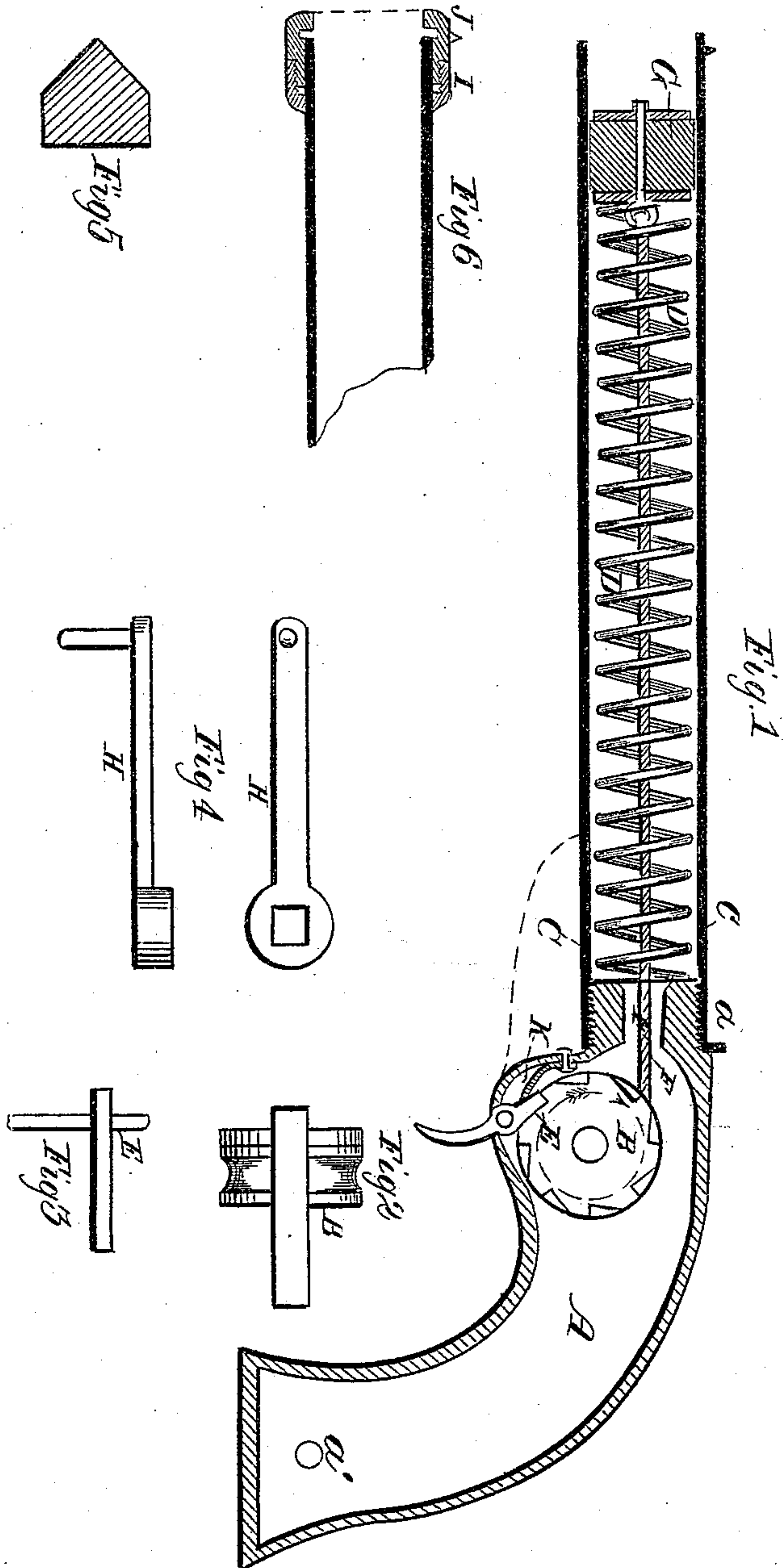


J. P. Kirk,

Toy Pistol.

No. 94,119.

Patented Aug. 24, 1869.



Witnesses:
Rott Greybaur
Demas Conner

Inventor:
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United States Patent Office.

JOHN P. KIRK, OF BROOKLYN, E. D., NEW YORK.

