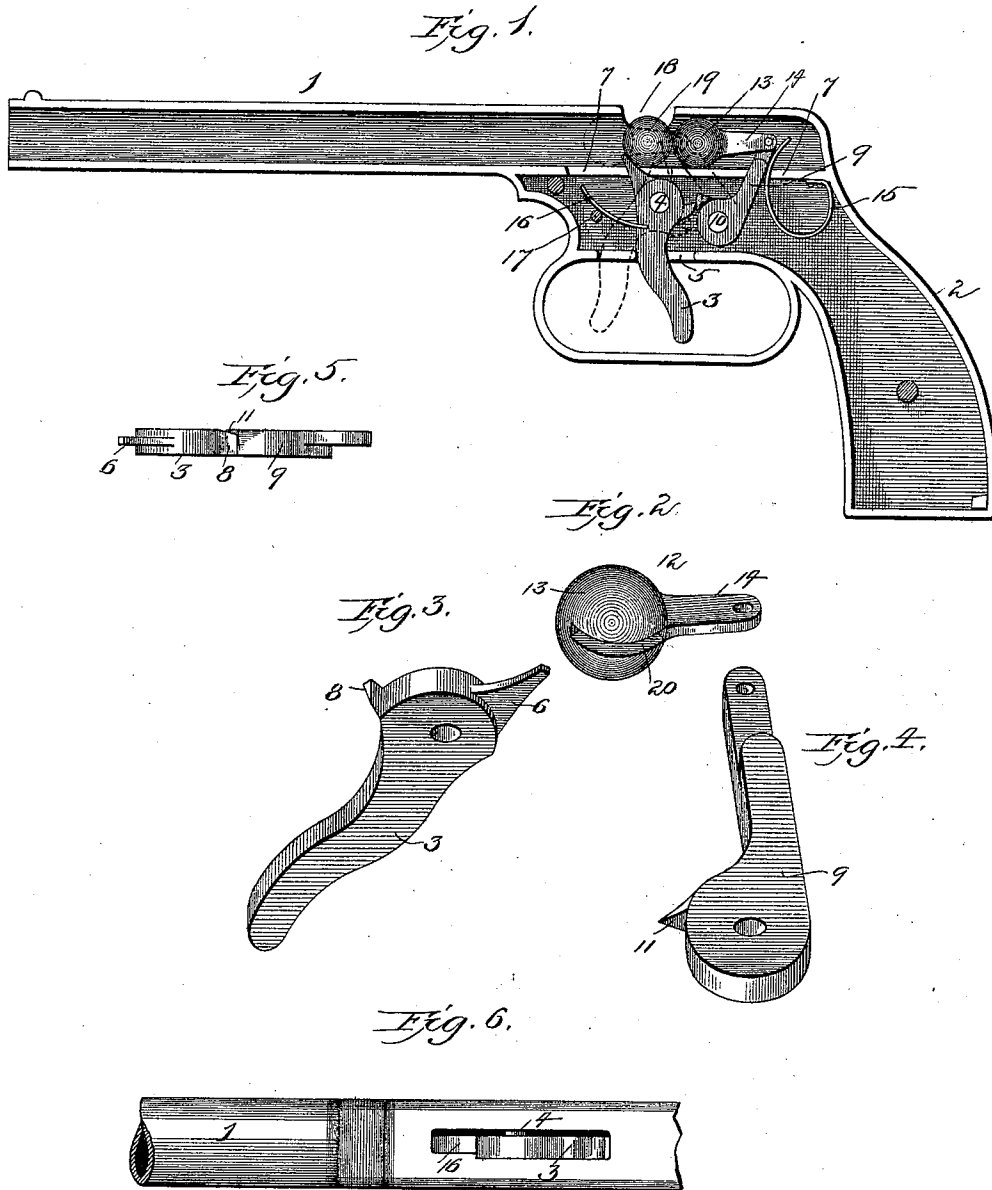


(No Model.)

W. DUECHTING.  
TOY PISTOL.

No. 518,987.

Patented May 1, 1894.



Witnesses:  
Wm. A. Fleming  
Ralph Vandyke

Inventor  
William Duechting  
By Bond, Adams, Rickard & Jackson  
His Attorneys.

# UNITED STATES PATENT OFFICE.

WILLIAM DUECHTING, OF CHICAGO, ILLINOIS.

## TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 518,987, dated May 1, 1894.

Application filed January 31, 1893. Serial No. 460,457. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM DUECHTING, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Toy Pistols, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal section of the pistol, showing the trigger and discharging devices. Fig. 2 is an enlarged detail, being a perspective view of the plunger. Fig. 3 is an enlarged detail, being a perspective view of the trigger. Fig. 4 is an enlarged detail, being a perspective view of the pivoted arm which throws the plunger forward. Fig. 5 is an enlarged detail showing the trigger and pivoted arm, viewed from above, immediately after the pivoted arm has been released from engagement with the trigger and before it is thrown forward; and Fig. 6 shows a view of a portion of the pistol seen from below, with the trigger guard removed.

My invention relates to toy pistols, and has for its objects to provide a new and improved toy pistol adapted for the discharge of marbles and similar projectiles, and to provide new and improved mechanism by which the discharge device may be thrown back into position by the pulling of the trigger, and released when the trigger is pulled a little farther backward, giving it what is known as a double action. I accomplish these objects as hereinafter specified and as illustrated in the drawings.

That which I regard as new will be pointed out in the claims.

In the drawings,—1 represents a barrel and 2 the stock of a toy pistol.

