H. M. QUACKENBUSH.

Improvement in Toy Guns and Pistols.

No. 115,638. Patented June 6, 1871.

Fig. 1.

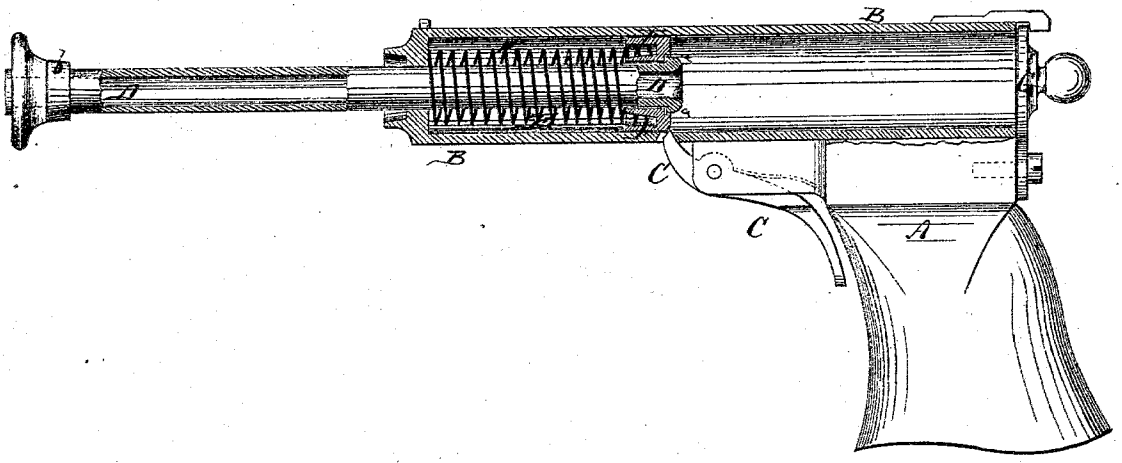


Fig. 2.

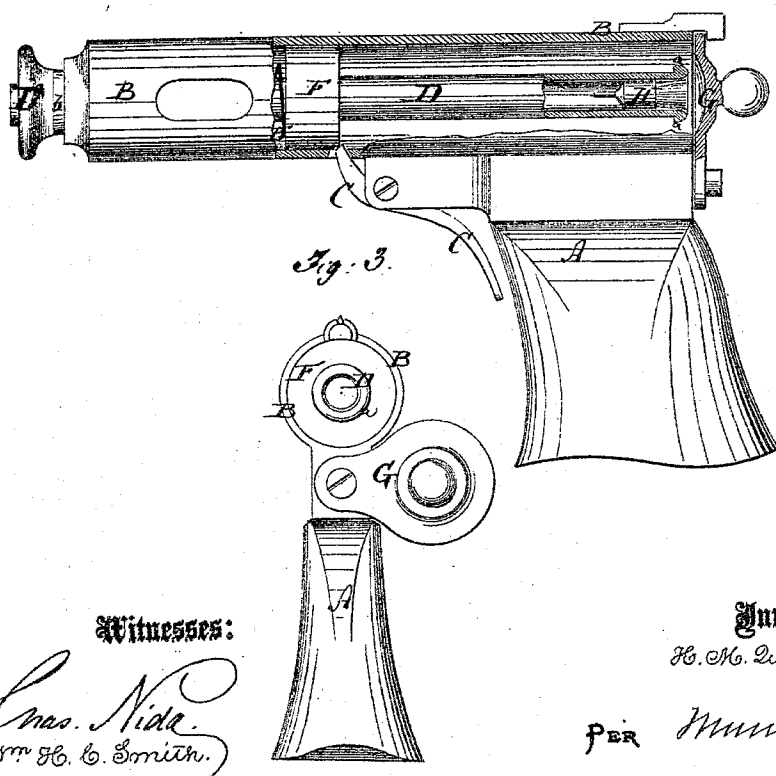


Fig. 3.

Witnesses:

Chas. Nida.

Wm H. C. Smith.

Inventor:

H. M. Quackenbush

Per Munn & Co

Attorneys.

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

HENRY M. QUACKENBUSH, OF HERKIMER, NEW YORK.

IMPROVEMENT IN TOY GUNS AND PISTOLS.

Specification forming part of Letters Patent No. 115,638, dated June 6, 1871.

To all whom it may concern:

Be it known that I, HENRY M. QUACKENBUSH, of Herkimer, in the county of Herkimer and State of New York, have invented a new and useful Improvement in Toy-Guns and Pistols; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a longitudinal section of my improved toy-pistol. Fig. 2 is a side view, partly in section, of the same. Fig. 3 is a back-end view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new combined spring and air gun to be used as toy and for target-practice; and consists in the use of a sliding barrel which actuates an annular piston, as hereinafter more fully described.

A in the drawing represents the stock or handle of my improved gun or pistol. It holds a rigid cylindrical case, B, and a trigger, C, whose point enters the case through an aperture, as shown. D is the barrel of the gun or pistol. It is fitted into the case B, and has a projecting shoulder, *a*, at the back end. E is a spiral spring, fitted into the case C so as to surround the barrel and be in contact with the front end of the case. F is an annular piston placed loose around the barrel D, within the case B, so as to be interposed between the shoulder *a* and spring E, as shown. The barrel can slide within the case B, and, when pulled forward, draw the piston F along and compress the spring E until the piston has passed and is locked by the trigger, as in Fig. 1. The barrel can then be pushed back into the case without affecting the position of the piston. Its backward motion is arrested by an elastic ring, *b*, placed upon the headed front part of the barrel. The breech end of the case B is open, but can be closed by a pivoted breech-plate, G. When the barrel has been pushed back as aforesaid, after having locked the annular piston to the trigger, its open back end does not quite reach the plate G, as is clearly shown in Fig. 2. A dart, H, or light projectile of suitable kind, can now be placed into the back end of the barrel, the plate G being swung aside to admit it, and then properly closed over the back of the case, which it closes as tight as possible.

Rubber packing may, if desired, be applied to the plate G or breech end of B for causing it to close tight. When the trigger is next touched to release the piston the spring E will expand and force the piston back, whereby the air contained in the back of the case B will be expelled through the barrel, causing it to expel the dart.

In this manner considerable power and longitudinal motion are obtained without the use of a long barrel, the piston moving backward in order to propel the dart forward.

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

1. A toy gun or pistol, provided with an annular movable piston around the barrel so that the backward motion of the piston will cause a forward motion of the projectile, as set forth.

2. The sliding barrel D, arranged within the case B, and combined with the spring E, annular piston F, and trigger C, to operate substantially as herein shown and described.

3. The case B, provided with the movable breech-plate G and with the movable barrel D, substantially as herein shown and described.

H. M. QUACKENBUSH.

Witnesses:
A. V. BRIESEN,
T. B. MOSHER.