

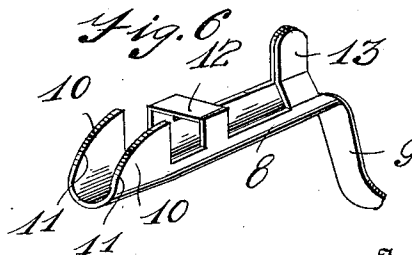
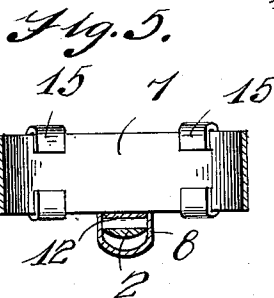
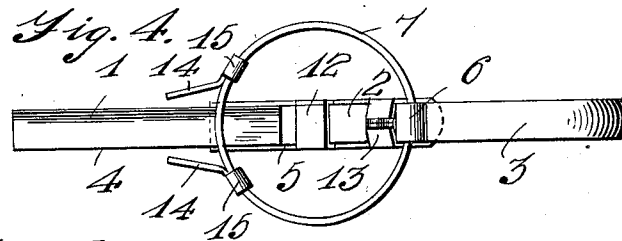
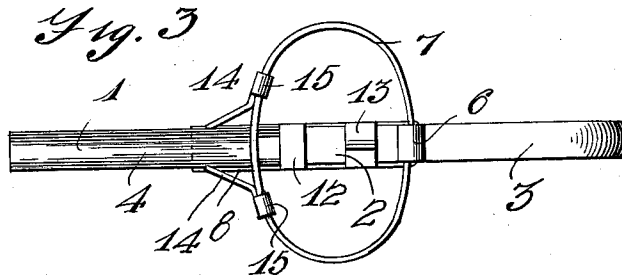
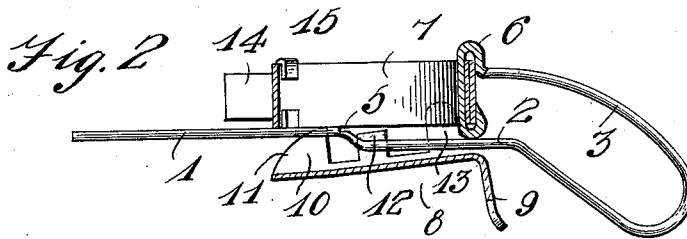
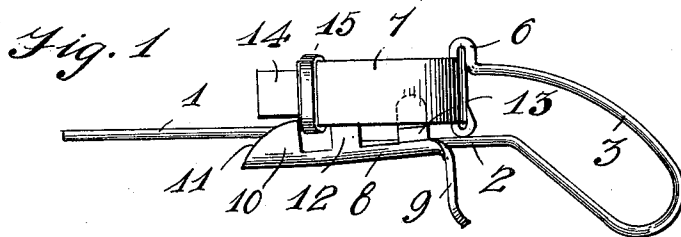
F. HORNQUIST.

TOY PISTOL.

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1,000,522.

Patented Aug. 15, 1911.



Witnesses

C. R. Hardy.
O. B. Hopkins.

Inventor
Frank Hornquist

by *A. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

FRANK HORNQUIST, OF KANE, PENNSYLVANIA, ASSIGNOR TO CHARLES SCHINDLER,
OF TOLEDO, OHIO.

TOY PISTOL.

1,000,522.

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To all whom it may concern:

Be it known that I, FRANK HORNQUIST, a citizen of the United States, residing at Kane, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Toy Pistols, and do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in toy pistols.

One object of the invention is to provide a pistol of this character which will be self cocking.

Another object is to provide an improved construction and arrangement of projectile throwing spring and means whereby the projectile will be held in position to be thrown by the spring irrespective of the position in which the pistol may be held.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1 is a side view of my improved pistol showing the same cocked; Fig. 2 is a central longitudinal vertical section of the same showing the parts in a projected position; Fig. 3 is a plan view with the parts as shown in Fig. 1; Fig. 4 is a similar view with the parts as shown in Fig. 2; Fig. 5 is a vertical cross sectional view on a plane cut centrally through the spring in Fig. 3; Fig. 6 is a detail perspective view of the trigger member.

My improved pistol comprises a barrel or projectile supporting bar 1, a trigger supporting bar 2 and a handle 3. These parts are here shown and are preferably formed from a single strip or bar of metal bent into the proper shape for forming said parts. The barrel or projectile supporting portion of the bar is preferably provided on its upper side with a longitudinally extending shallow groove 4 which is provided to prevent a projectile of cylindrical or spherical form from rolling off the sides of the bar. At the inner end of the barrel or projectile supporting portion of the bar where the

same joins the trigger supporting bar is formed a shoulder 5 behind which the trigger member is adapted to be engaged when in cocked position. The barrel portion of the bar is also bent at a downward inclination from the shoulder 5 to the outer end of the trigger supporting bar 2 whereby the latter is on a lower plane than the barrel bar. The end of the handle portion 3 of the bar is bent upwardly and thence downwardly to the trigger supporting bar and the end of the downwardly bent portion of the handle is then bent upwardly upon itself thereby forming a spring-gripping or clamping member 6 in which is adapted to be secured the ends of a circular projecting spring 7 which is preferably in the form of a thin steel band. The ends of the spring are overlapped and engage between the folded portions of the end of the gripping member 6 formed on the end of the handle portion of the bar, said folded portions of the gripping member being clenched into tight engagement with the overlapping ends of the spring thereby holding the latter in operative position. When thus secured the outer portion of the spring will project over the inner end of the projectile supporting portion of the bar with its lower edge in sliding engagement with the upper surface of the projectile supporting bar.

