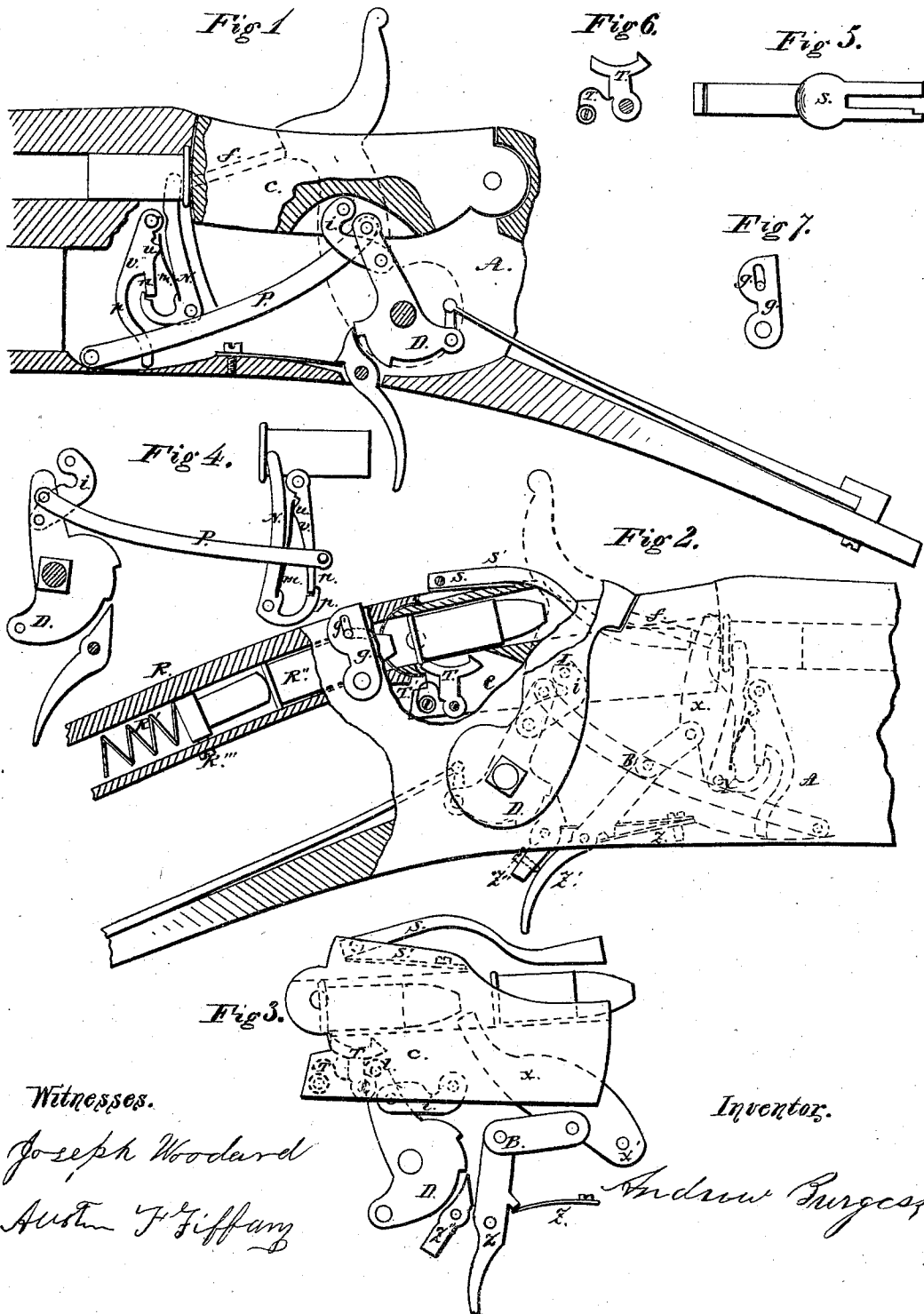


A. BURGESS.

Improvement in Magazine Fire-Arms.

No. 128,208.

Patented June 25, 1872.



Witnesses.
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IMPROVEMENT IN MAGAZINE-GUNS.

Specification forming part of Letters Patent No. 128,208, dated June 25, 1872.

To all whom it may concern:

Be it known that I, ANDREW BURGESS, of Owego, county of Tioga, 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 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 as constructed without the magazine. Fig. 2 is the same with the addition of the magazine, and showing its arrangement. Fig. 3 is the breech-block and parts connected therewith. Fig. 4 shows the extractor and its connection with the tumbler as used for a single loader. Fig. 5 is the breech-block cap or cover. Fig. 6 is the cartridge-feed regulator. Fig. 7 is the magazine-stop.

Similar letters of reference indicate corresponding parts.

