P. L. L. YORGENSEN.

TOY PISTOL.

APPLICATION FILED FEB. 2, 1921.

1,375,990. Patented Apr. 26, 1921.

Fig. 1.

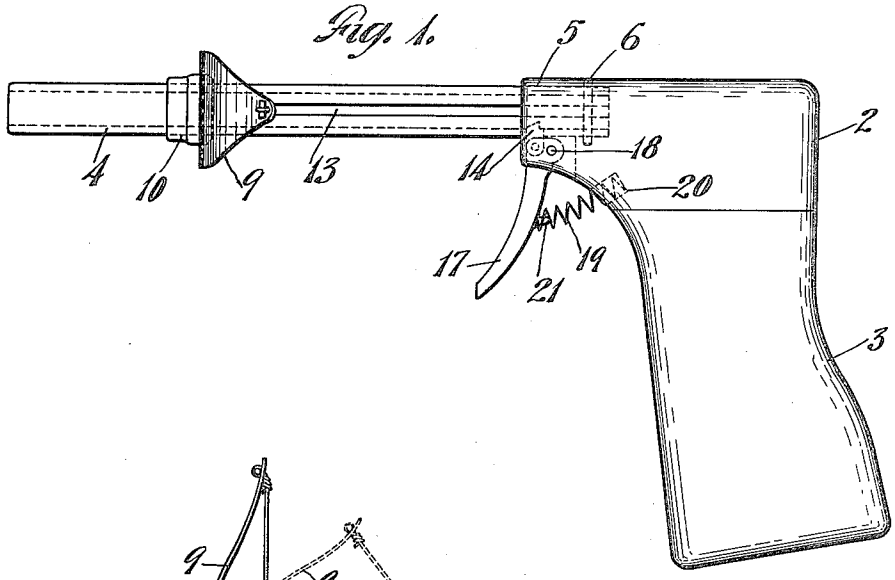


Fig. 2.

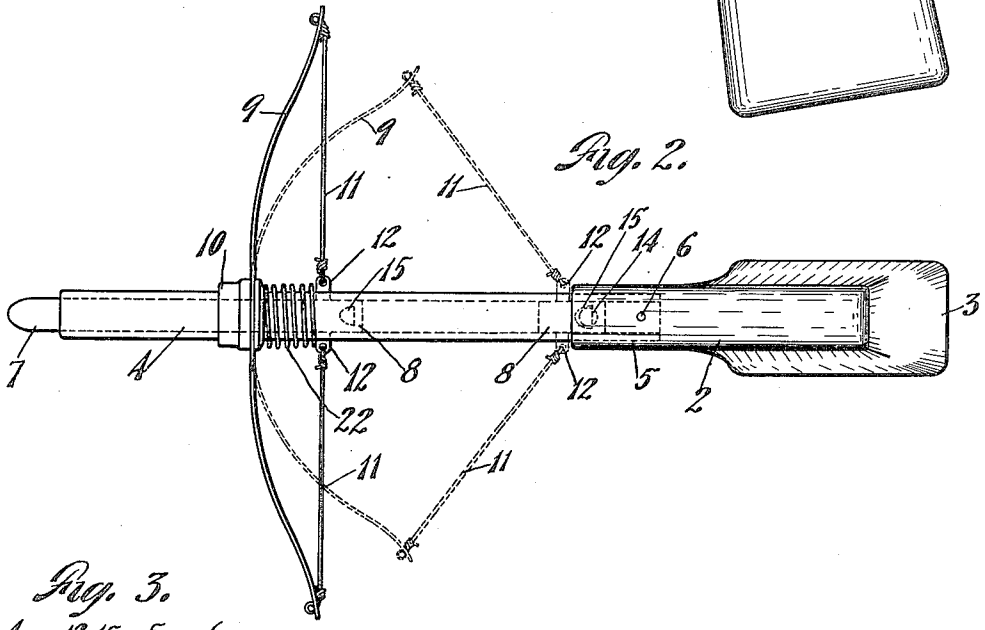
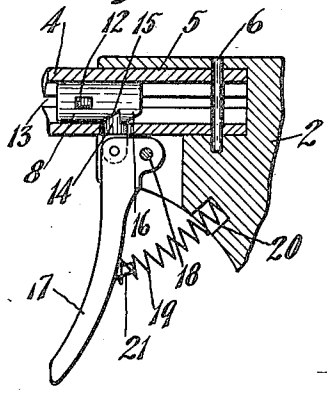


Fig. 3.



