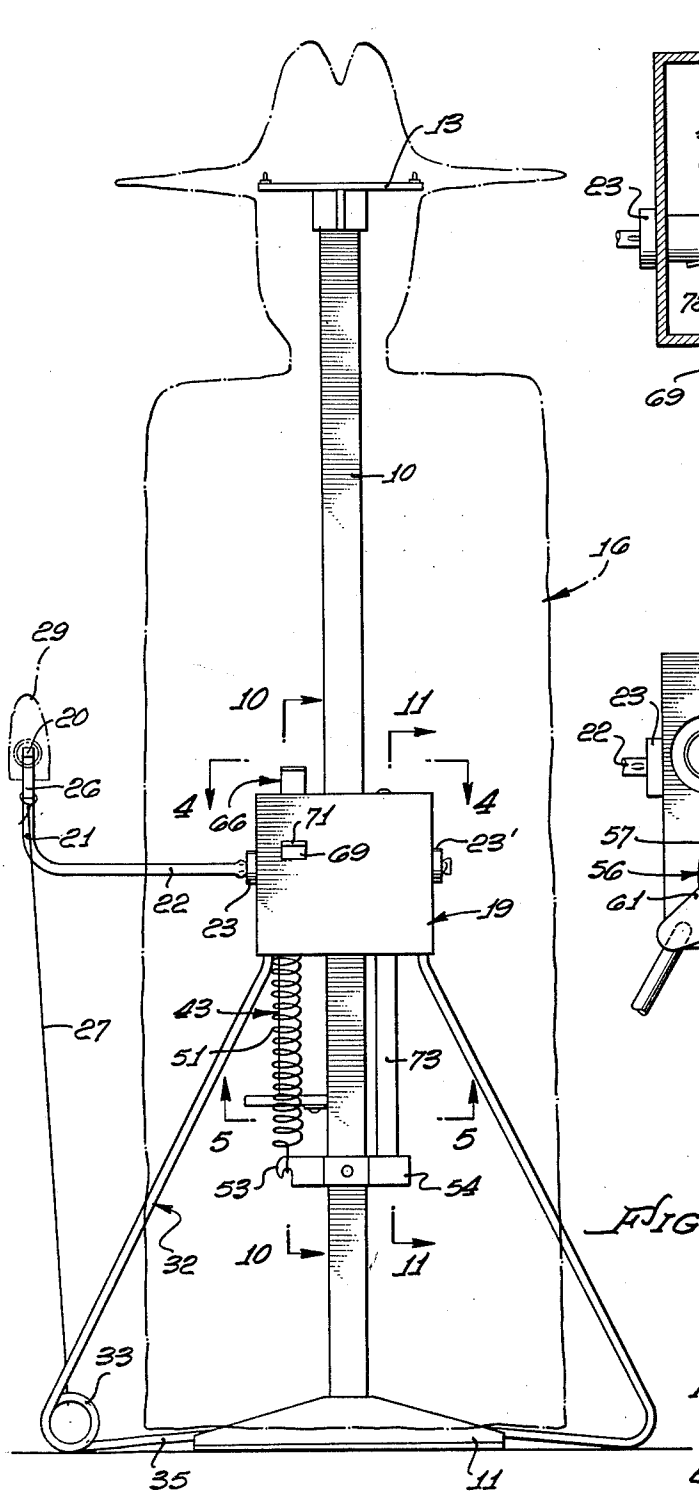


FIG. 3.

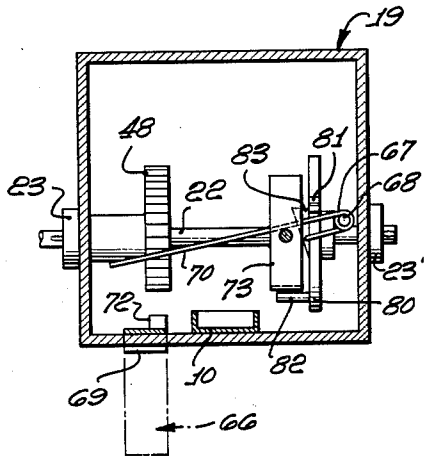


FIG. 4.

