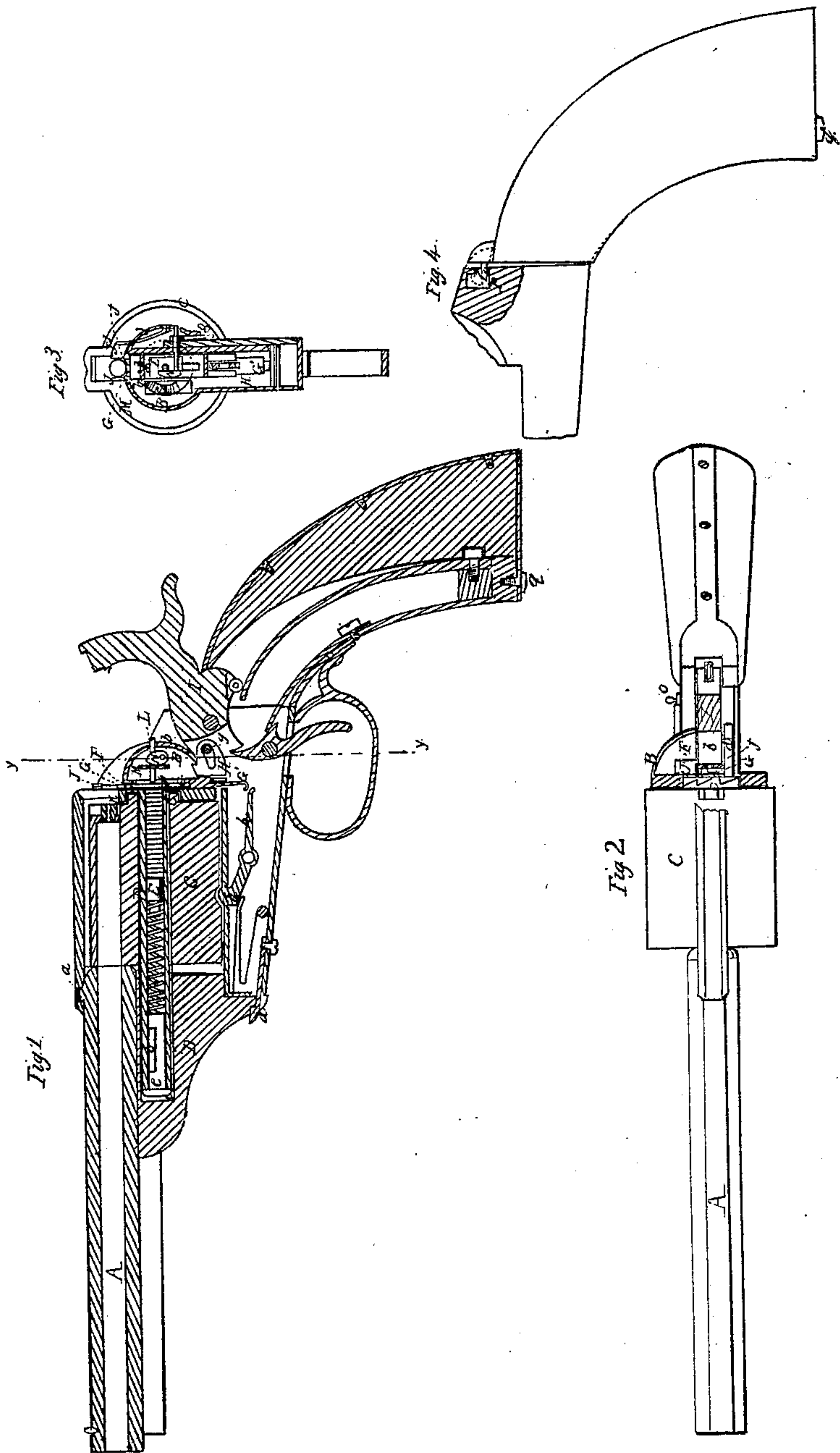


W. H. BELL.
Revolver.

Patented Mar. 20, 1860.

No. 27,518



Witnesses:

Goodman & Allen

John H. Kenrick

Inventor

William H. Bell

UNITED STATES PATENT OFFICE.

WILLIAM H. BELL, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN REVOLVING FIRE-ARMS.

Specification forming part of Letters Patent No. 27,518, dated March 20, 1860.

To all whom it may concern:

Be it known that I, WILLIAM H. BELL, of the city and county of Washington, in the District of Columbia, have invented a new and useful Improvement in Revolving Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical longitudinal section of a revolving fire-arm with my improvements applied to it. Fig. 2 is a top view and partial horizontal section of the same. Fig. 3 is a vertical transverse section in the line *y y* of Fig. 1, and Fig. 4 is a side and sectional view of the stock and part of the breech.

Similar letters of reference in each of the several figures indicate corresponding parts.

The main invention which I have developed is adapting the stem on which the cylinder revolves to containing or supplying the wafer or other primer continuously to the cap-nipples of revolving fire-arms.

