B. KIRKBRIDE.

TOY-PISTOLS.

No. 194,690. Patented Aug. 28, 1877.

Fig 1

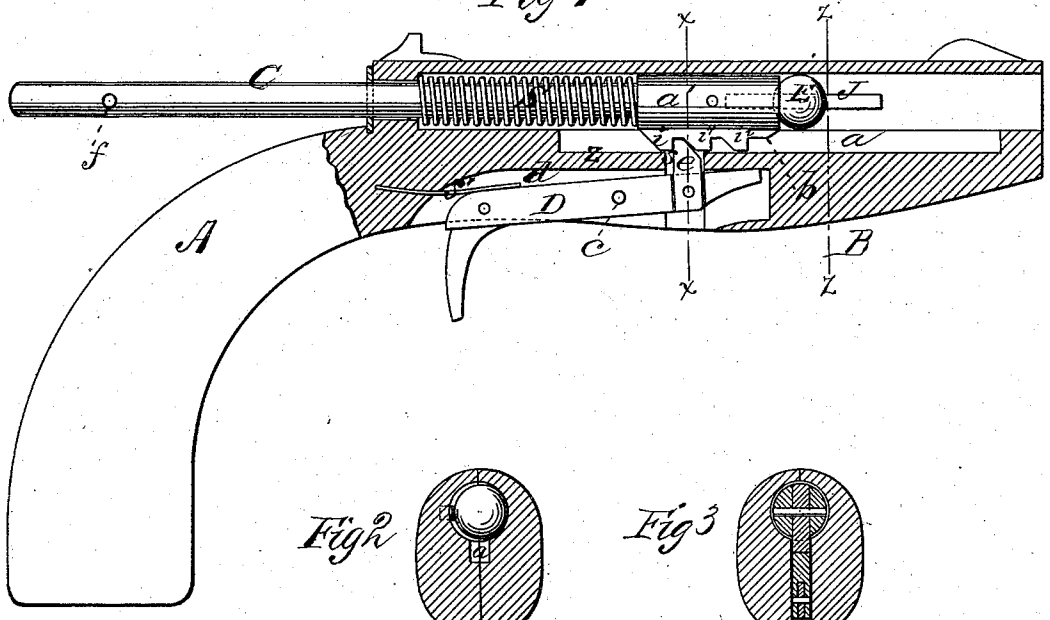
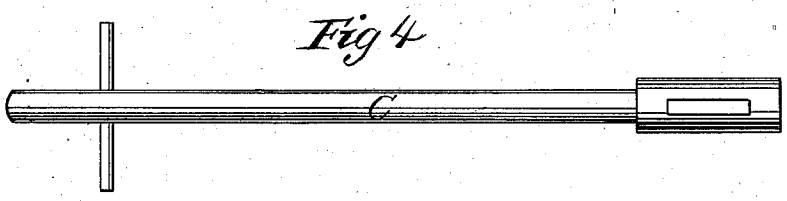


Fig 2

Fig 3

Fig 4



WITNESSES

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BARTLEY KIRKBRIDE, OF MORGANVILLE, OHIO.

IMPROVEMENT IN TOY PISTOLS.

Specification forming part of Letters Patent No. **194,690**, dated August 28, 1877; application filed July 14, 1877.

To all whom it may concern:

Be it known that I, BARTLEY KIRKBRIDE, of Morganville, in the county of Morgan and State of Ohio, have invented a new and valuable Improvement in Marble-Shooters; 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, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal section of my improved marble-shooter. Figs. 2 and 3 are sectional views of the same, taken, respectively, through the lines *x x* and *z z*. Fig. 4 is a detail view of the plunger.

This invention has for its object the improvement of that class of toy pistols wherein a spring-actuated plunger is employed to force a projectile out of the barrel.

The nature of the invention will be fully understood from the following description, and set forth in the claim.

In the annexed drawings, the letter A designates the stock, and B the barrel, having therein a longitudinal groove, *a*. C represents the projector, having an enlarged head, *a'*, between which and the bottom of the bore is a helical spring, S. This is applied upon the plunger C in the the usual manner. The head *a'* is vertically slotted, and in this aperture is seated a ratcheted plate, *b*, the serrated edge of which extends down into the groove *a* aforesaid. Plate *b* is preferably made of metal.

D indicates the trigger, formed of any suitable material and of angular form. It is arranged and pivoted at *c* in a deep recess, *d*, upon the under side of the barrel, and is provided at its weight end with a detachable (preferably metallic) tooth, *e*, that projects upward through a slot, *s*, in the partition Z, between the groove *a* and recess *d*, into the hollow of the barrel, it being maintained in this position by means of a strong metallic spring, *s'*, secured at the heel of the recess *d*, and throwing the power end of the trigger upward.

The plunger C projects through the breech of the barrel, and is provided with a handle or knob, *f*, by means of which it is drawn back. When the said plunger is drawn back the inclined face of the rear tooth *i* of the ratchet *b* comes in contact with the correspondingly-beveled face of the trigger-tooth *e*, and thrusts it back out of slot *s*, and passes the said tooth. This being accomplished, the said tooth engages the tooth *i* of the ratchet through the recoil of the spring *s'*. The projectile E is then introduced and forced home against the end of the plunger by a suitable rammer.

J represents a metallic strip-spring, the ends of which are rigidly secured to the inside of the barrel, and which is located at or at about the ball-seat in said barrel, and prevents the projectile from falling out of the barrel.

Upon firing the pistol at a mark, should the projectile fall short, the plunger is forced back until the second tooth *i'* of the ratchet engages the trigger-tooth, thereby increasing the compression of the spring S, and, consequently, the range of the weapon.

It will be evident that the number of teeth of the ratchet-plate *b* is only limited by the degree of compressibility of which the spring S is susceptible.

The said plate being of metal, as well as the trigger-tooth, and these parts being little affected by friction, they will always be in condition to engage the one with the other.

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

The marble-shooter consisting of the pistol-shaped body, having below its barrel a groove, *a*, divided from the trigger-recess *d* by a partition, Z, plunger C, having a serrated plate, *b*, playing in said groove, springs S and *s'*, and trigger D seated in said recess *d*, and having its tooth *e* arranged for direct engagement with said serrated plate, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

BARTLEY KIRKBRIDE.

Witnesses:

W. H. PIERPOINT,

WILLIAM FOULKE.