

(No Model.)

F. W. GOODYEAR.

TOY SPRING GUN.

No. 332,892.

Patented Dec. 22, 1885.

Fig. 1.

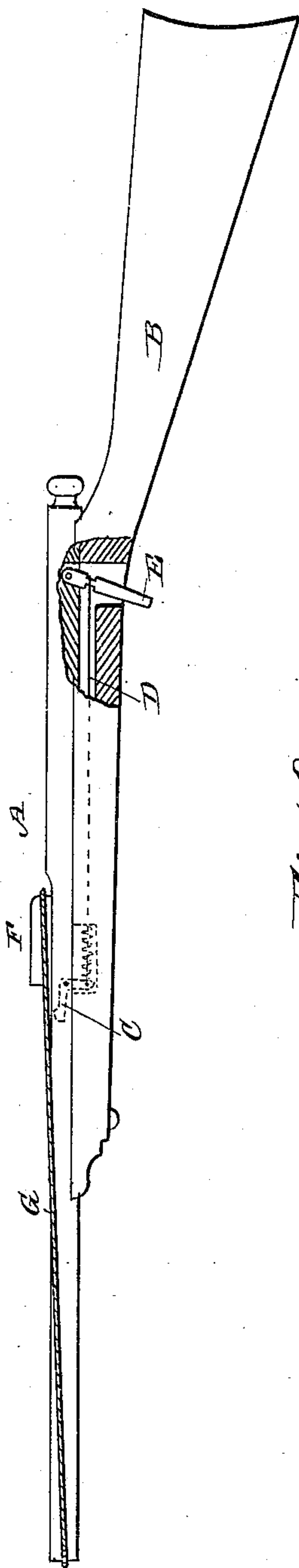


Fig. 2.

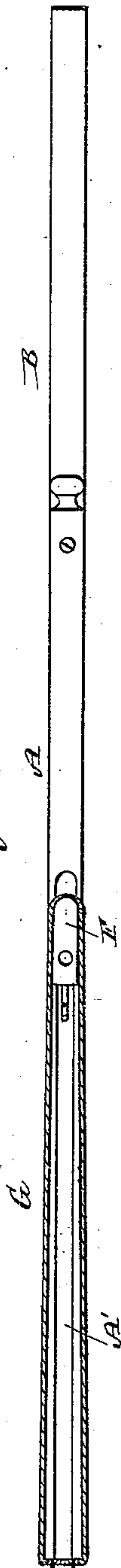


Fig. 3.

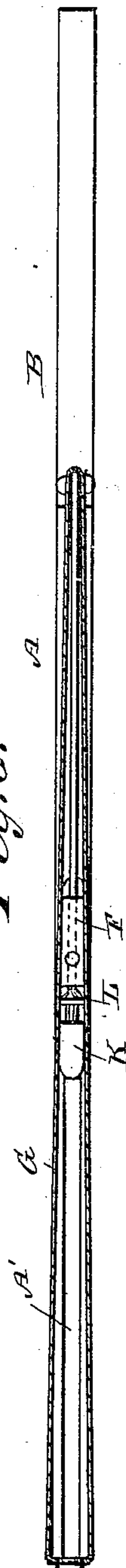
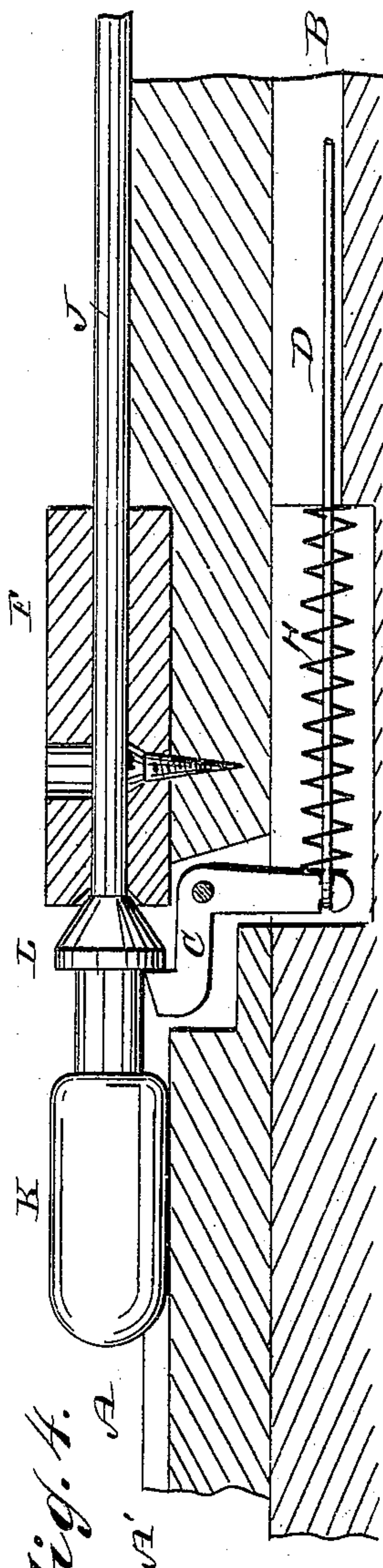


Fig. 4.



