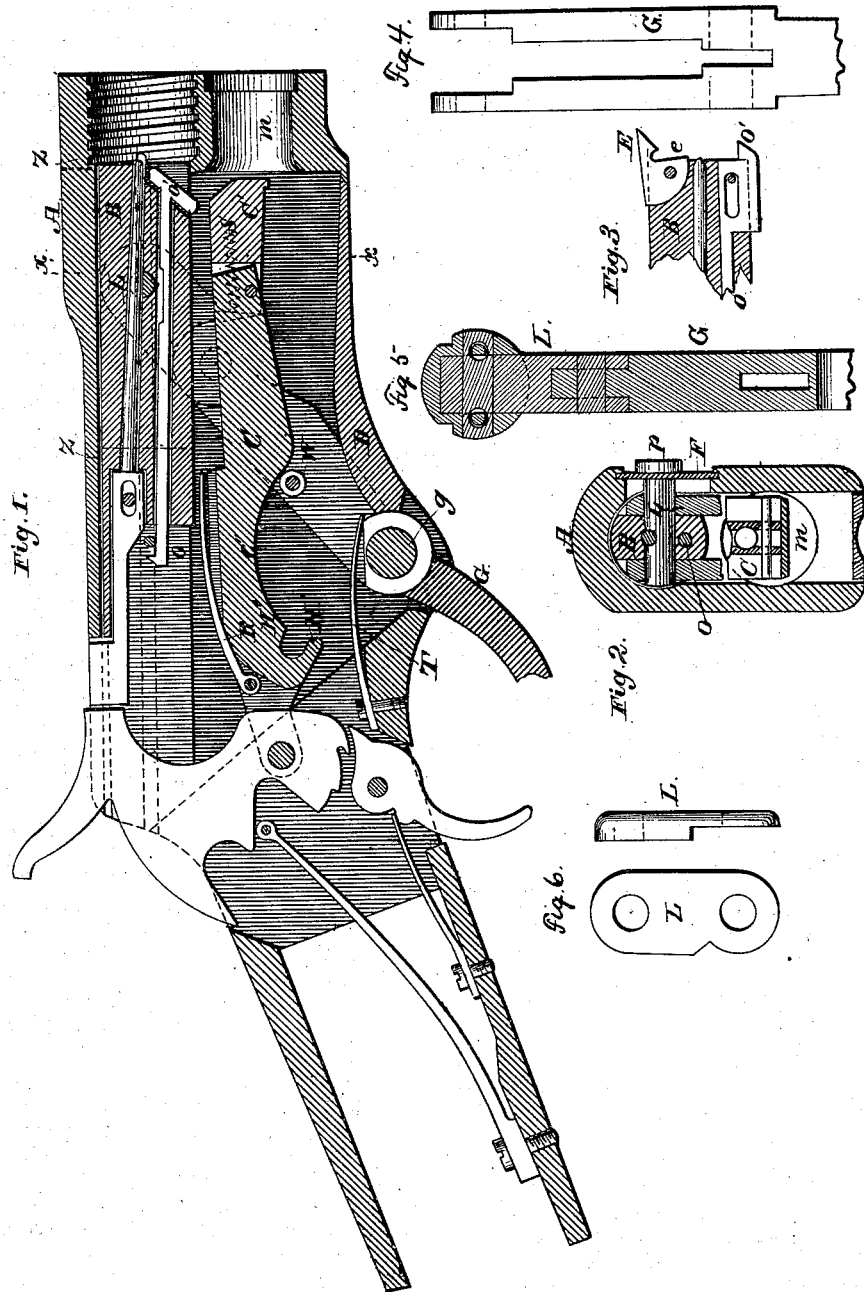


A. BURGESS.
Magazine-Gun.

No. 213,865.

Patented April 1, 1879.



Attest.

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UNITED STATES PATENT OFFICE.

ANDREW BURGESS, OF OWEGO, NEW YORK.

IMPROVEMENT IN MAGAZINE-GUNS.

Specification forming part of Letters Patent No. **213,865**, dated April 1, 1879; application filed September 13, 1877.

To all whom it may concern:

Be it known that I, ANDREW BURGESS, of Owego, in the county of Tioga and State of New York, have invented a new and useful Improvement in Magazine Fire-Arms, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The improvement in this arm consists, principally, in the method of operating and locking the breech-bolt, the construction of the carrier and loading device, the extractor and ejector, together with the general arrangement and combination of parts hereinafter more fully explained and described.

In the accompanying drawings, Figure 1 represents a sectional side elevation of the arm. Fig. 2 is a cross-section on the line *x x*; Fig. 3, a section of the forward part of the breech-bolt, showing the extractor and a modification of the ejector. Fig. 4 shows a link, and Fig. 6 a part of the lever detached. Fig. 5 is the lever as attached to the bolt by a single link.

Similar letters of reference indicate corresponding parts.

