C. CHABOT.

Breech-loading Fire-arm.

No. 47,163. Patented April 4, 1865.

Fig. 1.

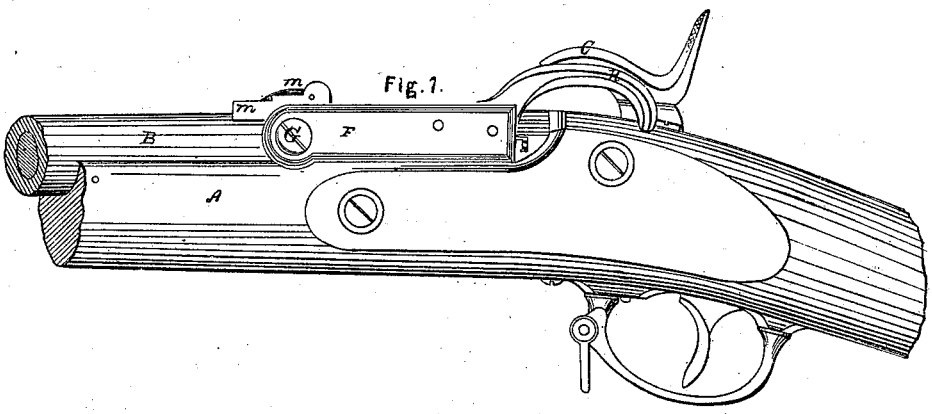


Fig. 2.

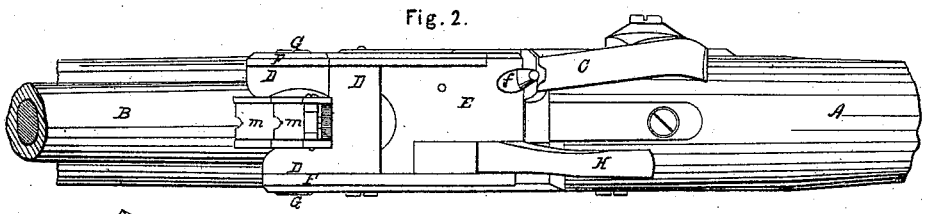


Fig. 3.

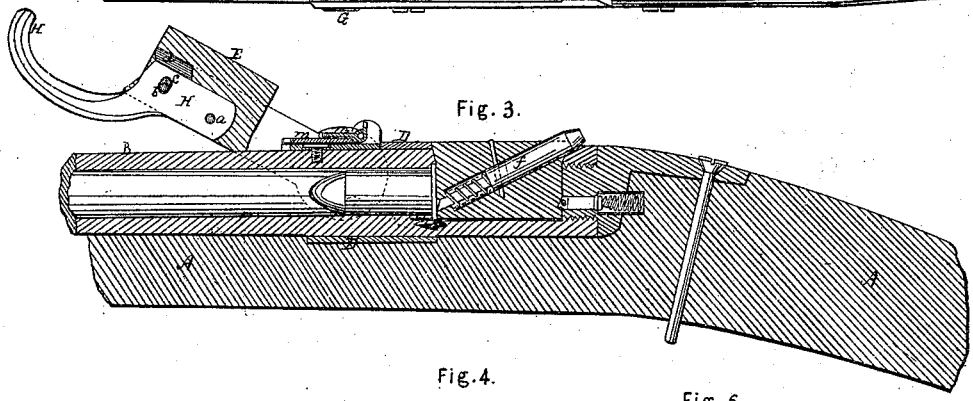


Fig. 4.

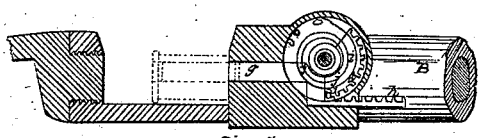


Fig. 5

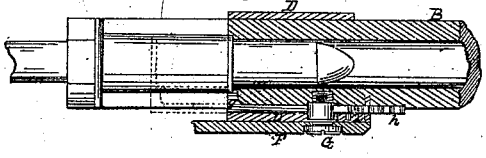
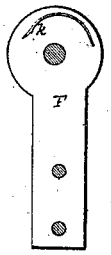


Fig. 6.



Witnesses:

Inventor:

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By atty A B Stoughton

UNITED STATES PATENT OFFICE.

CYPRIEN CHABOT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **47,163**, dated April 4, 1865.

To all whom it may concern:

Be it known that I, CYPRIEN CHABOT, of the city of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Breech-Loading 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, making a part of this specification, in which—

Figure 1 represents a side view of a portion of the gun. Fig. 2 represents a top plan thereof. Fig. 3 represents a longitudinal vertical section through the portion of the gun shown, with the hinged breech-piece thrown back. Fig. 4 represents a section through the frame, to show the cartridge-ejector and the device for operating it. Fig. 5 represents a horizontal section through the same, and Fig. 6 represents a portion of the mechanism for operating the cartridge-ejector.

