

J. W. COCHRAN, dec'd.
IDA COCHRAN, Adm'x.
Breech-Loading Fire-Arms.

No. 153,748.

Patented Aug. 4, 1874.

Fig. 1

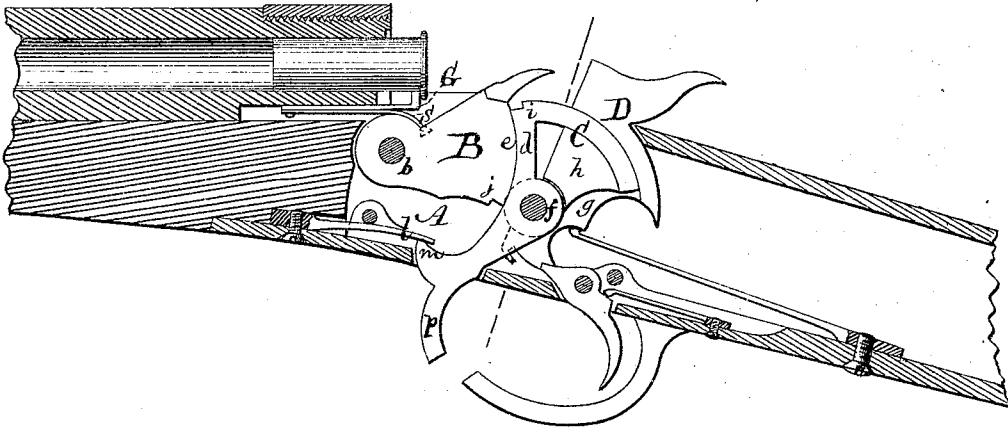


Fig. 2

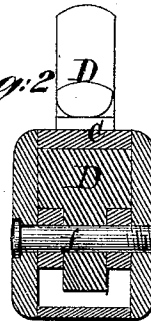
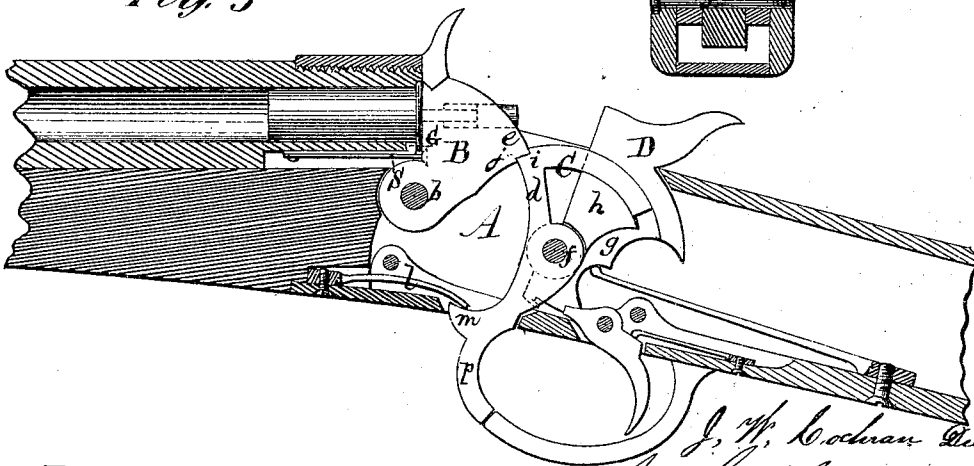


Fig. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

IDA COCHRAN, OF NEW HAMBURG, NEW YORK, ADMINISTRATRIX OF
JOHN W. COCHRAN, DECEASED.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **153,748**, dated August 4, 1874; application filed
March 3, 1874.

To all whom it may concern:

Be it known that JOHN W. COCHRAN, deceased, late of the city, county, and State of New York, did invent certain Improvements in Breech-Loading Fire-Arms, of which the following is a specification:

This invention relates more particularly to that class of breech-loading fire-arms commonly known as the Remington gun, and the one part or feature of the invention to that description of such guns in which an independent piece or brace operated by or in common with the hammer is used to lock the breech-block, when the latter is closed and the hammer is cocked.

The invention consists, first, in the combination, with the hammer and swinging breech-block, of a brace for raising the hammer to the position of half-cock, holding the breech-block in position when swung back to open the breech, and locking said breech-block when moved forward to close the breech, said brace being so constructed, and the parts being so arranged with relation to each other, that the brace may be moved back and the hammer half-cocked by means of the forefinger of the right hand, and the breech-block swung back to open the breech by means of the thumb of said hand, both operations being performed without changing the position of the hand. The invention consists, further, in the combination, with the swinging breech-block, of a shell-extractor and a spring attached thereto, serving to draw out the extractor and eject the shell when the breech-block is swung back, and to move the breech-block forward when released by the brace.

