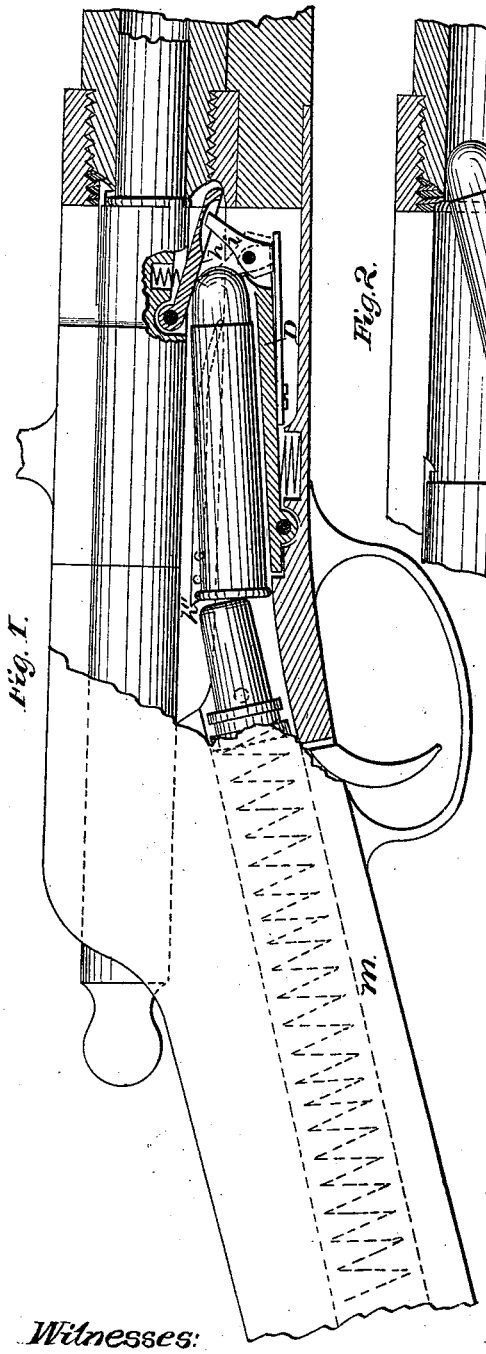
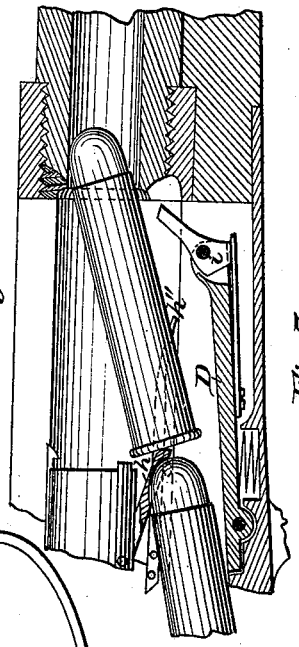
2 Sheets—Sheet 1.

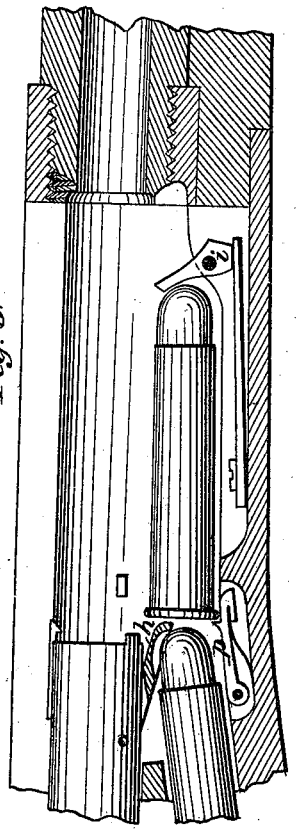
A. BURGESS.

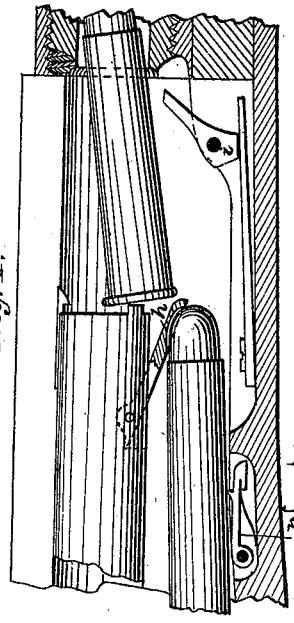
Magazine Fire-Arm.

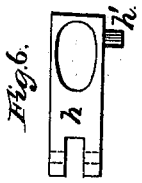
No. 210,294. Patented Nov. 26, 1878.