P. L. L. Yorgensen INVENTOR.

BY

J. Hunt Lothrop ATTORNEY.

UNITED STATES PATENT OFFICE.

PAUL L. L. YORGENSEN, OF HARTFORD, CONNECTICUT.

TOY PISTOL.

1,375,990. Specification of Letters Patent. Patented Apr. 26, 1921.

Application filed February 2, 1921. Serial No. 441,782.

To all whom it may concern:

Be it known that I, PAUL L. L. YORGENSEN, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Toy Pistols, of which the following is a specification.

This invention relates to toy pistols and among the objects of the invention is the provision of an article of the character set forth which is simple in construction and is capable of inexpensive manufacture and by which a projectile can be accurately expelled from the device.

In the drawings accompanying and forming part of the present specification I have shown in detail one of the several forms of embodiment of the invention which to enable those skilled in the art to practise the same will be set forth fully in the following description. From this it will be clear that I am in no sense restricted to such disclosure. I may depart therefrom in a number of respects within the scope of the invention defined by the claims following said description.

Referring to said drawings:

Figure 1 is a side elevation of the pistol.

Fig. 2 is a top plan view of the same.

Fig. 3 is a sectional detail of the breech portion of the barrel showing the plunger in its back position where it is held subject to release by the trigger.

Like characters refer to like parts throughout the several views.

The pistol involves a frame such as 2 which can be made of metal, wood or other suitable material. On the under side of the frame is fastened the handle or grip 3 the two parts, when made separate being rigidly united in some convenient way. It is of course conceivable that the frame or body 2 and the handle or grip 3 might be in one piece and in this event may be made of proper material such as either wood or metal.

The barrel is denoted by 4 and naturally is tubular, its breech or butt portion being set into a socket 5 and in which it is rigidly held as by the pin 6. The projectile is denoted by 7 and its shank portion is intended to fit somewhat freely the bore of the barrel 4 when the plunger of whatever nature it may be is in cocked or operative position, the plunger as it advances ejecting the projectile from the barrel. A stick or length of wood answers satisfactorily as a projectile and it may be headed or plain as desired, at its front end. The ejector which I have shown, is denoted by 8 and it is shown in Fig. 3 as being in its cocked position where it may be released as I will hereinafter explain.

The means shown for imparting an operative movement to the ejector or plunger 8 involves as shown, a spring bow or arch as 9 and which usually consists of a length of suitable stock having in it a practically central hole to receive the barrel 4 at about the middle thereof, the barrel usually being circumferentially chamfered to receive the mid portion of the bow and to be abutted by a stop as 10 which usually consists of a collar fitted onto the barrel and engaging the bow. From opposite or free ends of said bow extend rearwardly the strands 11 which generally consists of wire, these strands 11 converging rearwardly and their rear ends being connected with ears as 12 extending from opposite sides of the ejector 8 and through longitudinal slots 13 diametrically opposite each other, in the barrel 4.

In dotted lines in Fig. 2 and in Fig. 3 for that matter, the ejector or plunger 8 is shown as occupying its operative or projectile-propelling position, the bow 9 at this time being arched and necessarily under tension. The ejector 8 is shown as being held in its retracted position by a latch as 14 which at this time is adapted to enter a notch as 15 in the under side of the ejector 8 the front wall of the notch as represented being upon a downward forward slant while the rear wall thereof is perpendicular. The back of the ejector 8 has a cam surface 16 illustrated as being upon a downward and forward slant. The trigger is denoted by 17 and is of elbow formation being pivoted as at 18 within a slot or notch in the frame 2 at practically its angle.

