

C. C. COLEMAN.  
Breech-loading Fire-arm.

No. 35,217.

Patented May 13, 1862.

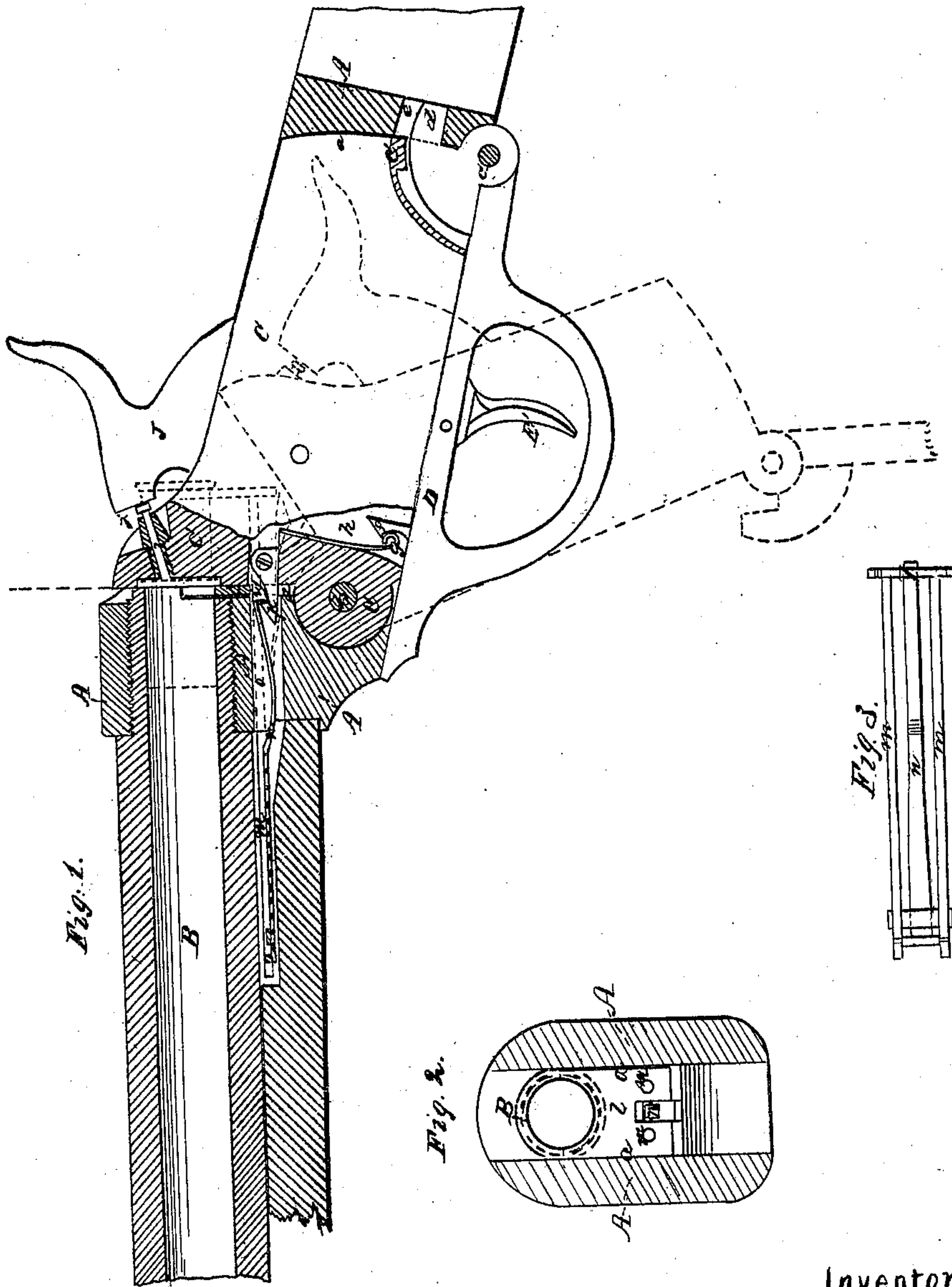


Fig. 1.

Fig. 2.

Fig. 3.

Witnesses:

*Holcomb's*  
*Geo Reed*

Inventor:

*C. C. Coleman*  
*by Munnell*  
*Atty.*



# UNITED STATES PATENT OFFICE.

CHAS. C. COLEMAN, OF WORCESTER, MASSACHUSETTS.

## IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 35,217, dated May 13, 1862.

*To all whom it may concern:*

Be it known that I, CHARLES C. COLEMAN, of Worcester, in the county of Worcester and State of Massachusetts, 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, forming part of this specification, in which—

Figure 1 is a longitudinal sectional view of the breech part of a gun with my improvements. Fig. 2 is a transverse section of the same. Fig. 3 is a top view of the device for withdrawing the discharged cartridge-cases.

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

This invention consists in a novel mode of applying, operating, and securing a movable breech.

