No. 116,642. PATENTED JULY 4, 1871.

G. R. STETSON.

BREECH LOADING FIREARM.

Fig 1

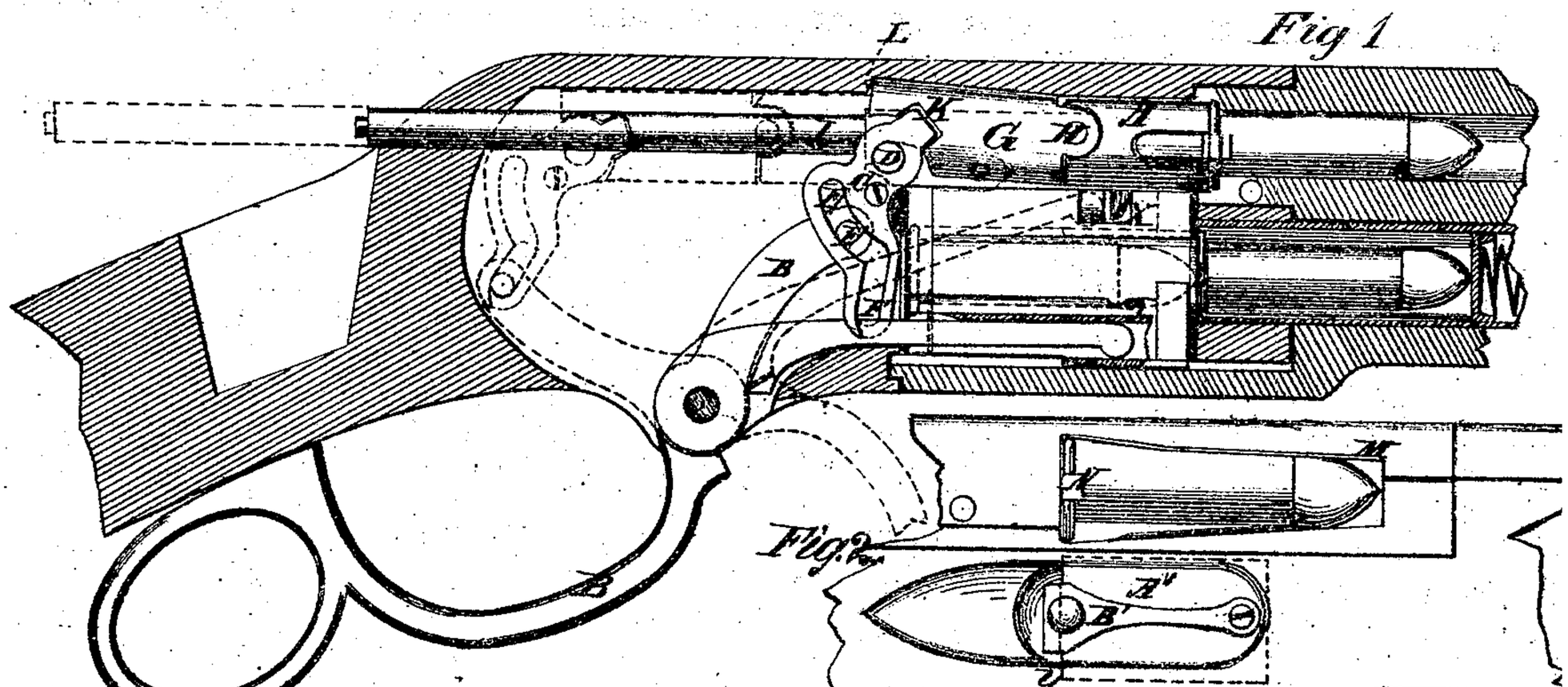


Fig. 2.

Fig. 4.

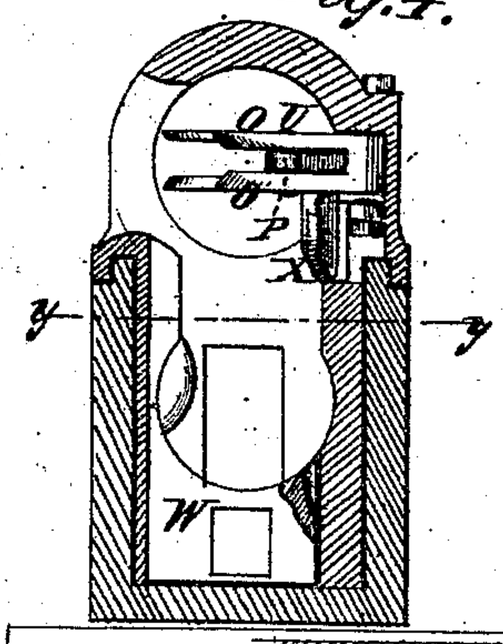


Fig. 3.

