

## UNITED STATES PATENT OFFICE.

ANDREW BURGESS, OF NEW YORK, N. Y.

## IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. 119,115, dated September 19, 1871.

To all whom it may concern:

Be it known that I, Andrew Burgess, of the city of New York, in the county and State of New York, have invented a new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The object of this invention is to improve and simplify that class of breech-loading fire-arms which are used as self-loaders by having a magazine connected therewith, or as a single-loader when the operator may wish or the magazine shall be empty; and it consists in the construction, arrangement, and combination of the parts hereinafter set forth and described.

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of the gun taken on the line ww of Fig. 3. Fig. 2 is a vertical longitudinal section taken on the line xx of Fig. 4. Fig. 3 is a cross-section of Fig. 1 on the line zz. Fig. 4 is a cross-section of Fig. 2 on the line yy.

Similar letters of reference indicate corresponding parts.

A is the bed-piece, into which the barrel B is received, and which contains the breech-block C and supports the operating mechanism of the gun. D is the hammer. E is the tumbler. The breech-block is connected with the tumbler E by the link I. The hammer is attached to the tumbler by a square socket on the side of the stock in the ordinary manner. J' is the trigger. J is the dog, which engages with the tumbler. Kis the main spring. The link I is pivoted to the breech-block and to the tumbler, as seen in Fig. 2.

As the hammer is drawn back in the act of cocking the gun the tumbler is turned back and the breech-block is brought down and the breech opened by means of this connecting-link. The dog is detached from the tumbler by the trigger, which, as it is drawn back, strikes the setscrew L, the hammer strikes the discharging-pin, seen in dotted lines, and the piece is discharged.

m is the dog-spring. It will be seen that by the act of cocking the gun the breech is opened. In drawing the hammer a little further than a full cock the retracter is operated. N is the upright retracter-bar and the rod connected therewith, and actuated by the hammer, is seen in cross-section at o. The retracter in this case is similar to that represented in my pending case marked A. P represents the magazine-tube. q is the spiral spring, and R is the follower connected with the spring. The cartridge is delivered opposite to the breech-chamber, as seen in Fig. 1, by the spiral spring, and is held in that position by the small spring s. T is the pusher, which is attached to the sliding guide- $\operatorname{rod} u$ .

As seen in Fig. 1, the piece has been discharged. The act of pulling the trigger and discharging the piece closes the breech, which turns the top of the pusher outward, raising the small spring s, which thereby allows the cartridge to rest against the pusher, which is kept from running back by a slight depression in the breech-block, seen at T; but on opening the breech, by pulling the hammer to full cock, the force of the spiral spring of the magazine runs the pusher back, the cartridge still resting against the pusher until the breech-block, by the hammer being carried beyond the full-cock notch, strikes the set-screw u' in the lever v, which throws the cartridge on the top of the breechblock, the point of the pusher still projecting over sufficient to drive the cartridge forward into the breech, by means of the upper end of the trigger, which rests against the back of the pusher when the trigger is pulled. When the cartridge reaches "home" the wide back part of the trigger strikes the set-screw L of the dog J, and so pulls off and discharges the piece by the hammer striking the discharging-pin in the breech-block.

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

1. The combination and arrangement of the hammer D, tumbler E, link I, and breech-block C, substantially as and for the purposes described.

2. The pusher T, breech-block C, spring s,

trigger J, and lever v, arranged and operating as described.

3. The pusher T, arranged to operate the spring S and thereby release the cartridge from the magazine, as described.

4. The breech-block C and bent lever v, arranged to operate as specified, for the purpose of moving the cartridge laterally.

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5. The combination of trigger J' and pusher T u, arranged to operate as specified.

ANDREW BURGESS.

Witnesses:

T. B. Mosher, Alex. F. Roberts.

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