Witnesses:
F. B. Broeth
D. G. Stuart

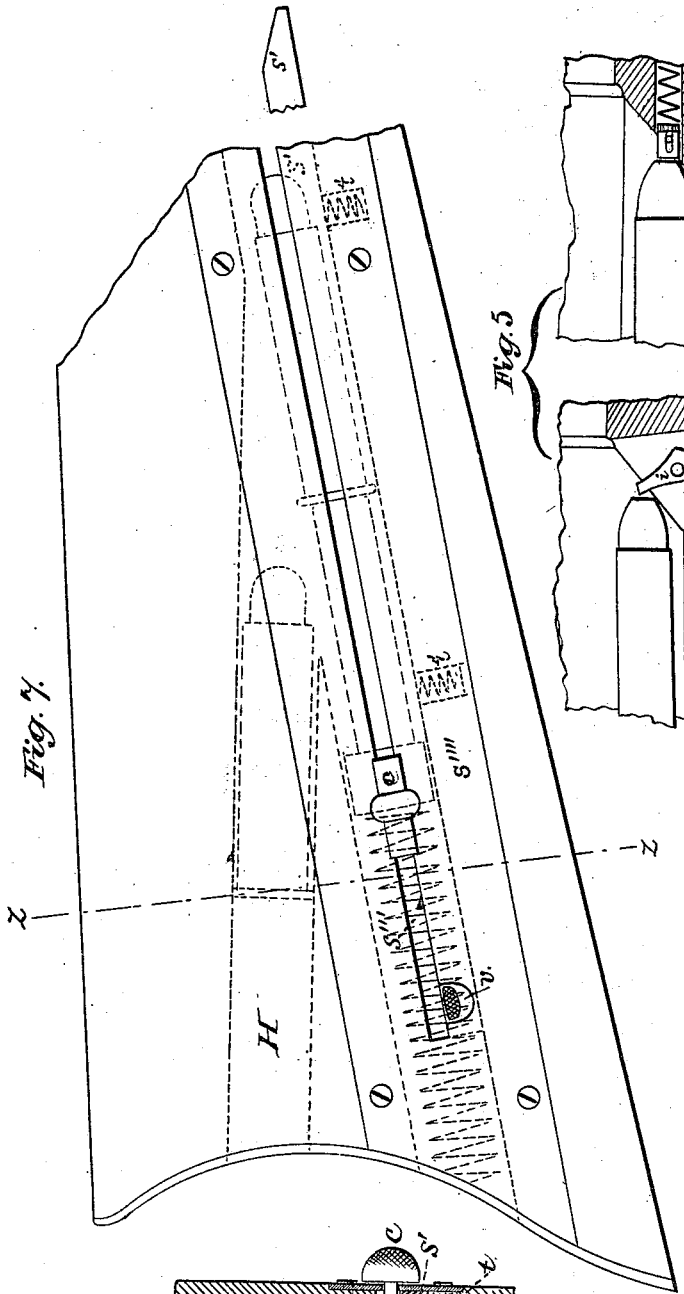
Inventor:
A. Burgess

2 Sheets—Sheet 2.

A. BURGESS.

Magazine Fire-Arm.

No. 210,294. Patented Nov. 26, 1878.



WITNESSES.

F. B. Brock

D. G. Stuart

Inventor.

Andrew Burgess

UNITED STATES PATENT OFFICE.

ANDREW BURGESS, OF OWEGO, NEW YORK.

IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. **210,294**, dated November 26, 1878; application filed November 21, 1878.

To all whom it may concern:

Be it known that I, ANDREW BURGESS, of Owego, Tioga county, State of New York, have invented a new and useful Improvement in Magazine Fire-Arms, of which the following, in connection with the accompanying drawings, is a specification:

This invention relates to that class of bolt-guns which carry a plurality of cartridges in the butt; and consists principally of loading and feeding devices and general combination of parts, hereinafter more fully set forth and described.

Similar letters of reference indicate corresponding parts.

Figure 1 is a side view, partly in section, and with the breech closed. Fig. 2 shows the bolt in the act of closing and driving forward a cartridge. Fig. 3 shows the breech open, the guide h'' and arm D being omitted. Fig. 4 is a view similar to Fig. 3, except that the cartridge is being driven into the barrel by the closing-bolt. Fig. 5 shows the cartridge-stop i arranged in an inclined guide. Fig. 6 is the hand of the breech-bolt. Fig. 7 shows a part of the butt-stock, with the spring-compressor, the bar for closing the slot, and, in broken lines, the hole through which the magazine may be loaded; and Fig. 8 is a cross-section on the line $z\,z$.

