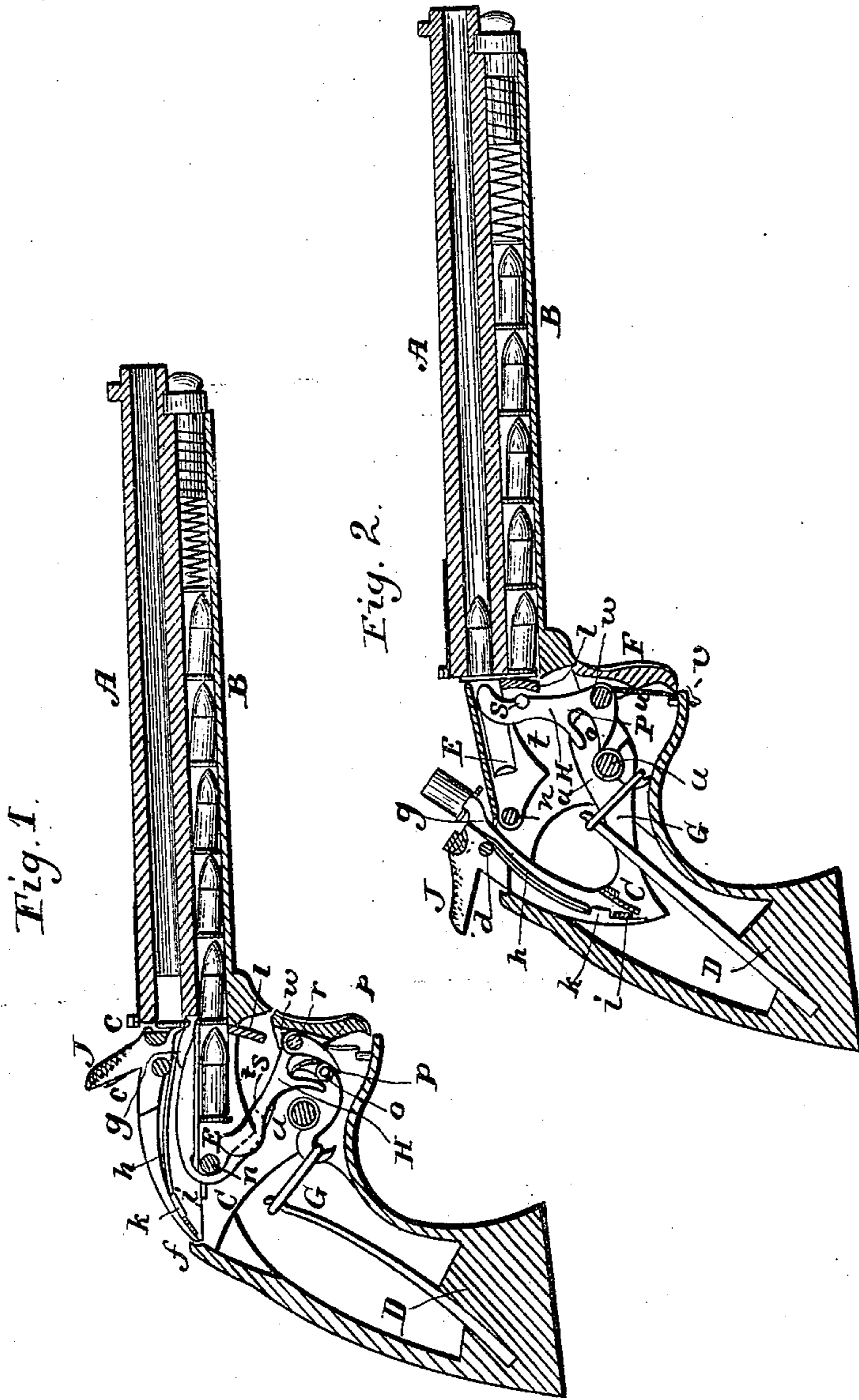


L. Z. TERRILL.  
Magazine Fire-Arm.

No. 89,705.

Patented May 4, 1869.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

LAFAYETTE Z. TERRILL, OF CHICOPEE, MASSACHUSETTS.

## IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. 89,705, dated May 4, 1869.

To all whom it may concern:

Be it known that I, LAFAYETTE Z. TERRILL, of Chicopee, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to that class of fire-arms known as "magazine breech-loaders;" and it consists in the manner in which the cartridge is introduced into the barrel of the gun, and in the manner in which the cartridge-case is removed therefrom, and in the form and construction of the hammer, and the general arrangement and combination of parts, whereby the gun is made self-loading and the parts greatly simplified as compared with other similar arrangements.