In the accompanying drawing, Figure 1 is a longitudinal vertical section of the rear portion of a breech-loading fire-arm, in part, with my improvement applied, and showing the swinging breech-block, as thrown back or open, the hammer cocked, and the brace in position to allow of the working of the breech-block; Fig. 2 is a transverse section on the line *xx*, looking backward. Fig. 3 is a section similar to Fig. 1, but showing the breech-block as closed, the hammer as cocked, and the independent brace as locking the breech-block.

Similar letters of reference indicate corresponding parts.

In the drawing, A represents the breech-receiver, and B the swinging breech-block, which works on a pivot, *b*. C is a brace, having a concavity, *d*, to receive the convex portion *e* of the breech-block when the latter is thrown open, thus causing the two devices to intermatch, mainly as and for the purposes in which the tumbler of the hammer and breech-block intermatch in the Remington gun as heretofore constructed. But, in this instance, the brace C intermatches with the breech-block, and said brace, though in one sense forming a part of the hammer D, is independent of it. Thus said brace is hung to freely swing upon the same pin *f* as the hammer, and is capable of moving in common with the hammer during its backward movement, and is also capable of being swung independently of the hammer, to lock the breech-block when the hammer is cocked, or at any intermediate position of the latter, as well as to lock it against recoil in the act of firing. To these ends, the hammer D is cut away at *g*, on both sides of it, leaving a sector-like projection, *h*, and the swinging brace C, which, like the breech-block, is of a width to fill the breech-receiver, is constructed to move independently over the projection *h*, and within the opening *i*, and so that its back underlaps the upper portion of the hammer, whereby it stiffens the hammer and assists in closing the joints between the hammer and the brace. On the front corner of the brace C is a notch, *j*, extending transversely across its entire width, and on the rear corner of the breech-block B is a notch, *j*, of corresponding form and size. On the forward side of the brace C, below the pivot *f*, is a projection, *m*, upon which the free end of a spring, *l*, presses, with a tendency to keep the upper portion of the brace C in contact with the swinging breech-block B. Below the projection *m* a finger-piece, *p*, extends through an opening in the guard-plate, and may be curved so as to form a part of the trigger-guard when the parts are in the positions shown in Fig. 3.

In operating the gun the stock is grasped in the usual way, with the forefinger of the

right hand between the guard and guard-plate, and the thumb of said hand in front of the comb of the breech-block. With the forefinger the finger-piece *p* is pushed forward, and with the thumb the breech-block is pulled backward. When the upper front notched portion of the brace is clear of the notch *j* the breech-block is free to swing down to the position shown in Fig. 1; and when the finger-piece is released by the forefinger, the pressure of the brace *C* is sufficient to hold the breech-block in the position shown. As the brace moves backward to allow the breech-block to be swung down, said brace engages with the sector-like projection *h* and moves the hammer to the position of half-cock. These movements are made without changing the position of the right hand or removing it from the stock. The breech may be closed by pressing the breech-block forward with the thumb, or by pressing forward the finger-piece *p* and allowing the breech-block to be moved forward by the spring *S*, as hereinafter described. When the breech-block is in place and the breech closed, the notches *i* and *j* engage with each other, and the breech-block is securely locked, as shown in Fig. 3.

From this description it will be seen that not only may the brace be made to lock the breech-block in different positions of the hammer, but also to effectually close all joints or

openings between the breech-block and hammer at all times, to the exclusion of sand or dirt.

The improvement, as just described, may be readily applied to Remington guns already made.

G is the cartridge-shell extractor, which is connected at its forward end by a watch or strap-like spring, *S*, with the hub of the breech-block *B*, so that on throwing back the latter the spring *S* forms a connection to draw out the extractor, and in due course, or as required, operates, by its tendency to straighten, to close the breech-block again and return the extractor to its place below the barrel of the gun.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The brace *C*, formed with the projection *m*, and finger-piece *p*, in combination with the hammer *d*, formed with the sector-like projections *h*, substantially as and for the purpose shown and described.

2. The combination of the spring-connection *S* with the extractor *G*, and breech-block *B*, substantially as herein described.

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Witnesses:

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