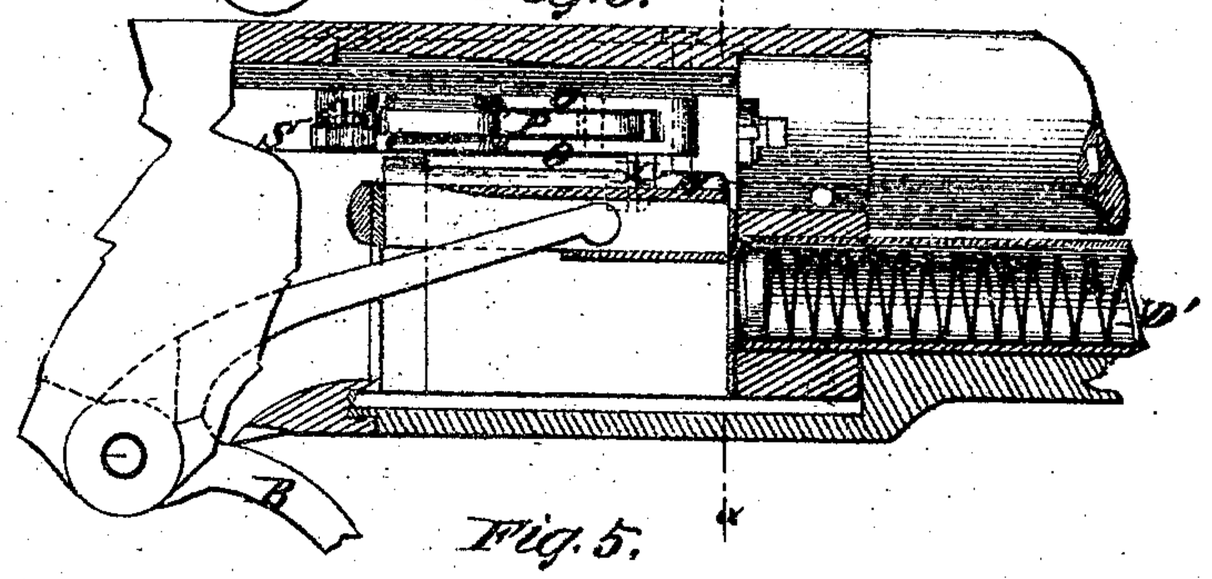


Fig. 5.

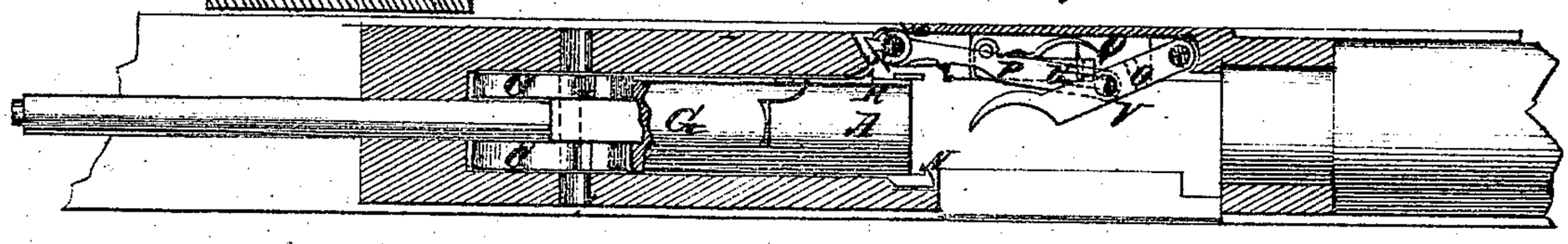
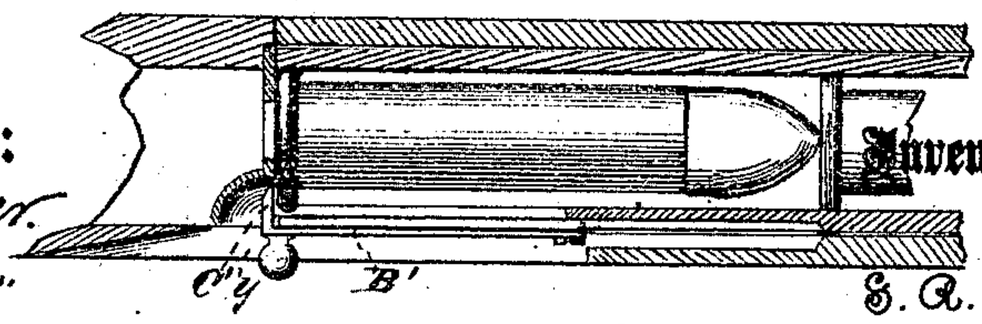


Fig. 6.