Figure 1 represents a vertical longitudinal section, showing the different parts of which it is composed and the manner of their combination. This view represents the gun as having been discharged, and as ready for the withdrawal of the empty cartridge-case. Fig. 2 is a view of the same, showing the hammer drawn back, with the empty cartridge-case withdrawn, but still held by the nippers. In actual practice, the case would be thrown from the nippers when the hammer reached the position shown.

Similar letters of reference indicate corresponding parts.

In this example of my invention, the improvements are applied to a pistol, as seen in the drawing; but this is merely for convenience' sake, as the parts are equally well adapted to fire-arms of all sizes.

A represents the barrel. B is the magazine. C is the hammer. D is the mainspring. E is the cartridge-receiver. F is the trigger. G is a link, which connects the hammer with the mainspring. *a* is the pivot of the hammer. H is the finger, which raises the receiver and pushes the cartridge from the receiver into the barrel.

The upper portion of the hammer is slotted, and the view of it being in section, but a small portion of it is seen, as in the slot there is a

piece, J, which is attached to the hammer, and the hammer is seen only in dotted lines through J and at *c*. The piece J is connected with the hammer at the point *d*, which is a pivot, upon which J turns. The back end of J is operated upon by a small spring, *i*, which forces the end out onto the shoulder at *f* when the discharge takes place, so that this shoulder receives the recoil through the piece J or the rear end of the piece J may be enlarged to form a shoulder, and thrown outward by the spring *h*. This spring is attached to the hammer, and its position when the hammer is cocked is seen plainly in Fig. 2. *g* represents the nippers or retractor, which is attached to the end of a spring marked *h*. The spring is attached to the hammer at the point *k*. As the piece is discharged, the retractor is thrown into a position to take hold of the flange of the cartridge-case to withdraw it from the barrel, as seen in Fig. 1. When the hammer is drawn back in the act of cocking the piece, the case is grappled and withdrawn, and the tension of the spring throws it from the nippers, as before mentioned.

The receiver E is a chamber, which is slotted longitudinally through the under side, and it is hung on a pivot, *n*, on which it is turned, so that its opposite end is made to correspond with either the magazine or the barrel of the piece. There is a lip, *l*, on the end of this receiver, on its under side, which closes the magazine when the receiver is raised, as seen in Fig. 2.

The receiver is raised and lowered and the cartridge is pushed therefrom by the finger H, and the finger is operated by the hammer in the following manner: In the toe of the hammer there is a friction-roll marked *o*, which works in the curved recess in the finger marked *p*. The pivot upon which the finger turns is at *r*. *s* is a friction-roll on the finger H, which engages with the curved under side of the receiver, as seen at *t*. The finger raises the receiver up by the roll *s* when the hammer is drawn back, as seen in Fig. 2, from which position the receiver drops by its own gravity, or is forced down by the hammer, as seen in Fig. 1; but before this is done the finger H must be thrown out of its way, and this is done by the roll *o* on the hammer operating in the curved slot *p*. When

the finger is thrown forward in cocking the piece, and raising the receiver thereby, the point of the finger pushes the cartridge from the receiver into the barrel, as seen in the drawing.

*u* is a spring, which is attached to the trigger *F*, and which bears against the pin *v* with a constant pressure, thereby forcing the trigger outward. On the back or heel of the trigger there is a projecting point or lip, (seen at *u*,) which is forced into a corresponding notch or recess in the toe of the hammer when the piece is cocked, as seen in Fig. 2. In pressing upon the trigger the point *w* is thrown from the notch, and the piece is discharged. It will thus be seen that the act of cocking the piece (the hammer, by its action,) raises the receiver with a cartridge from the magazine, and inserts the cartridge in the barrel, while the empty shell or case has been gripped by the nippers and withdrawn.

In discharging the piece the action of the hammer returns the receiver to the magazine, where it receives another cartridge, and the operation is thus continued until the magazine is exhausted.

The magazine is a tube arranged under the barrel, and the cartridges are forced out of it by a spiral spring, in the manner usual with this kind of fire-arms.

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

1. The hammer *C*, constructed as described and bearing the friction-roller *o*, in combination with the receiver *E* and finger *H*, as herein described, for the purpose specified.

2. The receiver *E* and the finger *H*, arranged and operating substantially as shown and described.

3. The retractor *g*, attached to the hammer *C* by the spring *h*, in combination with the piece *J*, as herein described, for the purpose specified.

The above specification of my invention signed by me this 5th day of June, 1867.

LAFAYETTE Z. TERRILL.

Witnesses:

WILLIAM McCORMICK,  
JAMES F. SWEENEY.