My invention, therefore, may be said to consist, first, in the use of a hollow axial stem furnished with a discharging device, in combination with a revolving fire-arm, whereby provision is made for storing the primers within the stem and discharging the same to a position to be taken up to the cap-nipples of the chambers of the cylinder.

It consists, second, in the employment of a spring device, in combination with a guide-box for holding the primer securely in line with the nipples after it is elevated by the slide, and guiding it until the hammer explodes it, substantially as hereinafter described.

It consists, third, in the combination of the barrel stop or dog with the cock, by means of a spring-hook-shaped extension of the primer, lifting slide, substantially as and for the purposes hereinafter described.

It consists, fourth, in the combination of a sliding pin with the series of primers and with the cock, substantially as hereinafter described, whereby as the cock falls the series of primers are forced sufficiently far into the primer-chamber that the explosion of a primer on the nipples of a chamber will not have any dangerous effect upon the same.

It consists, fifth, in the combination of a cam with the sliding pin, substantially as herein-after described, whereby said pin can be adjusted so as to prevent the discharge of primers from the hollow stem, and thus when the fire-arm is laid by loaded, and the cam adjusted so as to act on the pin, a liability of accidental discharge by strangers handling it avoided.

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

A represents the stationary barrel. It is connected to the breech-piece B by means of two spring-catches, *a a*, and a wedge-key, *b*, as represented, so that it may be readily detached whenever it is necessary.

C is the many-chambered cylinder. It is of ordinary construction, and is arranged on an axial stem, D, between the breech and stationary barrel, and revolved by means of a ratchet and pawl, *c d*. The axial stem D is made hollow from its front end to where it connects with the breech-piece B, and is furnished with a spring-plunger, E, as represented. The stem thus made hollow answers for holding wafer or other suitable primers, as illustrated in red color. The primers are introduced into the stem by taking off the stationary barrel and drawing out the plug *e* and plunger E of the stem.

F is a vertical recess formed in the breech just in rear of the rear end of the axial stem. This recess is large enough to receive a wafer-primer as it discharges from the chamber of the axial stem.

G is a vertical slide arranged in the recess F. This slide has a vertical slot, *f*, cut in it from its upper end downward some distance, for a purpose hereinafter stated.

G is a spring-hook-shaped extension by which the slide gears with the dog or stop *h* of the cylinder while the cylinder is being revolved.

H is an ear or projection on the rear side of the slide. This ear has a curved slot cut in it, so that a pin, *g*, of the tail of the hammer I may be admitted through it, and thus a connection between the slide and the hammer accomplished.

J J' represent two jaws for holding the cap in place after it is elevated. They are at the top of the breech-piece, and form a vertical

continuation of the vertical recess F, and a horizontal continuation of the guide-box K of the breech-piece, as represented. The jaw J' is formed on a spring, j, and thus acts with a spring-pressure upon the wafer-primer, and retains it in the position represented in Figs. 1 and 3 until the cock forces it against the nipple of one of the chambers of the revolving cylinder.

L is the sliding pin for cutting off the bulk of primers from the influence of an exploding primer. This pin passes through the breech-piece, as represented, and when it is bearing against the caps it does not interfere with the movement of the slide, as a slot, f, is formed in said slide to admit the pin through it and allow the slide to play up and down while the pin is bearing against the bulk of the primers. The rear end of the pin extends out beyond the rear of the breech, so that when the cock or hammer falls it shall be struck by the same and forced against the bulk of primers in a manner to force the same into the hollow axial stem sufficiently far to place them beyond the influence of an exploding primer. The contact between the hammer and pin takes place just about when the cock or hammer is completing its falling movement, and therefore the force with which the pin acts upon the bulk of primers is very slight. M is a shoulder formed on the pin, and N is a cam arranged on the transverse rod behind the shoulder. The rod N has a crank, O, on its outer end. By turning the cam-rod with the crank the cam is caused to act upon the shoulder M, and consequently the pin L is forced through the slot of the slide

against the bulk of primers, and now by securing the crank the supply of primers to the slide will cease, and the fire-arm may be cocked and uncocked time after time without causing any primers to be discharged from the hollow stem.

The stock is attached by means of a hook-catch, p, and a single screw, q, as illustrated in Figs. 1 and 4.

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

1. The use of a hollow axial stem, D, furnished with a discharging device, E, in combination with a revolving fire-arm, substantially as and for the purposes set forth.

2. The employment of a spring device, J', in combination with a guide-box, K, for holding the primer securely in line with the nipples after it is elevated by the slide, and guiding it until the hammer explodes it, substantially as and for the purposes set forth.

3. The combination of the barrel stop or dog h with the cock I, by means of a spring-hook-shaped extension, G, of the primer-lifting slide G, substantially as and for the purposes set forth.

4. The combination of a sliding pin, L, with the series of primers and with the cock I, substantially as and for the purposes set forth.

5. The combination of a cam, N, with the sliding pin L, substantially as and for the purposes set forth.

WILLIAM H. BELL.

Witnesses:

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ROBT. W. FENWICK.