3 indicates a trigger, which is pivoted within the stock of the pistol upon a pivot 4, and projects downward through a slot 5 in the stock 2. The trigger 3 is provided upon its upper end with an arm 6, which projects upward into the barrel of the pistol through a slot 7. Upon the rear side of the trigger is a lug 8, the upper surface of which is flat, while its lower surface is beveled, so that the lug is triangular in cross section, as is best seen in Fig. 3.

9 indicates a pivoted arm, which is pivoted in the pistol stock on a pivot 10. The upper

end of the arm 9 projects upward into the barrel of the pistol through the slot 7. Upon the lower end of the arm 9 and upon the front side thereof is a lug 11. The under surface of the lug 11 is flat and adapted to engage with the upper surface of the lug 8. The upper surface of the lug 11 is beveled, so that the lug is triangular in cross section, as is best shown in Fig. 4.

12 indicates a plunger, consisting of a head 13 and an arm 14. The arm 14 is pivoted at its rear end to the upper end of the pivoted arm 9, as is best shown in Fig. 1. The head 13 of the plunger 12 is adapted to move freely within the pistol barrel 1.

15 indicates a spring secured in the pistol stock by one end, and having the other free end adapted to bear against the upper end of the pivoted arm 9, so that when the spring 15 is relaxed it drives forward the upper end of the arm, carrying with it the plunger 12.

16 indicates a spring which is secured to the forward side of the trigger 3, at a point below the pivot 4.

17 indicates a pin within the pistol stock, against which the spring 16 bears.

18 indicates an opening in the top of the pistol barrel, through which a ball or marble 19 may be inserted into the barrel preparatory to discharging it.

The operation of my device is as follows: In Fig. 1 the dotted lines show the normal position of the trigger, pivoted arm and plunger, when the springs 15 and 16 are relaxed. In this position the upper surface of the lug 8 upon the trigger 3 engages with the under surface of the lug 11 upon the arm 9. As the lower end of the trigger 3 is pulled back, the lug 8 bearing against the lug 11 forces it upward, carrying the pivoted arm 9 around backward and drawing backward with it the plunger 12. When the parts reach the position shown by the full lines in Fig. 1, the spring 16 bears against the pin 17 and the ball or other projectile 19 is inserted through the opening 18 into the pistol barrel, the arm 6 of the trigger 3 preventing the ball from rolling forward out of the barrel. The head 13 of the plunger 12 is provided on its under side with a groove 20, of sufficient width to allow the free passage of the arm 6 of the trigger 3 through it when the plunger 12 is car-

ried backward. As the trigger 3 is pulled still farther backward, the lug 8 is released from engagement with the lug 11, and the arm 6 of the trigger 3 is moved below the top of the slot 7. As the lug 11 is released from engagement with the lug 8, the spring 15 bearing against the upper end of the pivoted arm 9 forcibly throws the pivoted arm 9 forward, carrying with it the plunger 12 and driving the ball or other projectile forcibly from the pistol. When the pressure upon the trigger 3 is released, the spring 16, bearing against the pin 17, throws the trigger forward again into the position shown by the dotted lines in Fig. 1, and as the beveled side of the lug 8 comes in contact with the beveled side of the lug 11, they pass one another, and the parts resume the position shown by the dotted lines in Fig. 1, when the pistol is again adapted to be discharged, as before. In order that the lugs 8 and 11 may pass one another when returning from the position in which they stand just before the discharge, to the position shown in the dotted lines, either the trigger 3 or the pivoted arm 9 has a slight play upon its pivot 4 or 10 in a direction parallel to that of the axis of the pivot.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination with a stock, and a barrel mounted thereon and provided at its rear with a slot in its under side, of a swinging trigger pivoted within said stock and provided with a lug upon its rear side, an arm pivoted at its lower end within said stock and having its upper end extending into said barrel through said slot and provided with a lug upon its front side adapted to engage with the lug upon said trigger and to be released therefrom when the trigger is swung on its pivot, and a spring bearing upon said arm adapted to force it forward, substantially as described.

2. The combination with a stock, and a barrel mounted thereon and provided at its rear end with a slot in its under side, of a swinging trigger pivoted within said slot, a lug upon the rear side of said trigger and having its

under side beveled, an arm pivoted at its lower end in said stock behind said trigger and having its upper end extending into said barrel through said slot, a lug upon the front of said arm, having its lower surface adapted to engage with the upper surface of the lug upon said trigger and having its upper side beveled, and a spring bearing upon said arm and adapted to force it forward, substantially as described.

3. The combination with a barrel and stock, of a trigger pivoted within said stock, a lug upon the rear side of said trigger and having its under side beveled, an arm pivoted at its lower end in said stock behind said trigger, a lug upon the front end of said arm, having its lower surface adapted to engage with the upper surface of the lug upon said trigger and having its upper side beveled, a plunger pivoted upon the upper end of said arm and extending forward into said barrel and moving freely therein, and springs bearing upon said trigger and said arm and adapted to force said trigger and arm forward, substantially as specified.

4. In a toy pistol, the combination with a barrel 1 and a stock 2, of a trigger 3 pivoted within said stock 2 and provided with an upward projecting arm 6, a lug 8 upon the rearward side of said trigger, said lug having its under side beveled, an arm 9 pivoted at its lower end in said stock 2, a lug 11 upon the forward side of said arm 9, having its under surface adapted to engage with the upper surface of said lug 8 and having its upper side beveled, a plunger 12 pivoted at its rear end upon the upper end of said arm 9 and extending forward into said barrel 1, a spring 15 bearing against said arm 9 and adapted to force the same forward, and a spring 16 bearing against said trigger and adapted to force the same forward, substantially as described.

WILLIAM DUECHTING.

Witnesses:

JOHN L. JACKSON,  
RALPH VAN DYKE.