Similar letters of reference, where they occur in the several figures, denote like parts of the arm in all the drawings.

One of the leading objects of my invention is to so contrive as that I may convert the present standard muzzle-loaders into breech-loaders of my form and construction, and at a small expense and without detriment to the safety of the gun; but I may also construct the guns entirely anew, though involving the same general mode of action.

My invention consist, first, in combining a slightly-moving lever-latch with the breech-block, and a spring-catch with the frame, so that the breech-block will be firmly locked and fastened when down in its seat, and so that the simple catching of the lever to raise up the breech-block to open the bore of the gun for charging it will detach the latch and catch by a single motion—viz., that of raising the breech-block—and allow it to swing open; and my invention further consists in the manner in which I have constructed, arranged, and located the ejector and the mechanism for operating it, so as to make it firm, well secured against accident, and of certain action.

To enable those skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings and the letters of reference thereon.

A represents the stock, B the barrel, and C the hammer, of a gun. The barrel B at its rear upper portion is cut away, as shown more particularly in Fig. 3, to form a space through which the cartridge may be passed into the bore of the gun, and the empty shell ejected when the breech-piece is opened or thrown back. Immediately in front of this cut-away portion I shrink or otherwise securely fasten around the barrel a sleeve or block, D, which strengthens that portion of the barrel where the cartridge lies and is exploded, and also furnishes a base for hinging the breech-block E to. The breech-block E is made to neatly fit and close the cut-away portion of the barrel, and is hinged by its arms F to the two sides of the sleeve D by pivots G, upon which it can freely swing. To the breech-piece is united a lever, H, pivoted at *a*, and allowed a slight motion independent of the motion of the breech-piece by means of a pin, *b*, passing through a slot, *c*, for that purpose. On this lever H there is a latch, *d*, which, when the breech-piece is brought down to close the bore of the gun, shuts under the spring bolt or catch *e*, arranged in the frame of the gun, and securely locks it down. When the breech is to be opened for recharging, the operator simply seizes the lever and raises it upward. Its independent motion first pushes back the bolt or catch *e*, and the same motion continued raises up the breech-piece to the desired position for reloading.

Through the breech piece or block E a spring-rod, *f*, passes, which, when struck by the hammer, imparts the blow to the cartridge at its flange and explodes it. If it be an altered gun, the same hammer and location will answer, an oblique direction being given to the rod to carry the blow to the cartridge. When the hammer is raised up to the half-cock notch, the spring retracts the rod *f* within the breech-block, and the latter can then be readily raised up for the discharge of the empty case and for a recharging of the gun.

The cartridge-ejector *g* is arranged within the sleeve or frame in a mortise or opening, but protected by metal all around it. It has upon it a straight rack, *h*, with which a segment-gear, *i*, secured under one of the arms, lugs, or ears F of the breech-block, works, and which forces it toward the rear of the gun when the breech-block is swung open, as shown in red in Figs. 4 and 5, and forces out the

empty case. As the ejector is forced rearward to throw out the discharged cartridge-case, a coiled spring, *j*, is wound up, the recoil of which carries back the ejector to its recess in readiness for the next similar operation. The spring *j* is detached by a certain device connected with the breech-block, so that it will be tripped when the ejector has discharged the empty shell and carry back the ejector suddenly, while the breech-block may remain open; or, in other words, the opening up of the breech-block throws the ejector into action; but after the breech-block is thrown open it has no influence upon the ejector until it has been shut down tight and again raised. This is accomplished as follows: On the lug, ear, or arm F there are a curved spring and forked arm, *k*, and on the segment *i* there are two studs or pins, 1 2. Now, the fork of the arm *k* takes against the stud 1 and causes the segment to turn, which, gearing with the rack *h*, forces out the ejector; but as the segment *i* continues to turn, the other stud, 2, comes against the spring-forked arm *k* and pushes it away from the stud 1, and the spring *j*, being now detached from the force that wound it up, recoils and carries back the segment *i*, and it in turn carries back the segment *k* and the ejector *g*, while the breech-block may be brought down or remain up, as the case may be.

The sight *m* may be the same as that now used on the standard guns, and in the same location.

Having thus fully described the nature, object, and purpose of my invention, what I claim therein is—

1. In combination with the hinged breech-block swinging upward and forward, the lever H and its latch hung thereto, but so as to have a degree of motion independent thereof, and the spring-bolt *e*, for the purpose of locking the breech-block when down, and for unlocking it by the same motion that raises up again, as herein described and represented.

2. The ejector *g*, when arranged and operated as herein described and represented—viz., by means of the toothed segment *i*, straight rack *h*, spring *j*, and the escapement, as herein represented.

CYPRIEN CHABOT.

Witnesses:
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