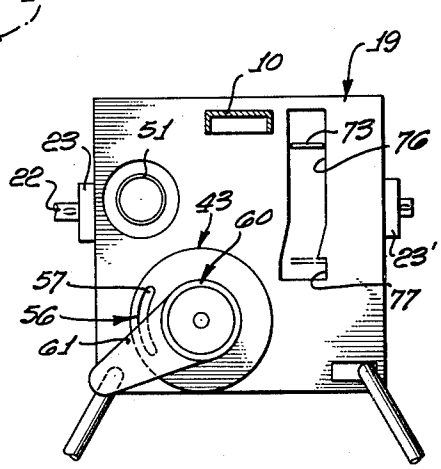


FIG. 5.

JOHN W. RYAN,
INVENTOR.
Herzig & Jessup,
ATTORNEYS.
BY Albert M. Herzig

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FIG. 10.

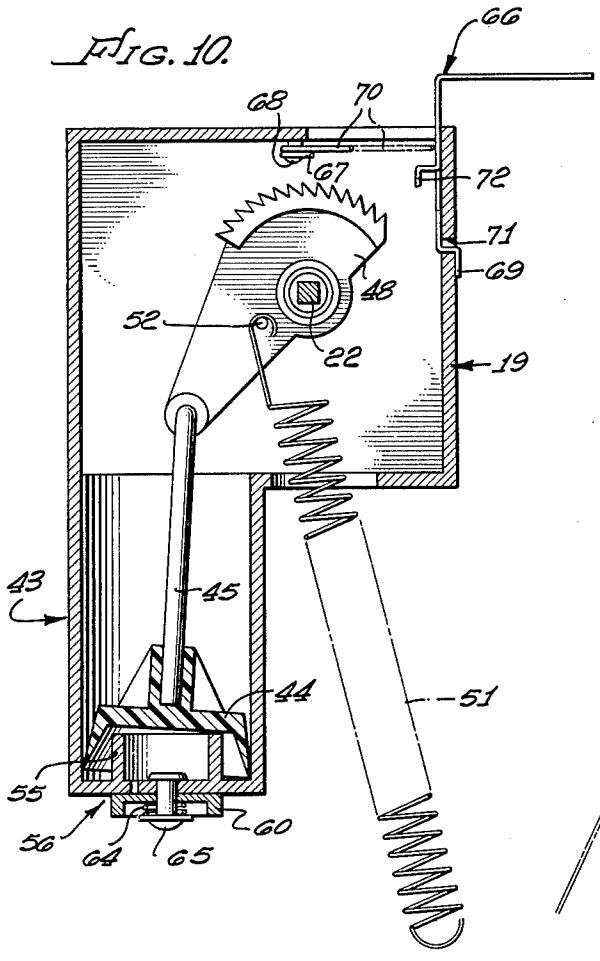


FIG. 11.

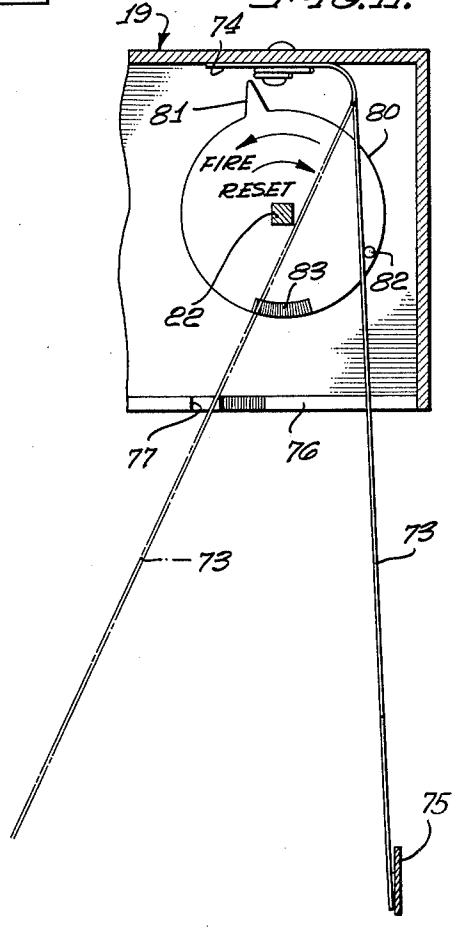
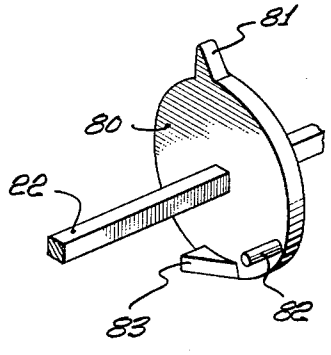


FIG. 7.



JOHN W. RYAN,
INVENTOR.

Herzig & Jessup,
ATTORNEYS.

