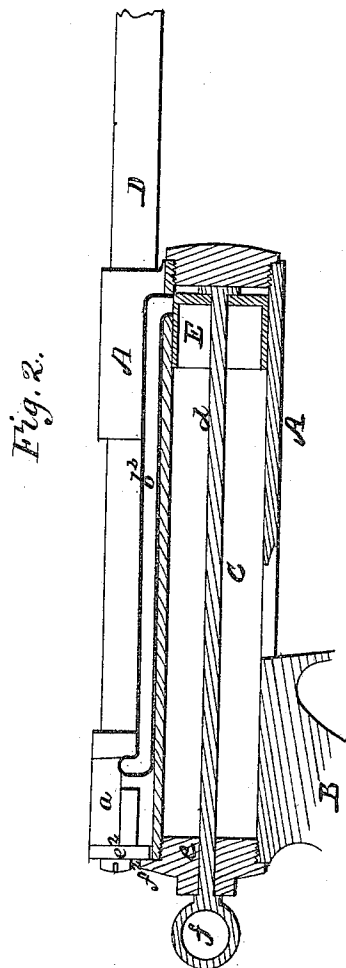
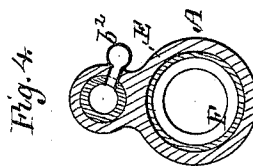
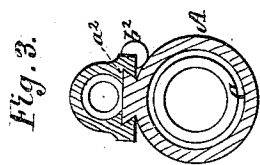
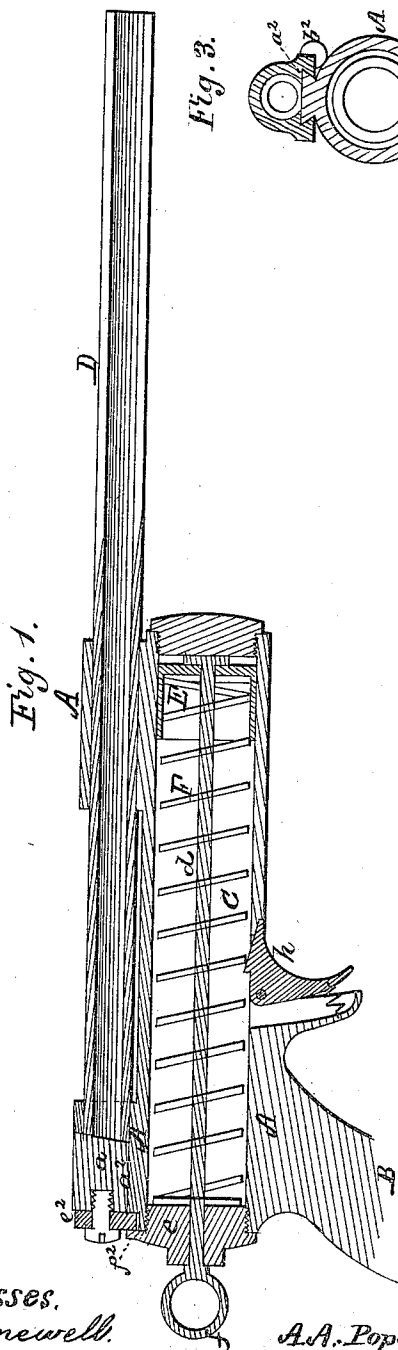


A. A. POPE.
 SPRING AIR PISTOL

No. 172,583.

Patented Jan. 25, 1876.



Witnesses.
 J. H. Burdwell.
 W. B. Boardman

A. A. Pope.
 J. Curtis, Atty.

UNITED STATES PATENT OFFICE.

ALBERT A. POPE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SPRING AIR-PISTOLS.

Specification forming part of Letters Patent No. 172,583, dated January 25, 1876; application filed December 13, 1875.