Slidably mounted on the trigger supporting bar 2 is a trigger member 8 comprising a strip of metal. The inner end of the bar 2 is bent downwardly and slightly curved to form the trigger 9 while on the outer end of the bar are formed upwardly projecting parallel spring catching and holding lugs 10, the upper edges of which are curved or inclined downwardly as shown at 11 to facilitate the engagement of the same with the forward portion of the spring whereby the latter is retracted or drawn back to an operative position for throwing the projectile. On the upper side of the bar forming the trigger member in rear of the lugs 10 and spaced a suitable distance therefrom is a catch loop 12 which is preferably formed of upwardly bent lugs one of which is bent at a right angle across the upper side of the trigger supporting bar and into engagement with the lug on the opposite side of the bar. On the bar of the trigger member

adjacent to the trigger are formed inwardly and upwardly bent lugs 13 which provide a guiding and supporting loop for the trigger member and a stop member to limit the rearward or retracting movement of the trigger member, said lugs coming into engagement with the gripping or clamping member on the inner end of the handle bar when the trigger member is retracted.

On the outer portion of the spring 7 on opposite sides of the projectile supporting bar and substantially tangential thereto are forwardly projecting retaining or supporting arms 14 the inner ends of which are bent at a slight angle and have formed on their upper and lower edges attaching lugs 15 which are bent around the upper and lower edges of the spring and tightly clenched thereby securing the projectile holding arms in operative position on the spring. When the spring is drawn back by the trigger member to a retracted position the inner ends of the plates 14 will be drawn toward each other thereby gripping a projectile which may be placed between the same and upon the projectile supporting bar 2. When the spring is released by the trigger member and permitted to spring out to an expanded position wherein the band assumes a circular form the outer ends of the plates 14 will be spread apart or opened thereby releasing the projectile and permitting the expansion of the spring to forcibly throw the same from the projectile supporting bar of the pistol.

In the operation of the pistol, the trigger member is pushed forwardly on the supporting bar 2 and the inner end of the projectile supporting bar, thus forcing the rounded or inclined forward edges of the lugs 10 beneath the lower edge of the forward portion of the spring thereby raising the spring a sufficient distance to permit the lugs 10 to pass beneath the same so that the square inner ends of the lugs will engage the outer side of the spring. After the trigger member has thus been engaged with the spring, said member is retracted and the spring thus drawn back until the catch loop 12 engages the dog shoulder 5 at the inner end of the projectile supporting bar whereby said trigger member and the spring will be held in a retracted or cocked position. When the parts have been brought to this position a projectile is inserted between the plates 14 and is then ready to be shot or projected from the pistol. When it is desired to shoot the pistol after the parts have been retracted in the manner described the trigger is pulled back thereby drawing the catch loop down the inclined connection between the trigger supporting bar and the projectile supporting bar which action will disengage the lugs 10 from the spring and thus allow the expansive force

thereof to throw the projectile from the bar. 1. When the trigger member is thus retracted the stop lugs 13 will engage the gripping member 6 as hereinbefore described and thus limit the rearward movement of the trigger.

From the foregoing description taken in connection with the accompanying drawings the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claims.

Having thus described my invention what I claim is:

1. A device of the character described comprising a support for a projectile, a circular propelling spring, and a pair of gripper arms secured to and projecting from the spring above the projectile support in position to grip the projectile when the spring is contracted and release the projectile when the spring is expanded.

2. A device of the character described comprising a support for a projectile, a circular propelling spring, and oppositely placed gripper arms projecting from the spring in substantially tangential lines on opposite sides of the projectile support.

3. A device of the character described comprising a projectile support, a shoulder and an inclined offset at its inner end, and a trigger supporting bar at the inner end of the offset, a propelling spring slidably engaging the upper surface of the projectile support, and a trigger member slidably mounted on the trigger supporting bar comprising spring engaging lugs, a loop encircling the bar, a stop loop, and a downwardly projecting trigger.

4. A toy pistol comprising a projectile supporting bar, a trigger supporting bar formed integral with and offset from said projectile bar, a handle formed on the inner end of said trigger supporting bar, a projectile throwing spring secured in said handle, a trigger member slidably mounted on said trigger supporting bar, spring engaging and retracting lugs formed on the outer end of said member, a catch loop also formed on said member, a shoulder formed at the inner end of the projectile supporting bar and adapted to engage said catch loop when the trigger member and projecting spring are retracted, a stop member adapted to limit the retracting movement of said trigger member and a trigger formed on the inner end of said member whereby the latter is operated.

5. A toy pistol comprising a projectile support, an integral trigger supporting bar formed on the inner end of said projectile

support, and offset therefrom, a shoulder formed at the inner end of said projectile support, a handle formed on the end of said trigger supporting bar, a spring gripping or clamping member formed on said handle bar, a projectile throwing spring, a trigger member comprising a bar slidably engaged with said trigger supporting bar, spring engaging and retracting lugs formed on the outer end of said bar, a catch loop formed on said trigger bar and adapted to engage the shoulder of said projectile support when the trigger member and spring are retracted, stop lugs arranged on said trigger member, and a trigger formed on the inner end thereof whereby the same is operated.

6. A toy pistol comprising a projectile supporting bar, a trigger supporting bar formed integral therewith, a handle on the end of said trigger supporting bar, a pro-

jectile throwing spring secured in said handle and adapted to slidably engage said projectile supporting bar, projectile gripping and holding arms arranged on said spring whereby when the latter is retracted in operative position they will grip a projectile on the projectile supporting bar and a trigger member adapted to be engaged with said spring to retract and hold the same in retracted position, and means to release the trigger member and thereby permit the spring to expand and throw the projectile held by said arms.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK HORNQUIST.

Witnesses:

F. J. WOODS,
J. T. TUOHY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."