D. CONNER.

Breech-Loading Fire-Arm.

No. 160,880. Patented March 16, 1875.

Fig. 1

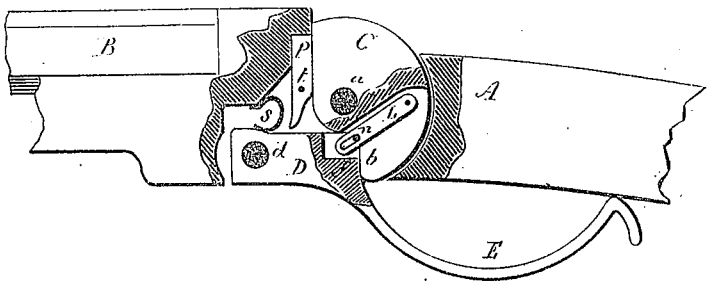
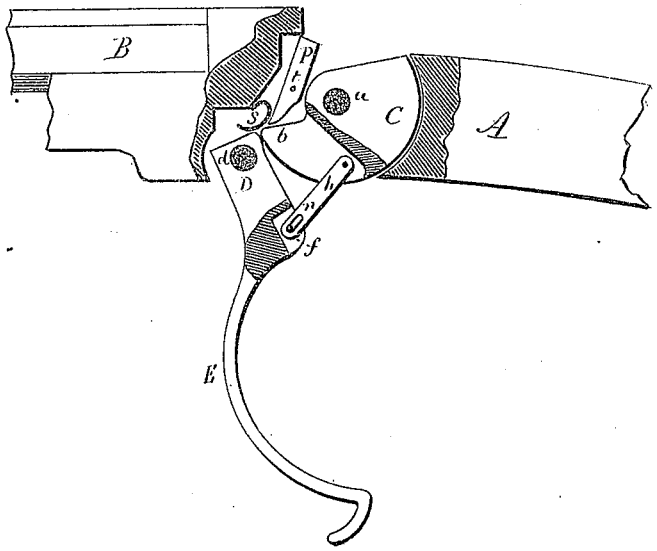


Fig. 2



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UNITED STATES PATENT OFFICE.

DAVID CONNER, OF MERIDEN, ASSIGNOR TO ELI WHITNEY, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 160,880, dated March 16, 1875; application filed October 31, 1874.

To all whom it may concern:

Be it known that I, DAVID CONNER, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a sectional side view with the breech closed; and in Fig. 2, the same with the breech closed.

This invention relates to an improvement in that class of breech-loading fire-arms which have a breech-piece swinging to the rear in the plane of the barrel, and particularly to an improvement in the Robertson and Simpson patent of March 13, 1866; the object being to more securely lock the breech-piece.

The invention consists in constructing the breech-piece and guard-lever so that a shoulder on the guard-lever will interlock with the corresponding shoulder on the breech-piece when the breech is closed, as more fully hereinafter described.

A is the frame; B, the barrel; C, the breech-piece, hung upon a pivot, *a*, below the barrel, so that the front of the breech-piece will close the rear end of the barrel, as seen in Fig. 1, or, when thrown back or down, as in Fig. 2, will open the barrel for the insertion of the cartridge. D is a lever, hung to the frame upon a pivot, *d*, below and forward of the pivot of the breech-piece, and extends below the frame to form the guard E. On the breech-piece, below the pivot, is formed a shoulder, *b*. The lever extends from its pivot to the rear, and so as to form a shoulder, *f*, corresponding to the shoulder *b*, so that when the breech-piece is closed, as in Fig. 1, the shoulder *f* shall pass up in front of the shoulder *b*, and then hold the breech-piece closed. The recoil against the breech-piece would tend to turn it back upon its pivot. This tendency of recoil is met by the lever, the bearing between the breech-piece and the lever being directly in line with the pivot of the lever; hence it will not tend to force the lever down.

The lever and breech-piece are connected by a link, L. At one of the points of connection the link is slotted, as seen at *n*, in order to give the lever an opportunity to pass below the breech-piece before it will commence to draw down the breech-piece. On returning the lever, the breech-piece will be raised by the link-connection until nearly closed; then the lever, bearing against the breech-piece, will complete its closing, and the slot in the link allow the shoulder of the lever to pass up into the locking position.

P is the extractor, hung upon a pivot, *t*, extending below the pivot, so that during the last part of the opening movement of the breech-piece the shoulder *b* will strike the lower end of the extractor, and turn the upper end out to withdraw the cartridge, as seen in Fig. 2.

In order to give to the breech-piece an accelerated movement toward the completion of the opening, in order that the movement of the extractor may be sufficiently quick to eject the cartridge-shell, I arrange a spring, S, to bear upon the lever D over the pivot, as in Fig. 1, and so that in turning the lever the angle of the lever beyond the pivot will pass the bearing-point of the spring near the completion of the opening of the breech-piece; and the bearing of the spring then brought upon the end of the lever will quickly turn that angle, and impart a quick or accelerated movement to the lever, thence through the breech-piece to the extractor.

I claim—

1. The combination, with the barrel of a fire-arm, of the breech-piece C, swinging in the plane of the barrel and constructed with the shoulder *b*, the lever D, connected to the breech-piece by a slotted link, L, and constructed with the shoulder *f*, corresponding to the shoulder *b*, substantially in the manner described.

2. The combination, with the barrel of a fire-arm, of the breech-piece C, swinging in the plane of the barrel and constructed with the shoulder *b*, the lever D, connected to the breech-piece by a slotted link, L, and constructed with the shoulder *f*, corresponding to the shoulder *b*, the extractor P, and the spring S, substantially in the manner and for the purpose specified.

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Witnesses:

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