To all whom it may concern:

Be it known that I, ALBERT A. POPE, of Boston, Suffolk county, Massachusetts, have invented certain Improvements in Air-Pistols, of which the following is a specification:

The object of this improvement is to reverse the action or movement of the spring-impelled plunger—that is to say, so that a forward movement of such plunger shall expel the air from the air-chamber, in lieu of a rearward movement, as heretofore in pistols of this class.

The drawings accompanying this specification represent, in Figures 1 and 2, longitudinal sections, and in Figs. 3 and 4, a cross-section of a portion of an air-pistol embodying my improvements.

In these drawings, A represents the stock or frame of the pistol; B, the handle; C, the air-chamber or reservoir; and D the barrel, such barrel being immovable fixed to the said frame A in lieu of sliding thereupon.

The rear end of the barrel D is closed by a movable breech of any suitable character, the device herein shown, consisting of a block, *a*, sliding in a recess or cut-away, *a*², created in the rear upper part of the frame A, the joint between the two being a detail or shelf groove in order that the block shall not be liable to lateral misplacement.

In loading the pistol the block *a* is drawn back, and, the rear end of the barrel thus exposed, the dart is inserted in the barrel, and the breech-block pushed forward to place. The breech-block is locked in a closed or firing position by a latch, *e*², pivoted to its rear end and operating with an abutment, *f*², cast upon the rear part of the frame A.

The plunger of the pistol is shown at E, playing within the air-reservoir C and pressed forward to the outer or front end of such reservoir by a spring, F, interposed between the plunger and the rear end of such reservoir.

A rod, *d*, is secured at its front end to the plunger, and passes rearward through the outer plug or cover *e* of the air-reservoir C, where it is provided with a suitable knob or handle *f*.

To open communication between the front end of the air-reservoir C and the rear end of

the bore of the barrel, I employ a tube, *b*², which is disposed upon the upper part of the periphery of the frame A, and alongside of the barrel, one end of this tube *b*² extending into the front part of said reservoir C, and the other into the rear end of the barrel.

I do not confine myself to the use of the tube *b*² as a means of conveying the air from the reservoir C to the bore of the barrel, as it may be accomplished in various ways; and in practice I shall probably employ a passage, cast in the metal of the frame A, between the air-reservoir and barrel, one end of which communicates with the front part of such reservoir, and the rear end with the rear part of the barrel.

To load this pistol, the user seizes the knob *f*, and pulls back the plunger E, and contracts the spring F, until such plunger has passed in rear of the trigger *h*, and is cocked, the rod *d* being next pushed forward to its utmost limit, in order that it may not be violently driven forward by the advance of the plunger. The breech-block *a* is next unlocked and drawn back, the dart inserted within the barrel, and the breech returned to place and locked. The trigger *h* is now pulled, the plunger released and driven forward, and the air within the reservoir C is expelled from the latter, in advance of the plunger, upward through the tube *b*², and into and through the barrel, expelling the dart from the latter.

The arrangement by which the forward flight of the plunger effects the expulsion of the dart from the barrel is attended with many advantages over the plan of effecting the same result by a rearward movement of such piston.

It will be noted that the air-cylinder is not on the prolongation of or in rear of the barrel, but lies directly beneath and parallel with the barrel. I thus obtain the advantages of a long barrel and a long air-cylinder combined, so as to occupy comparatively little space, and still have the advantage of a forwardly-moving piston, an advantage due to the passage *b*², which extends backwardly from the front end of the cylinder to the breech end of the barrel.

I claim—

1. In combination with the barrel and the air reservoir or cylinder, containing a spring,

impelled forwardly-moving piston, and arranged directly beneath and parallel with the barrel, as described, of the air-passage or duct extending from the front of the air-cylinder rearwardly to the breech end of the barrel, as shown and set forth.

2. The breech-closing device herein shown,

consisting of the block *a* and latch *e*², substantially as and for the purposes stated.

ALBERT A. POPE.

Witnesses:

F. CURTIS,

W. E. BOARDMAN.