Letters Patent No. 94,119, dated August 24, 1869; antedated August 14, 1869.

TOY-PISTOL.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN P. KIRK, of the city of Brooklyn, E. D., in the county of Kings, and State of New York, have invented a new and improved Toy-Pistol or Gun; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a sectional view.

Figures 2 and 3 represent the pulley, ratchet-wheel, and shaft, and the trigger and shaft respectively.

Figure 4 is the lever or crank for setting the spring.

Figure 5 represents a plain cork plug, made to fit air-tight in the barrel.

Figure 6 represents a modification of the end of the barrel, for purposes hereafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A suitable handle, A, (preferably made of two parts, cast hollow,) is provided with a proper recess or space for the working of the pulley, ratchet-wheel, and shaft B, and the upper end of trigger E, which may be cast of any suitable material.

The front end of the handle A is provided with a round projection, a, over which the rear end of the barrel is screwed, or otherwise fastened firmly.

This barrel C may be of any suitable material, but smooth brass tubing is preferable.

Within this barrel is arranged a suitable spring, D, at the front end of which is arranged a close-fitting piston, G, of cork or other suitable material, fitting as near air-tight as possible without too much friction.

To this piston a cord, F, is attached at one end, the cord passing back through the barrel to the pulley B, to which the other end is fastened, as shown in fig. 1.

The right-hand end of the shaft of the pulley B is made long enough to project through the handle on that side, and is made square for the length of the projection.

On this square end the crank H fits, so that it can easily be put on and taken off.

The different parts being put together, as described and shown in fig. 1, the operation of loading and firing is gone through as follows:

The crank H is placed on the square end of shaft B, which is turned by it in the direction of the arrow. The cord is wound on the pulley, and the spring compressed. The trigger, held to the ratchet-wheel by the small spring K, acts as a pawl, and prevents the shaft B from turning back. The plug, fig. 5, is now placed in the end of the barrel, and forced down a short distance.

It is now loaded and ready to fire, which it does by pulling the trigger. The act of pulling the trigger releases the pulley, upon which the cord is wound, and allows the spring to force the piston suddenly toward the front end of the barrel, compressing the air be-

tween the piston and plug, which, in turn, forces the latter out of the barrel with a loud report, and throws it very accurately a considerable distance.

The modification shown in fig. 6 is intended to be used for closing the end of the barrel air-tight by means of paper, bladder, parchment, or other similar material.

J is a ring, of metal, of the same bore of the barrel, and a little thicker, having three arms, two opposite each other, and one between these two, arranged parallel with the bore, and intended to fit over the outside of the end of the barrel.

The extreme end of the barrel is provided with an outside ring or enlargement, soldered or otherwise fastened to it, and having three notches cut in it for these arms to pass through.

These arms are provided, on their outside, with a screw-thread, over which the screw-ring I is made to fit, the front end of this screw-ring coming in contact with the ring or enlargement at the end of the barrel, upon being turned, draws the ring J down on the paper or substitute, which is placed over the muzzle or end of the barrel, and firmly clamps it between, thus closing it air-tight.

The spring being set, as above described, and released by pulling the trigger, compresses the air between the piston and the paper or substitute, and bursting it with a loud report.

When the ring J is screwed down close against the end of the barrel, it can also be used for throwing the plug or ball in the manner first described.

I am aware that compressing the air in a tube closed at one end with paper, by forcing a piston in at the other end, and thus making a report by bursting the paper, is not new.

I am also aware that closing one end of a tube with a cork, and by pushing a piston from the other end with the hand, and thus forcing the cork out with a report, is not new, and I do not claim either of them; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. The toy-pistol or gun, arranged and operated as described, as a new article of manufacture.

2. The use of a close-fitting piston, arranged in front of a spring, for the purpose of compressing the air in the barrel of a pistol or gun, as set forth and described.

3. The arrangement for compressing a spring by means of a cord, pulley, and lever, or their equivalents, for the purpose of compressing the air in the barrel of a pistol or gun.

4. Closing air-tight the barrel of a pistol or gun, at or near its front end, and compressing the air behind it by means of releasing a compressed or stretched spring.

JNO. P. KIRK:

Witnesses:

ROBT. CREUZBAUR,
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