BY Albert M. Herzig

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TARGET SIMULATING A FAST DRAW GUNMAN

John W. Ryan, 11027 Cashmere St., Bel-Air, Calif.

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7 Claims. (Cl. 273—102.1)

This invention relates to a target, particularly a toy target which simulates a gunman and, in particular, simulates the action of a gunman in drawing a pistol. The invention further is characterized by the concept and characteristic that the target is mechanically animated to simulate the movements of a gunman's gun arm and, further, that the movement of the target's gun arm is interrupted if the target is struck by a pellet or missile from a toy weapon during the progress of the draw.

The invention comprehends the general concept and assembly as above described and the particular mechanical arrangement for achieving the simulated draw for interrupting it and further in means for variably adjusting the draw so that it may simulate and characterize a fast or slow draw. The invention is further characterized in that the target assembly includes noise producing means to simulate the firing of a pistol in the event that the target figure completes the draw before being struck by a pellet or missile interrupting the draw. Preferably, the sound or noise making means incorporated in the target is a cap firing device.

In accordance with the foregoing introduction, the primary object of the invention is to provide an animated target simulating a gunman having means simulating a movable gun arm, the movement of which is adapted to be interrupted in the event of the target being struck prior to completion of the draw.

Another object of the invention is to implement the foregoing object by providing mechanical means to actuate the gun arm at variable, adjustable rates to simulate fast or slow draws.

Another object is to further implement the object and concept stated in the foregoing by providing means actuatable by a child at a distance from the target to reset the simulated gun arm, and the sound making device.

Another object of the invention is to provide means for implementing the concept further comprising pawl and ratchet brake means arranged to interrupt movement of the simulated gun arm in response to the target being struck at any point of a predetermined area.

Another object is to provide adjustably controlled dashpot means for regulating the time of the simulated draw.

Another object of the invention is to provide a particular structure having the foregoing characteristics wherein the target figure is that of a gunman displayed on a light rigid member adapted to move when struck by a pellet or missile and arranged to actuate a brake or interrupter means to terminate movements of the simulated gun arm.

Further objects and numerous advantages of the invention will become apparent from the following detailed description and annexed drawings, wherein:

FIG. 1 is a side elevation of a preferred form of the invention;

FIG. 2 is a partial top view of the device of FIG. 1;

FIG. 3 is a front view of the mechanism of the device of FIG. 1;

FIG. 4 is a sectional view taken along the line 4—4 of FIG. 3;

FIG. 5 is a sectional view taken along the line 5—5 of FIG. 3;

FIG. 6 is a detail perspective view of a sector gear;

FIG. 7 is a detail view of the reset disc;

FIG. 8 is a detail view of the interrupter brake latch;

FIG. 9 is a detail view of the adjustable valve member controlling the dash pot;

FIG. 10 is a sectional view taken along line 10—10 of FIG. 3; and

FIG. 11 is a sectional view taken along line 11—11 of FIG. 3.

Referring now more in detail to the drawings, numeral 10 in FIG. 1 designates an upright standard seated in a foot support member 11 so that the structure stands upright in the manner of a pedestal. At the top of the column 10 is a hanger bracket having the shape shown in FIG. 2 having pivots 13 and having a portion 12 fitting down over the top of the standard 10 as shown and an extending portion 14 having upwardly directed pins as shown. The pivots 13 are for the purpose of supporting a member as shown at 16 which may be made of cardboard or thin plastic material such as vacuum formed polystyrene sheet and which is decorated to represent the target figure which is preferably that of a western gunman, by way of example.

Attached to the back side of the upright 10 is a housing 19 which contains part of the operating mechanism for the animated target figure. Numeral 20 designates an arm or arm support constituting the movable animated gun arm of the target figure. The arm has a transverse portion 21 and another portion 22 extending in a direction normal to the portion 21 and journalled in the side walls of the housing 19 in the bushings as shown at 23 and 23' in FIG. 3. The arm 20 has a loop 26 in it as shown attached to a cord 27, the purpose of which is to reset the arm as will be presently described. Attached to the arm 20 by means of a rivet 30 and staples 28 is a cover or shroud 29 having on it a picture or design representative of the gun arm of the target figure. The gun arm is at one side of the target figure itself, preferably the right side, for a right-handed gunman.