The receiver A contains a breech-bolt, B, which is operated back and forward by the links L and lever G. The carrier C is pivoted by the same pin that holds the hammer. The spring R tends to separate the carrier from the breech-bolt. The spring S straightens the joint C' of the carrier. The spring T bears against shoulders on the guard-lever and the loading-trap D, to hold both in position. The roller or wheel W forces down the carrier when it comes in contact with projection H', and raises it by contact with projection or shoulder H''. The slide F covers the opening in side when the receiver is not left open at the top. The extractor E is pivoted to the breech-bolt, and the ejector *e* moves parallel to the firing-pin.

To operate this arm the guard-lever is turned partly forward, and the cartridges are inserted into the magazine through the opening in the bottom of the receiver. This is done by pressing the cartridge against the trap D, and pressing it up against the bottom of carrier enough to raise the end of carrier, (compressing the spring R,) and bending up the joint

C' of the carrier, so that the cartridge can be forced forward into the magazine *m*. The trap D can be omitted, leaving the bottom of receiver open, or either the spring R or joint and spring C' S can be dispensed with, and the operation remain essentially the same, the carrier springing back to cover the opening as each cartridge is inserted. The magazine being thus charged, the lever G is turned forward and opens the breech by drawing back the bolt by the links L. The firing-pin presses back the hammer to full-cock and then rides over it. The roller W, having passed along the curve C'', comes in contact with the projection H', and forces down the carrier, which then receives a cartridge from the magazine. Then the lever G being pulled back the roller W raises the carrier by contact with point H'', and the breech-bolt drives the cartridge forward into the barrel, and the lower projecting point or points, *e*, reaching the head of the cartridge and rotating on its pivot, causes the extractor-hook E to fall over and hook onto the flange of the cartridge, and the arm is discharged by pulling the trigger, the cartridge being exploded by a firing-pin through the breech-bolt. Then, by again pushing the lever forward, the extractor-hook tightens still more on the flange of the cartridge-shell by the force of the shell's resistance bearing on the pivot below contact of the hook on the cartridge-flange, the opposite side of the flange at the same time pressing against the end of stud *o'* until the breech is nearly back, when the ejector *e* comes in contact with the face of the hammer, which stops it suddenly, and the breech, with its extractor-hook, still moving back, the shell is ejected from the arm through the side opening. This side opening has a cover, F, which, being pivoted to the breech-block and links by pin *p*, moves open to allow the ejection, but closes with the breech. In this arm the extractor is shown on the side of the breech-bolt, but is alike applicable to the top or bottom of any arms having reciprocating breech-blocks.

In practice, by leaving an opening on top of receiver to eject the cartridge-shell from, as shown by dotted lines *zz*, Fig. 1, the side opening and slide F are not used; but the cartridges are fed in at the top when using the

arm as a single breech-loader, and all the shells ejected with the same means and facility as at the side, only the extractor is then placed on top, as in Fig. 3.

The simple closing of the breech by the lever brings the pivots of links L in line with the pivot of lever, and pressing up diagonally against the strong part of the receiver at A effectively locks the breech-pin against the discharge.

The ejector *o* has a diagonal front that remains forward of the face of the breech-bolt after having ejected a shell until another cartridge is thrown up by the carrier, so that the feeding-cartridge, striking the face *o'*, is impelled by diagonal or glancing force forward partly into the barrel.

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

1. A reciprocating bolt to close and open the breech, a link or links, L, pivoted to said breech-bolt on a line with the bore of the barrel, and in combination therewith, the guard-lever pivoted to the other end of the link or links L, and operating to open, close, and lock the bolt through said link-connection without intermediate part.

2. The continuous breech-bolt B, pivoted to and operated by the links L and lever G, all in combination, so that the breech is locked against the frame A, substantially as specified.

3. The link or links L, pivoted directly to the reciprocating bolt, a guard-lever pivoted to the other end of said link or links, and op-

erating thereby to move and lock the breech, as described, in combination with the spring T, for holding said lever and parts in position, substantially as specified.

4. The breech-bolt, links, and pin *p*, combined to operate the slide F, substantially as described.

5. The pivoted extractor having a projection below the pivot or toward the center of breech-block that, closing against the head of a cartridge, turns the hook down over the flange, substantially as set forth and described.

6. A breech-bolt, or attachment thereto, having an inclined surface at the lower front end, whereby a cartridge is given a tendency to move forward when raised against the bolt, as set forth.

7. A bolt, having or carrying an incline at its front end, in combination with a vibrating carrier, substantially as specified.

8. A vibrating cartridge-carrier pivoted at its rear and extending forward through or by the operating-lever, a spring to press the front of the carrier downward to stop the delivery end of the magazine when the breech is closed, a projection, W, on the guard-lever to operate the carrier, and a curved surface, C", eccentric with the movement of the lever, all in combination, to operate substantially as specified.

A. BURGESS.

Witnesses:

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B. M. STEBBINS.