The catch 14 has its head or upper portion set in the notch in the ejector 8 in Fig. 3, the ejector being assumed to be back and the bow 9 flexed as shown by dotted lines in Fig. 2. It will be assumed that the trigger 17 is pulled. This causes the catch 14 to be pulled down thus freeing the ejector 8 so that the latter can be advanced by the bow or spring 9 acting through the connections 11 in the manner already set forth. The instant that the trigger 17 is released it is returned to its normal or full line po-

sition as by the spring 19 set in a socket 20 in the handle 3 and fitted around a stud or projection 21 extending rearwardly from the long branch of the trigger 17.

It will be supposed that the ejector 8 is advanced and that the bow 9 is lax as illustrated in Fig. 2, the finger being off the trigger 17, the catch 14 will be up, where it is maintained by the spring 19. To cock the pistol, the bow 9 will be flexed as shown by dotted lines in Fig. 2 thus through the wires 11, moving the ejector backward to its cocked position. Just before this cocked position is reached the inclined rear face of the ejector will strike and depress the catch 14 so that the rearward movement of the ejector can be continued and when it reaches its extreme position the catch 14 will be projected into the notch or slot 15 by the action of the spring 19.

I prefer to use a shock absorber to check the advancing movement of the ejector 8, and the coiled spring 22 acts satisfactorily in this manner. The spring fits around the barrel 4 and is adjacent the central portion of the bow 9, its rear portion being engaged by the lugs or ears 12 of the ejector when the latter reaches its extreme forward position as best shown by full lines in Fig. 2.

What I claim is:

1. A toy pistol comprising a frame, a barrel connected with the frame, a spring having a hole to receive the barrel, the barrel being provided with means for holding the spring in position, an ejector in the barrel, connections between the free portions of the spring and the ejector, and a trigger mounted on the frame, and a latch to hold the ejector back and the spring tensioned, the trigger being provided with means to trip the latch and thus release the ejector.

2. A toy pistol comprising a frame, a barrel connected with the frame, a spring having a hole to receive the barrel, the barrel being provided with means for holding the spring in position, an ejector in the barrel, connections between the free portions of the spring and the ejector, and a trigger mounted on the frame, a latch to hold the ejector back and the spring tensioned, the trigger being provided with means to trip the latch and thus release the ejector, and means for buffing the ejector when it is in its forward position.

3. A toy pistol comprising a frame, a barrel connected with the frame, a spring having a hole to receive the barrel, the barrel being provided with means for holding the spring in position, an ejector in the barrel, connections between the free portions of the spring and the ejector, and a trigger mounted on the frame, a latch to hold the ejector back and the spring tensioned, the trigger being provided with means to trip the latch and thus release the ejector, and a coiled spring fitted around the barrel and to be engaged by the ejector when it reaches its forward position under the action of said first mentioned spring.

4. A toy pistol comprising a frame, a barrel connected with the frame and having longitudinal slots, a spring having a hole to receive the barrel, the barrel being provided with means for holding the spring in position, an ejector in the barrel, the ejector having lugs which extend through the longitudinal slots in the barrel, connections between the ends of the spring and the respective lugs, a trigger pivotally mounted on the frame, a spring backing the trigger, and a latch connected with the trigger, the ejector having a notch to receive the latch when the ejector is in its back position.

5. A toy pistol comprising a barrel, a spring having an approximately central hole to receive the barrel, an ejector in the barrel, operative connections between the spring and the ejector, and hammer-controlled means for holding the ejector in its retracted position.

In testimony whereof I affix my signature

PAUL L. L. YORGENSEN

Witnesses:
N. E. BLAKE,
HEATH SUTHERLAND.