WITNESSES:

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INVENTOR:

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# UNITED STATES PATENT OFFICE.

FRANCIS W. GOODYEAR, OF SPRINGFIELD, MASSACHUSETTS.

## TOY SPRING-GUN.

SPECIFICATION forming part of Letters Patent No. 332,892, dated December 22, 1885.

Application filed May 1, 1885. Serial No. 164,112. (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 Gun, of which the following is a full, clear, and exact description.

This invention relates to certain new and useful improvements in that class of toy guns in which the dart or arrow is thrown by an elastic band or cord.

The invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

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

Figure 1 is a longitudinal view of my improved toy gun, parts being broken out. Fig. 2 is a plan view of the same. Fig. 3 is a plan view, the arrow being in position for firing. Fig. 4 is an enlarged detail sectional view of the trigger, arrow, &c.

The barrel A is secured on the stock B, and the said barrel has a longitudinal groove, A', in its top. The trigger C is pivoted in a slot in the barrel, and has its upper end, which projects slightly from the groove in the barrel, beveled, and the other or lower end is connected by a wire, D, with the trigger-lever E, pivoted in the stock. Directly behind the trigger a block, F, having a longitudinal bore or aperture, is secured on the top of the barrel. An elastic cord or band, G, is secured to the barrel at the muzzle end, and is passed around the rear or butt-end of the block F. A spiral spring, H, surrounding the wire D, rests against the trigger C and presses the upper end upward. The arrow J is provided with a head, K, at its front end, and behind the head with a collar, L, the rear side of which is beveled. The arrow is placed in the groove of the gun-barrel, its rear end being passed into the bore of the block, and resting against the elastic cord G. By pressing the arrow toward the stock the elastic cord is stretched, and when the collar L arrives at the beveled end of the trigger C the same catches on the collar, as shown in Fig. 4, whereby the gun is cocked, the elastic cord

being stretched, as shown in Fig. 3. By pulling the trigger-lever the upper end of the trigger C is moved down, and the arrow is released, and is thrown forward by the elastic cord, which contracts very forcibly. When the gun is cocked ready for firing, the arrow cannot slide out in whatever position the gun may be. The block F acts as a stop or check for the elastic cord G, which is forcibly brought in contact with the rear end of the said block when the gun is fired. Pistols can be constructed in the same manner, and in that case the trigger is operated direct, and the trigger-lever and intermediate wire are dispensed with. The block F has notches in its rear end for receiving the elastic cord, and the rear end of the arrow is notched.

I reserve the right to claim my arrow in a separate application.

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

1. In a toy gun, the combination, with a barrel, of the apertured block F, secured on the top of the barrel, the aperture in said block being parallel with the length of the barrel, the elastic band G, fastened to the gun at or near the muzzle end and passed around the rear end of the block, the trigger C, pivoted in the barrel in front of the above-mentioned block F, the wire D, having its front end connected with the trigger, and the trigger-lever E, to which the rear end of the wire D is connected, substantially as herein shown and described.

2. The toy gun having a grooved barrel, a block, F, apertured parallel with the groove in the barrel, the trigger C in front of the apertured block, the trigger-lever E, connected with the trigger, and the elastic G, secured to the muzzle end of the barrel and passed around the rear end of the apertured block, in combination with the arrow J, having a collar adjacent to the rear of its head, whereby when in place in the gun the collar and trigger will engage when the rear end of the arrow is passed through the apertured block to engage the elastic, substantially as set forth.

3. The toy gun having the apertured block F, secured to the barrel in advance of its breech, the spring-operated trigger C, having

its front end beveled, as described, the trigger-lever connected therewith, and the elastic G, secured to the muzzle end of the gun and passed around the rear end of the apertured  
5 block, in combination with an arrow having a collar adjacent to the rear of its head, said collar being beveled at its rear edge, whereby when the arrow is passed through the aper-

tured block the beveled collar will depress the beveled trigger and be engaged and held 10 thereby, substantially as set forth.

FRANCIS W. GOODYEAR.

Witnesses:

RALPH W. ELLIS,  
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