

(No Model.)

F. W. GOODYEAR.
TOY SPRING GUN.

No. 317,119.

Patented May 5, 1885.

Fig. 1.

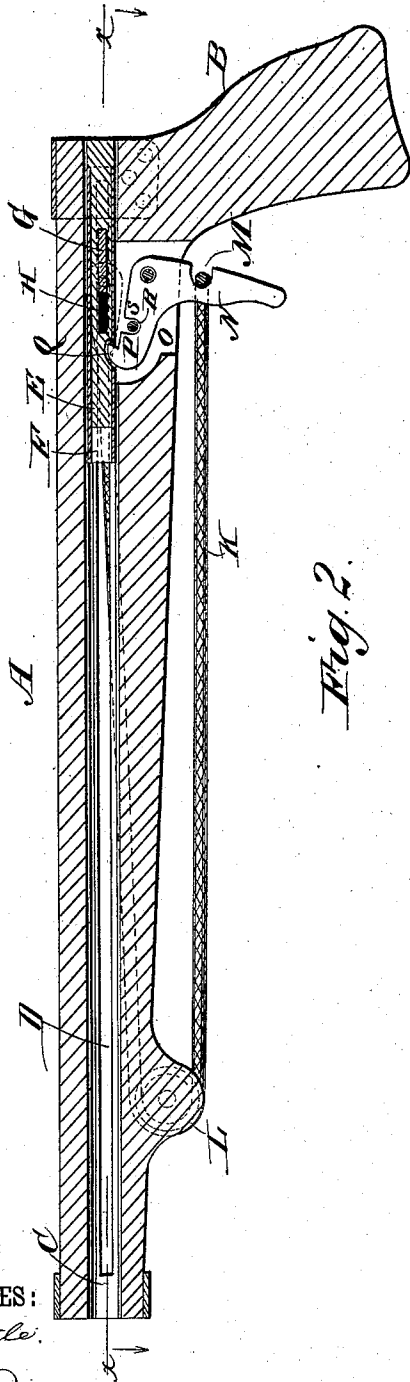
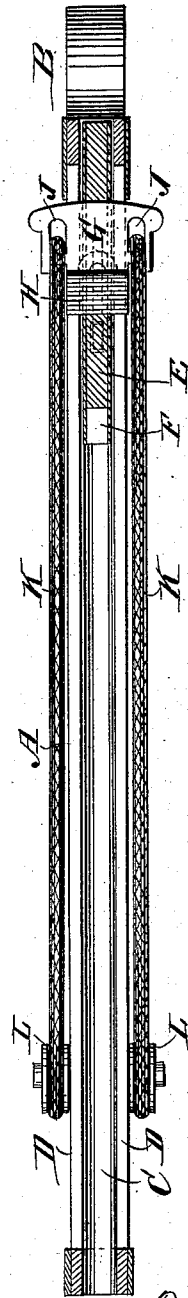


Fig. 2.



WITNESSES:

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TOY SPRING-GUN.

SPECIFICATION forming part of Letters Patent No. 317,119, dated May 5, 1885.

Application filed August 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. GOODYEAR, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and Improved Toy Pistol, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved toy pistol or gun for throwing arrows, darts, &c.

The invention consists in the combination, with a barrel, of a slide in the same, and of an elastic cord secured to the slide and passed over pulleys at the muzzle end of the barrel, and over a trigger pivoted in the barrel at the butt-end.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal sectional elevation of my improved toy pistol. Fig. 2 is a sectional plan view of the same on the line *x x*, Fig. 1.

The barrel A and stock B are preferably made of one piece of wood or metal.

The barrel is provided with the usual bore, C, extending from end to end, and the barrel is provided with two opposite longitudinal side slots, D, extending to within short distances from the ends.

A tube or plunger, E, fitting quite closely in the bore, is held to slide in the same, and the said tube is filled to within a short distance from the front end to form a recess, F, for receiving the butt-end of the arrow or dart.

In the middle of the tube E a cross-piece, G, is held, which projects through the side slots, D, and in front of the said cross-piece a flat rubber buffer, H, is held in the tube E.

Outside of the barrel A the cross-piece G is provided with two apertures, J, through which the ends of a strong elastic cord, K, are passed, and then tied or fastened in any other suitable manner to hold them on the cross-piece. The two strands of the elastic cord are then passed over two grooved pulleys, L, pivoted on the sides of the barrel near the muzzle end. Then the cord is passed to the breech end and placed in a notch, M, in the inner or back edge of the trigger-lever N, pivoted in a slot, O, in the bottom of the barrel.

The trigger N is provided on its upper end

with a hook, P, adapted to pass into a notch, Q, in the bottom of the tube E. A transverse check-pin, R, in the slot O passes into a notch, S, in the trigger.

To charge the gun the cross-piece G is pulled back toward the butt-end until the hook P snaps into the notch Q, thus locking the plunger in place. Thereby the elastic cord is brought in tension. The dart or arrow is then placed in the barrel until it rests on the front end of the tube E or in the recess F. By pulling the lower end of the trigger toward the handle the tube E is released and thrown forcibly toward the muzzle by the elastic cord, which contracts.

The buffer H strikes against the ends of the slots, thus breaking the shock, and thus preventing the cross-piece from injuring the barrel.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A toy gun or pistol provided with an elastic cord secured on a slide in the barrel and connected with the trigger to act on the same, said cord being passed over a bearing arranged distantly from and intermediately of the slide and trigger, substantially as herein shown and described.

2. A toy gun or pistol provided with an elastic cord secured to a slide in the barrel, passed over pulleys at the muzzle end of the barrel, and connected with the trigger, on which it acts, substantially as herein shown and described.

3. In a toy gun or pistol, the combination, with the barrel having longitudinal slots in the sides, of a slide in the barrel, and an elastic cord secured to the slide, passed over pulleys on the muzzle end of the gun, and passed over the trigger, substantially as herein shown and described.

4. In a toy gun or pistol, the combination, with a barrel, of a slide in the barrel, an elastic cord connected with the slide, passed over pulleys on the barrel, and over the trigger, and of a rubber buffer held to the front of the slide, substantially as herein shown and described.

5. In a toy gun or pistol, the combination, with the barrel, of the tube or plunger E in the barrel, the cross-piece G, the trigger N, the pulleys L, and the elastic cord K, secured

to the slide and passed over the pulleys and the trigger, substantially as herein shown and described.

6. In a toy gun or pistol, the combination,
5 with the barrel, of the tube or plunger E, having a notch, Q, and the cross-piece G, the trigger N, having a hook, P, and the elastic cords K, passed over the pulleys L and connected to
10 said plunger and trigger, substantially as and for the purpose set forth.

7. In a toy gun or pistol, the combination,

with the barrel, of the tube or plunger E, having a notch, Q, the trigger N, having a hook, P, and notch S, the stop-pin R, entering said notch S of trigger, the cross-piece G, the pulleys L, and the elastic cord K, substantially
15 as herein shown and described.

FRANCIS W. GOODYEAR.

Witnesses:

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W. F. RICE.