

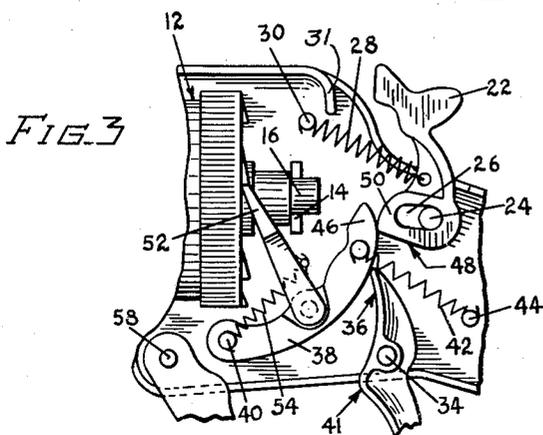
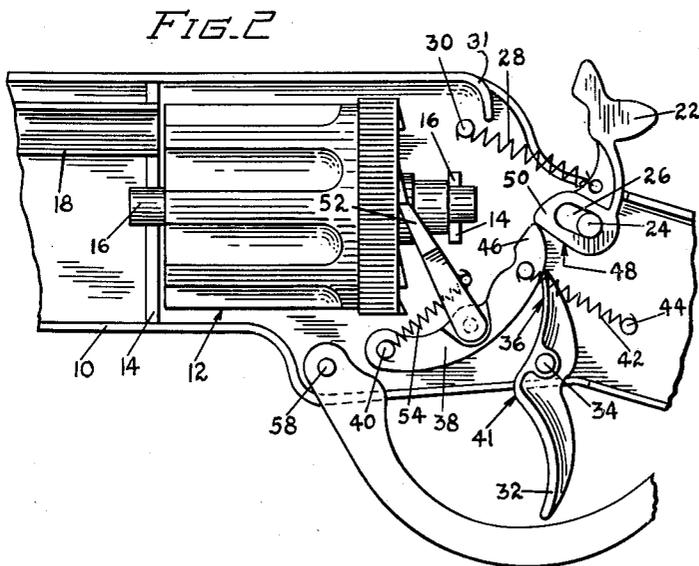
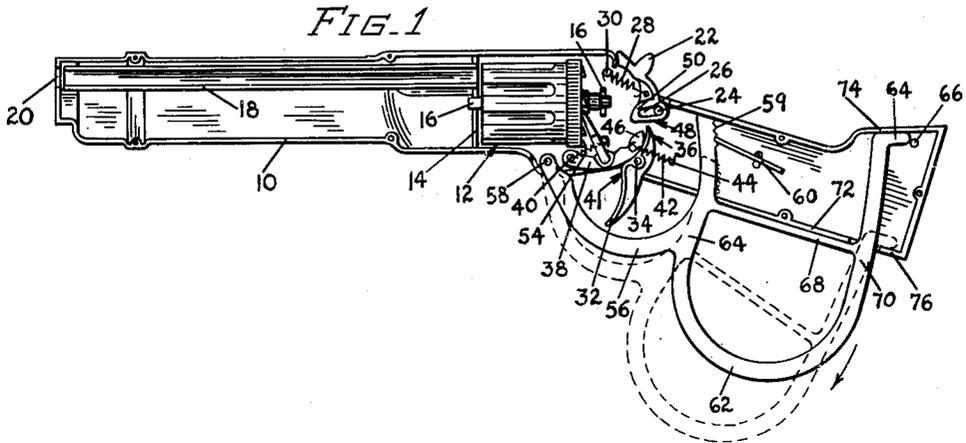
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TOY GUN CONSTRUCTION

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TOY GUN CONSTRUCTION

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This invention relates to a new and improved toy gun construction, and the principal object of the invention resides in the provision of an improved hammer, trigger, and sear mechanism made of molded plastic and adapted to make a noise in imitation of the firing of a gun, and including a rotary cylinder and a lifter on the sear for actuation of said cylinder to index the same as the hammer is brought to the rear and released to simulate firing action, said mechanism providing only a double-action, said mechanism providing only a double-action simulated firing; the provision of a noise-maker for said firearm, said noise-maker including a simulated loading lever, said lever being adapted to be manually actuated to and from stop members, and including a trigger guard which is actuated therewith, said trigger-guard being provided with teeth adapted to engage a noise-making spring strip or the like completely housed within the stock of the gun and operating to make a rapid clicking noise upon actuation of said lever.

The invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly set forth in the appended claims.

Reference is to be had to the accompanying drawings, in which:

FIG. 1 is a view showing the operating parts of the toy gun in position wherein the hammer strikes a part to make a noise;

FIG. 2 is a similar view showing the hammer in substantially its rearwardmost position about to be released by the sear to move forwardly to make the noise; and

FIG. 3 is a similar view illustrating the hammer during its forward motion under influence of the hammer spring.

In carrying out the present invention, the same is shown as applied to a sawed-off lever-action toy firearm. This toy firearm is preferably composed of two complementary molded plastic shell-like members, which when conjoined, provide the stock, barrel, receiver, fore-end of the gun, and in fact practically all of the external apparatus in the form of a hollow housing. In this housing substantially intermediate the ends thereof, there is a rotating cylinder which is journaled in partitions extending across the shell-like housing. This cylinder is the subject matter of Patent No. 2,625,927, which is adapted to propel pellets and such pellets are adapted to be expelled along a separate molded plastic tube in imitation of the firing of a real gun.

As shown in the drawing, one of the complementary shell-like members is generally indicated by the reference numeral 10, and it is to be understood that the other shell member is complementary thereto and covers the same to form a hollow housing when secured rim-to-rim in a way which will be clear to those skilled in the art.