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

A is the frame of the gun, having immediately in rear of where the barrel B is screwed into it a long straight vertical slot, *a a*, whose sides are parallel lengthwise with the bore of the gun, and which is somewhat wider than the bore. This slot has fitted to it the movable breech C, which consists of a straight flat piece of steel fitted to the said slot, and arranged to swing therein upon a transverse pin, *b*, which is inserted transversely through it, near its front end and near its bottom, and through the sides of the frame A. The face of this breech, which is situated directly above the pin *b* when the breech is closed, is made flat to abut against the rear end of the barrel, and its rear end is made in the form of an arc described from the pin *b* as a center, and the rear end of the slot *a a* is of corresponding form. To the lower rear corner of this breech there is pivoted by a pin, *c*, the rear end of the trigger-guard lever D. This lever is furnished above the pin *c* with a bolt, *d*, working in a circle described from the said pin as a center, and entering a hole, *e*, in the part of the breech-frame behind the slot *a*, for the purpose of locking the breech in a closed condition when the front end of the lever is close under the breech-frame, as shown in black outline in Fig. 1, in which position the lever is secured by means of a hook, *f*, which enters

a slot, *h*, in the breech, and a spring, *g*, which is arranged within the said slot, and which slips under and catches the said hook as the lever is brought up to the frame. This spring *g*, though it holds the lever against accidental displacement, and so keeps the breech locked by the bolt *d*, will allow the hook *f* to pass it and liberate the lever when any considerable force is applied to pull down the latter.

To unlock and open the breech the lever D is laid hold of by the guard and its front end drawn down. The first part of the downward movement of the lever effects the withdrawal of the bolt *d* from the hole *e*, and until that has been done the breech C remains locked; but as soon as that has been accomplished the continued pull upon the lever draws down the breech in the manner shown in red outline in Fig. 1, and opens the rear of the chamber of the barrel for the reception of the cartridge, which is inserted therein by hand from above the slot *a a*, and pushed forward into its place by the closing of the breech, which is effected by taking hold of the lever D and pushing up the breech into its place, after which it is secured by placing the lever up against the bottom of the frame again, as shown in black outline in Fig. 2.

The cartridge used in connection with the breech C, applied and operated as above described, may have its case of paper or metal. The gun represented uses those with metal cases carrying their own priming, and the hammer acts upon the priming through a pin, *i*, sliding through a nipple, *j*, fitted into the upper part of the front of the breech.

In a gun for using paper cartridges the nipple for the percussion-cap would be arranged precisely like *j*; but I would prefer to make it with a point at its inner end, to penetrate and carry the fire to the middle of the charge. The breech C has the whole of the lock, with the exception of the trigger, arranged within it in a central longitudinal slot provided for the purpose, the hammer J working through the top of the said slot, and the trigger entering at the bottom thereof. The trigger E is attached to the guard-lever, and therefore it cannot operate to set free the hammer until the breech is locked, which makes the lock much safer than if the trigger were attached to the breech.

*l* is a thin flat plate for withdrawing the dis-



charged metal cartridge-cases, fitted into the front of the slot *a a* in the frame, and into a recess provided for it in the lower part of that portion of the barrel which projects into the said slot to form the breech-joint. The upper edge of this plate is made of a form to correspond with the bore of the barrel. When the breech is closed, the back of the said plate is flush with the rear end of the barrel, and the lower part of the flange of the cartridge-case rests against it. The said plate has rigidly secured to it two rods, *m m*, which work through holes provided for them in the front part of the frame A, under the barrel, and parallel therewith, and to the front ends of these rods there is secured a spring-catch, *n*, which projects forward through an opening, *o*, in the front of the frame A, and through a slot in the lower part of the plate *l*.

To the front part of the breech C there is rigidly attached a hook, *p*, which, when the breech is closed, is immediately in front of the hook of the catch *n*, as shown in black outline in Fig. 1. By the act of opening the breech the hook *p* acts on the hook of the catch *n* to draw back the plate *l*, and the said plate, in coming back, draws the cartridge-case so far out of the chamber of the barrel that it can be easily removed by taking hold of it with the finger and thumb. By remaining in the position to which it has been thus brought

(represented in red outline in Fig. 1) it serves as a support for the rear end of the new cartridge in reloading, and enables the cartridge to be centered better to the bore, and as the cartridge is pushed in is driven forward again by the flange of the latter into the recess provided for it in the rear of the barrel, as illustrated in black outline in Fig. 1.

Springs may be applied, in connection with the rods *m m*, to draw forward the plate *l* suddenly to the position shown in black outline as soon as it has withdrawn the cartridge-case far enough, the hook *p* in that case being arranged to escape from the catch *n*, after withdrawing the plate the requisite distance, and the hook and catch being beveled, so that the hook will pass the tooth of the catch as the breech closes again.

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

The breech C, swinging on a pin, *b*, at the bottom of its front end, and having attached to the bottom of its rear end by a pin, *c*, a trigger-guard lever, D, constructed with a bolt, *d*, to lock into the frame A and secure the breech in a closed condition, the whole operating substantially as herein specified.

CHAS. C. COLEMAN.

Witnesses:

GEO. L. ALLEN,  
BERIAH W. HYDE.