A is the bed-piece, which contains the breech-block C and supports the operating mechanism of the gun. The hammer is attached to the tumbler D by a square socket in the ordinary manner, and operates the breech-block by the link *i* in the same manner as one of my guns patented September 19, 1871. N, Figs. 1 and 4, is the bar of the side extractor, the upper part operating back of cartridge-flange, the lower part being pivoted to bed-piece A and bent back and upward, and having a notch, *p*, which engages a point, *n*, of lever O, said lever being sprung back by the point of spring *m* operating against it near the pivot above. The extractor is "set" by pushing back the bar N in inserting the cartridge. When the hammer is carried a little beyond full-cock the rod P, being pivoted to a projection of tumbler D, is carried back until a projection on the other end of said rod pulls back the lever

O, releasing the bar N, by disengaging the point *n* of lever O from notch *p* in back part of said bar, when, if the force of spring *m* should not be sufficient to throw out the discharged shell, the lever O operates against the bar N at the point *n* by the further drawing back of the hammer, thus starting the shell, which is then thrown out by the recoil of spring *m*. C is the breech-block, and is hollow at the rear end for allowing the cartridge to enter from magazine R, which extends backward through the breech of gun. S is the breech-block cap, pivoted at the rear end to the top of breech-block, and kept in position by small straight spring S'. T is the feed-regulator, pressed forward by small spring T'. X is the pusher, pivoted at X' to bed-piece A, and is thrown back by force of spring Z, and connected with the trigger Z', by which it is operated, by the toggle-joint B. The pusher X has also pivoted to it, the other side from the toggle B, a bar or dog, B', the upper part of which is pressed outward by small spring E, which allows of its passing forward under the flange of cartridge by pressing down said spring E.

It will be seen that the upper part of the tumbler D, to which the link *i* is pivoted, projects above said pivot, the extreme upper end having a screw or pin connecting the two sides, the upper part of link *i* being bent or cut out so as not to prevent the straightening of the joint when the hammer is down.

To operate this arm we first turn back the cap S of the breech-block, leaving the mouth of magazine open, into which we insert the cartridges. The back flanges, passing over the first point, push back the rear point of the feed-regulator T, allowing them to enter, which, by force of spring T', returns to its former position and prevents their return. Then, closing the cap S, we may cock the piece and use as a single loader, only taking precaution not to carry the hammer but little back of the full-cock notch. To insure this the stop *g* is turned down toward the back of hammer, where it is retained by the friction-spring *g'*. It is loaded at full-cock by inserting the cartridge forward into the chamber of barrel, and fired by pulling the trigger, which, releasing the tumbler, allows the hammer to fall, the breech-block, which carries the firing-pin *f*, closing upward, by means of the link *i*, at the same time, and

reaching position a little before, or at the time, the hammer strikes. Now, if we desire to use the reserved charges in the magazine, we have only to turn back the stop *g*, which allows the hammer to be carried still further beyond the full-cock, causing the pin *L* to come in contact with the feed-regulator *T* above the pivot in breech-block, on which it turns, causing the rear point to fall and release the flange of cartridge, which, being sent forward by force of spiral spring of the magazine *R*, catches on the forward point of the feed-regulator *T*, where it is retained until the hammer is let down to the full-cock or nearly so, when the feed-regulator, being released from contact with pin *L*, returns to first position by force of spring *T'*. The cartridge is left free to spring forward into the chamber of the barrel by impetus received from spiral spring *R'*. The cartridge, in passing from the feed-regulator to the barrel-chamber, forces up the cap *S*, which then assists to guide it into the chamber. The "pusher" *X*, working vertically through the breech-block, following up, drives the cartridge "home," said pusher being operated by the trigger connected with toggle *B*, so that when the trigger is straightening the joint *B*, by being pulled, it throws the pusher forward, and, driving the cartridge home, the back part of trigger *Z'* reaches set-screw in dog *Z''*. The one motion of pulling trigger pushes the cartridge into the barrel-chamber and discharges the gun, by releasing dog *Z''* from the tumbler, so causing the hammer to fall and strike firing-pin *f* as the breech-block rises to position. When the hammer is again raised after having fired the gun the falling of the breech-block allows the pusher to be forced back by the spring *Z*, and the point of dog *B'* engages with the flange of cartridge-shell, when, if the

force of spring *Z'* is not sufficient to throw out said shell, by carrying the hammer back beyond full-cock the breech-block strikes that part of the joint *B* that is pivoted to the pusher *X*, when the pivot *X'* of said pusher acts as a fulcrum, forcing the point of dog *B'* backward and starting the shell, which, when thus loosened, will be thrown by force of spring *Z*, and, striking the inclined top of breech-block cap *S*, is thrown out of the way. The magazine-tube *R* has an opening or groove in lower interior side, extending its whole length, and into which a point or screw of the follower *R''* slides freely; but, as it cannot pass the feed-regulator *T*, prevents it from running out after the cartridges have all been delivered.

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

1. The spring-bar *N*, in combination with the lever *O* when the latter is pivoted to the bed-piece, and provided with an arm, *n*, engaging with a notch, *p*, in a prolongation of the bar *N*, in the manner and for the purpose set forth.
2. The breech-block *C* when hinged in the rear, and perforated to admit the passage of cartridges from the magazine in the breech of the gun, as described.
3. The combination of the feed-regulator *T* and tumbler *D*, as and for the purpose described.
4. The pushing or loading device, consisting of the trigger *Z'* and toggle *B*, when combined for operation with the pusher *X*, as and for the purpose set forth.

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Witnesses:

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