Numeral 32 designates generally a wire back support or support bracket having the shape shown in FIG. 3. At one corner, it is formed into a loop 33 so that the two side arms thereof spring together. At their upper ends, the arms have inwardly extending portions which are fixed inside the housing 19. The support bracket 32 has a bottom portion 35 which may rest on a table top and it may be anchored to the edge of the table by way of an anchor member 36 hooked to the portion 35 as shown in FIG. 1 and having a right angle portion enclosed in a flexible or plastic tube 37 hooked over the edge of the table at 38.

The cord 27 passes through loop 33, then passing forwardly of the target to the position of the child who is the operator so that the child can reset the arm 20 to a position at the side of the target figure by pulling on the cord 27.

The housing 19 has a downwardly extending cylinder 43 forming part of a dash pot having a piston or plunger 44 connected to a stem 45. See FIG. 10. The stem 45 is connected to a sector gear 48 which is mounted on the horizontal portion 22 of the gun arm 20 within housing 19. When the gun arm is reset, the sector gear 48 moves in a clockwise direction with the piston or plunger 44 of the dash pot moving upwardly. Numeral 51 designates a coiled tension spring attached to the sector gear 48 at pin 52 and attached at the other end to a hook 53 on bracket 54 attached transversely to the upright standard or column 10 as may be seen in FIG. 3.

Thus, when the arm is reset, the spring 51 is tensioned. When the target is undertaking its animated draw, under the influence of spring 51, the plunger or piston 44 moves downwardly in the cylinder 43 and valve means are provided to adjust the escape of air from the cylinder so that the time of draw may be adjusted relatively to be a fast or slow draw. The valve means in the bottom of cylinder 43 are designated at 56 as shown, in FIG. 5. The plunger 44 moves down over a cylindrical stop 55 in the bottom of cylinder 43, and in the bottom of the

cylinder 43 is a port as shown for the escape of air which may be variably opened or closed by a manually adjustable valve member 60 as shown in detail in FIG. 9. The member 60 has an extending tapered portion 61 having a groove or recess 62 and a portion 63 extending into the groove. The valve member is adjustable on arcuate ramp 57 against the force of spring 64 to thereby move member 60 away from the port in cylinder 43 to variably adjust the escape of air from the cylinder 43 into recess 62 and therefore the rate at which the plunger moves downwardly and the rate at which the gun arm 20 moves upwardly. In other words, this adjustment adjusts for a fast or slow draw. Member 60 is attached and held by rivet 65, spring 64 being under the rivet head as shown.

In operation of the device as so far described, the animated target starts to draw when the operator releases the cord 27, i.e., the arm 20 starts upwardly. During the progress of the draw if the child or operator fires at the target and a missile or pellet strikes the target member 16, as explained in the foregoing, it is operable to move inwardly and interrupt or break the operation of the gun arm of the target. This result is achieved by the sector gear 48 in cooperation with a brake or latch operated by the member 16. This brake or latch member is designated by the numeral 66 and as shown in detail, in FIG. 8. It is an L-shaped bracket as shown having a downwardly extending angular finger or pawl 72 adapted to engage with the teeth of sector gear 48 to brake or interrupt the movement of that gear and to thereby interrupt the draw, that is the upward movement of arm 20. One leg of bracket 66 normally engages or is close to the member 16 as shown in FIG. 1 and the angular foot 69 pivotally engages in an opening 71 in the side of the housing 19. Member 66 moves in a slot in the top of housing 19. Numeral 67 designates a spring mounted on a rivet 68 and having a portion 70 which may engage the member 66 after it has been moved, to return it to its original position as will be described. Whenever the member 16 is struck, it moves sufficiently to cause the member 66 to fall back or move inwardly as described to interrupt and lock motion of the segment gear 48 by engagement of pawl 72 with the teeth of the sector gear.

The noise making mechanism comprises a spring member 73 having a horizontal portion 74 attached to the top of the housing 19 by a rivet. The spring 73 extends downwardly to a position adjacent the anvil 75 carried on the bracket 54 as shown in the figures. An adhesive cap may be attached to the anvil 75 and when the spring 73 has snapped against it, the cap is exploded to simulate the firing of a pistol by the target figure.

The spring 73 extends through a slot as shown at 76 in the bottom of the housing 19, the slot 76 having a slanted portion and an off-set square shoulder as shown at 77 which acts as a detent or latch to hold the spring until the time of triggering for firing.