The magazine m is located in the butt-stock and extends forward under the bolt. The stop i holds the cartridges in the magazine as they are loaded in from the front, or when the breech is open, and is pivoted to the arm D or in the body of the frame. The bottom of the bolt is furnished with a spring-hand, h, which serves to turn back or set the stop i as the bolt is started back, to start forward a cartridge when closing, and also when closing to hold back the next cartridge rearward.

In Figs. 1 and 2 the hand is so arranged that after pulling back the finger i it is supported by the lug h' falling on the spring or spline h'' when the bolt is being drawn back; but when the bolt reaches its backward limit the hand drops down behind the first cartridge, and when the block moves forward the lug h' is held down by the spline h'', so that the next cartridge cannot raise the hand to escape.

The spline and lug may be dispensed with and the spring of the hand made strong enough to resist the force of the magazine-spring; but in this case I add a pawl, p, to prevent the hand from forcing back the cartridge when riding back over it.

The hand h is scored or dished out at the bottom to admit a part of the ball or point of the cartridge, but not enough to admit the butt, even when without projecting flange.

The magazine has a slot or opening extending into it through the stock. This opening is provided with the compressor c, which engages on the forward side of a stud on the follower to push it back, and thereby compress the magazine-spring. This allows the cartridges to be dropped freely into the magazine through the frame or through the hole H in the butt, which enters the magazine at an angle and forward of the follower when the magazine-spring is compressed.

The bar s', protected by the plate s'''', is arranged to cover the slot in the magazine by being forced laterally over it by the springs t t when the compressor c is in its forward position.

The compressor in moving back retires the bar from the opening by contact with the beveled front end, s', of said bar, and when the compressor reaches its rearmost limit the point s''' holds it there while the magazine may be loaded, when it is released by pressing back the thumb-piece v.

It will be readily seen that when the compressor is in its forward position the magazine-spring and follower are free, and the arm, as shown in Figs. 1 and 2, can be loaded by forcing the butts of the cartridges back against the pressure of the magazine-spring, and when their points get behind the finger i it will hold them against expulsion. When the arm is loaded in this manner the bolt should not be withdrawn to its utmost limit, as the hand h would then snap down behind the spline h' and obstruct the mouth of the magazine.

To operate this arm, after the magazine has been loaded, as specified, the bolt is pulled back until the hand h springs down behind the head of the first cartridge; then closing the bolt forces the cartridge forward, turning the

finger or stop *i* forward to the position shown in Figs. 2 and 4, and the point of the cartridge being propelled forward against the finger is forced up on it to the chamber in position to be driven in by the closing bolt. Again withdrawing the bolt the hand *h* catches the point of the finger *i* and pulls it back to its position in Fig. 3, when the hand rides over it and backward over the cartridge or spline, as already described.

In Fig. 5 is represented an incline, as shown by C. W. Baldwin in Patent No. 85,897. In this modification the finger is pivoted in the incline, which guides the point of the cartridge up to the chamber, and the finger only serves as a stop retained by a spring, and for which a reciprocating pin, set into the incline and operated back by a spiral spring, would be an equivalent.

The finger *i*, alone or in conjunction with the hand *h*, also serves as an elastic buffer to lessen the shock on the cartridges in the magazine by the recoil when the arm is fired.

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

1. The oscillating or vibrating finger *i*, arranged in bottom of the receiver and combined with the reciprocating breech mechanism, to form a stop or detent for the cartridges as they are loaded in the magazine and to guide their points to the barrel-chamber when moved by the bolt, substantially as described.

2. A spring-stop, fixed in the bottom of the frame, to engage the point of the cartridge and hold it in the magazine, when so arranged and combined with a reciprocating bolt, substantially as described, as to be forced to disengagement by the propulsion of the cartridge forward in closing the breech, substantially as specified.

3. The hand *h*, arranged in combination with the breech-bolt, substantially as described, to spring down behind the forward cartridge, drive it forward, and stop the next cartridge from advancing before it.

4. The magazine provided with a slot or opening, for the purpose specified, the compressor, and the laterally-moving bar for closing the slot, all in combination, substantially as set forth.

5. The rear stock, provided with a magazine-tube and with a loading passage or opening through the butt, which enters the magazine-tube at a point in front of that to which the follower in the magazine can be retracted, to permit the introduction of the cartridges into the magazine through said loading-tube, substantially as described.

ANDREW BURGESS.

Witnesses:
WM. P. YOUNG,
F. B. BROCK.