The cylinder is generally indicated at 12 and is mounted upon partitions 14 or the like by means of trunnions 16. The construction and operation of the cylinder is not shown, as it forms no part of the present invention and may be seen by reference to the above-identified patent; however, a separate tubular member 18 is set into the shells and provides a barrel which leads the pellets as they are propelled in the manner of a bullet passing through a barrel of a gun to be discharged through an aperture at 20.

A hammer is provided as at 22 and this hammer is pivotally mounted on a hammer-pin 24 by means of an elongated slot 26 which provides the required action of the

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hammer as will be made more clear hereinafter. This hammer is provided with a hammer-spring 28 which is connected to a pin 30 and always urges the hammer to the left, so that the hammer nose strikes an abutment 31 to make a clicking noise.

A trigger is illustrated at 32 pivotally mounted on a trigger-pin 34. This trigger has a concave forwardly-facing portion at 36 which acts as a cam to accommodate a more or less conformably shaped rear surface on a sear 38 pivotally mounted on a sear-pin 40. The trigger also has a forward convex portion at 41 which actuates the sear. A spring 42 connects the sear at a point remote from pin 40 to a fixed pin 44, across the trigger, and thus it will be seen that the trigger is held in the position shown in FIG. 1 by means of this spring which causes the sear to bear on the concave portion 36 as shown, and also on the convex portion 41.

When the trigger is pulled, the parts will move to the FIG. 2 position, under influence of the surface at 41 of the trigger, and the sear nose at 46 engages the under side surface of the hammer at 48 or thereabouts, causing the hammer to pivot in a clockwise direction to its full extent as shown in FIG. 2.

Continued motion of the trigger to the rear, i.e., counter-clockwise, continues the motion of the sear also in a counter-clockwise direction to the left in FIG. 1, until the sear nose 46 rides from the hammer nose 50. Spring 28 then snaps the hammer forwardly to contact and strike abutment 31, making a clicking noise in imitation of the firing of a gun.

When the trigger 32 is released by the finger of the user, the spring 42 brings both the sear and the trigger back to the normal position of FIG. 1.

The sear may also be provided with a lifter 52 which rises with the same to index the cylinder 12, the cylinder 12 having grooves or the like at the rear end portion thereof as is well known in the art to cooperate with the nose of the lifter in order to provide the indexing action. The lifter is provided with a lifter spring 54 in order to hold it in continued ratchet-type of connection with respect to the rear end of the cylinder.

Means is provided for ejecting the pellets from the cylinder along the simulated barrel 18 but this construction is not pertinent to the present invention and is illustrated in the above-identified patent.

The gun is provided with a trigger-guard 56 which is pivotally mounted at 58. This trigger-guard is free-ended, terminating in a series of teeth 59 which cooperate with a spring steel member held in position at 60, so that if the trigger-guard be moved about its axis in the pin 58, the teeth will cause a ratchet-like effect and make a snapping noise during the motion thereof.

The trigger-guard is provided with an enlarged handle or actuating lever 62 and this connected to the trigger-guard at 64. The lever member 62 extends down in a large loop and reversely upwardly, terminating in a foot 64, which when raised in the FIG. 1 position, snaps behind a pin 66 to be lightly latched in position but capable of being manually released upon a downward thrust in the direction of the arrow in FIG. 1, to release the same and to actuate the trigger-guard to make the ratchet-type of noise identified above. This action is in imitation of the lever-loading action of a real firearm.

Lever 62 is provided with a cross-bar 68 which extends from the upward portion thereof at 70 to the trigger-guard itself just above the connection thereof at 64 and this acts as a stop against the rims 72 of the shells 10, so as to stop the action of the inward motion of the lever and trigger-guard. Also, the foot 64 at the same time contacts the shell rim at 74 and thus there is provided a double stop for the inward action of the lever.

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There is also a stop for the action of the lever in the opposite direction, and this stop is a turned-in portion 76 of the rim forming an integral part of the plastic shell of the gun.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A toy gun construction comprising a frame, said frame including a hollow stock, receiver, and fore-end, said receiver connecting the stock and the fore-end, an imitation barrel on said fore-end, a veritable barrel located within and concealed by said imitation barrel and fore-end, means holding said veritable barrel in position, a cylinder rotatably mounted within the receiver in cooperative position relative to the veritable barrel, means to rotate said cylinder to successively align bullet chambers therein with the veritable barrel, and trigger, sear and lifter mechanism actuating said cylinder to rotate the same upon pulling and releasing the trigger, an imitation loading lever pivotally mounted with respect to said frame, said loading lever including a pair of integral arcuate portions, one of which acts as a trigger guard and the other of which acts as a hand-hold, and means releasably latching said loading lever in position with respect to said stock but allowing release thereof under manual action to actuate the loading lever downwardly in imitation of a veritable loading lever, sound-producing means mounted in the stock and associated with said loading lever, means on

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said loading lever actuating the sound-producing means, and stop means on said loading lever limiting the motion thereof in both directions of pivotal motion thereof.

2. The toy construction of claim 1 wherein said loading lever includes a pair of free-ended generally parallel arms extending through apertures in said stock to be normally located within said stock, said sound-producing means being associated with one of said arms.

3. The toy construction of claim 1 wherein said loading lever includes a pair of free-ended generally parallel arms extending through apertures in said stock to be normally located within said stock, said sound-producing means being associated with one of said arms, and means on the latter for actuating the sound-producing means, a bar connecting said arms and forming a stop limiting the inward motion of said loading lever, said bar being located at the exterior portion of said stock at all times and engaging the same in stopped position.

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