The firing mechanism is set for firing by means of a reset disc 80 on the shaft 22 which rotates clockwise when the arm 20 is pulled down by the operator. This disc also releases or disengages and resets the brake or interrupter 66 if it has been actuated to interrupt the draw in the manner described. The disc 80 has a rise or dwell 81 on it which, when the disc is rotated, engages the spring 67, part 70 of which in turn engages the latch brake 66 moving it out of engagement with the teeth on the sector gear 48 and moving it back into the position shown in FIG. 1 and FIG. 10. FIG. 4 shows the normal position of spring portion 70.

The disc 80 also has a finger or pin 82 on it which, when it is rotated clockwise, engages the right side of spring 73 moving the portion of the spring in the slot 76 back into the detent 77 where it is held until actual firing takes place by reason of the arm 20 moving into the position shown in FIG. 1. In the event of completion of such a cycle, disc 80 will be moving in a counter-clockwise direction and it has a rise on its side portion as shown at 83 operative to move the spring 73 laterally to release it from the detent 77 so it springs against the anvil 74 detonating the percussion cap.

From the foregoing, the general concept of the invention and the implementation of the concept will be understood by those skilled in the art. The concept is that of an animated target figure capable of simulating the actual draw of a gun by a gunman with the additional characteristics that if the target is struck by a pellet fired by an operator or child, the draw will be interrupted. The invention further features the characteristics that the draw may be adjusted to be slow or fast to simulate gunmen slow and quick on the draw. The assembly is further characterized by the feature that upon the animated draw, if not interrupted, a sound will be produced at the completion of the draw simulating the firing of a pistol by the target figure. After each operation whether complete or incomplete, the device is reset by pulling a cord by the operator which returns the draw arm to normal position, releases the latch or brake on the arm if it has been operated and resets the cap firing mechanism.

The assembly is novel and unique in concept and as a toy has a great appeal from the standpoint of entertainment in providing a target for the child simulating a western gunman or cowboy which is animated to the extent that the target animatedly simulates firing at fast or slow rates which can be adjusted by the child to further simulate actuality. The invention has the further appeal in that it provides a form of game or contest to the extent that the child may or may not beat the draw of the target by striking the target before the draw is complete. The invention is unique as an action toy providing for a maximum of participation by the child.

The actuating mechanisms for the animated target are unique and novel in concept, construction, and arrangement of parts. As a whole, the invention provides a distinctly, novel, new, interesting and entertaining toy capable of production at limited expense and offers increased opportunity for the entertainment and enjoyment of children.

The foregoing disclosure is to be interpreted in an illustrative rather than a limiting sense, the invention to be accorded the full scope of the appended claims.

What is claimed is:

1. In a target assembly adapted for use with toy weapons, in combination, means comprising an upright target figure representative of a gunman, said assembly having a rotatably mounted member simulating a gun arm of the target figure, a spring for rotating the movable member and dash-pot means for regulating the rate of rotation of the movable member, said dash-pot means having an adjustable valve to regulate the rate of rotation to simulate a fast or slow draw, sound producing means to simulate firing from the target after predetermined rotation of the rotatable member simulating completion of the draw, and means for interrupting the cycle of operation of the rotatable member at an intermediate point, said last means comprising a ratchet rotatable with the movable member, and a pawl means engageable therewith, said target figure having at least a portion movable in response to being struck by a missile, and said pawl being actuatable by said movable portion to interrupt the draw.

2. The assembly of claim 1 including a flexible member connected to said rotary member for rotating and resetting it to the starting position of the operating cycle, and means operated thereby for resetting said pawl to an inactive position after it has been operated to interrupt the cycle of operation of the movable member.

3. In a target device: a target figure representative of a gunman; said figure having a member, representative of a gun arm, mounted for movement thereon through a cycle of movement simulating the drawing and firing of a gun; means for moving said member through said

cycle of movement at a predetermined rate; said target device further including a normally stationary target portion mounted for movement in response to impingement of a projectile thereon; and means responsive to said movement of said target portion for stopping movement of said member at any point in its cycle.

4. A target device as defined in claim 3, wherein said moving means includes spring means for moving said member; dashpot means arranged to limit said rate of movement of said member through its said cycle; and means for adjusting said dashpot means whereby to change said rate.

5. A target device as defined in claim 3 wherein said means responsive to movement of said target portion comprises a latch device having engageable elements.

6. A target device as defined in claim 3 including manually actuable means for resetting said member to the starting position of its cycle of movement and initiating a subsequent cycle thereof; said manually actuable

means being actuable from a position remote from said target figure.

7. A target device as defined in claim 3 wherein said member includes a ratchet member and wherein said means responsive to movement of said target portion comprises a pawl engageable with said ratchet member.

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