Witnesses:

John Becker.

Wm. H. L. Smith.

Inventor:

G. R. Stetson.

Per

Attorneys.

Dietrich

UNITED STATES PATENT OFFICE.

GEORGE R. STETSON, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 116,642, dated July 4, 1871.

To all whom it may concern:

Be it known that I, GEORGE R. STETSON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and Improved Breech-Loading Fire-Arm; 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.

This invention relates to improvements in magazine or breech-loading guns; and it consists in a novel and simple arrangement of a locking-bar and a connecting-link with the breech-pin and actuating-lever for locking the breech-pin and working it; also in a novel ejecting apparatus for throwing out the cartridge-shell when the breech-pin is moved back, said apparatus being set in motion by the breech-pin in its backward movement. It also consists in the arrangement of a cover and spring, in connection with an aperture in the side of the stock, whereby said cover is caused to close after the first cartridge has been put in by the said cartridge being forced against it by the magazine-spring, all as hereinafter described.

Figure 1 is a longitudinal sectional elevation of the improved gun, showing the parts in the positions they occupy when the gun is loaded. Fig. 2 is a partial side elevation, showing the cartridge through the side opening for ejecting the shell in the position previous to being moved forward. Fig. 3 is a partial sectional elevation, showing the position of some of the parts when the breech-pin has been thrust back. Fig. 4 is a transverse section on the line *x x*, Fig. 3. Fig. 5 is a horizontal section, showing the parts when the breech-pin is moved back. Fig. 6 is a horizontal section of part of the magazine on the line *y y* of Fig. 4.

Similar letters of reference indicate corresponding parts.

The breech-pin A is connected to the operating-lever B by the slotted links or levers C pivoted to it at D, and connecting with the lever B by the cam-slots E and the pins F below the pivots D, while the upper ends of the said levers engage with notches in a longitudinally-slotted or grooved cylindrical locking-bar, G, pivoted to the breech-pin at H, and fitted on the reduced part I of said breech-pin, so that the end having said notches K, which receive the end of the levers, may rise above said part I for locking the pin against the shoulder L when in the position for firing. The said locking-pin is raised up in front of this shoulder by the levers C being vibrated by the lever D, which continues in motion a short time after the forward movement of the breech-pin is arrested by coming in contact with the end of the barrel, and it is thrown down again, before the backward movement of the breech-pin begins, by the vibration of said levers C by lever B at the beginning of its movement for throwing the breech-pin back, for a short time before the pins F and the slotted levers C arrive at that position in which a pulling action is applied to the breech-pin, after which the latter is forced back to the position represented in dotted lines, when the levers B and C assume the positions indicated. For ejecting the cartridge-shell after it has been discharged, a hole, M, is made in the right side of the magazine, opposite the position it occupies when raised up to the axial line of the barrel before being pushed forward into it, and to which it is pulled back, after firing, by the hook N, and the ejecting-levers O and P are arranged in a recess, Q, opposite to this opening, for levers O to be forced against the said shell by the lever P, which is suddenly thrown out by the breech-pin in its backward movement, which has a catch, R, which engages a catch, S, on the hub of lever P at its pivot, by which the said lever P is suddenly thrown forward at the free end, which is connected to levers O by a slot, U, through it, and a pivot, V, on the levers O. The catch S escapes from catch R after turning a suitable distance, leaving levers P and O free to be swung back again into the recess to make room for the next cartridge. They are forced back into said recess by the cartridge-carrier W coming against the curved projection X extending downward from the lower edge of levers O as the said carrier rises with the next cartridge. The cartridges are to be supplied to the magazine-tube Z through an opening, Y, in the side of the stock above the carrier W when in its lowest position, one being pushed in after another until the tube is filled. This opening is provided with a sliding cover, A′, moving forward to uncover the opening, on which is a spring, B′, with spur C′, which catches behind the last cartridge put in to subject the cover to the action

of the spring D′ for closing it by said spring, which, pushing said last cartridge back over the carrier, causes said cartridge to move the cover along with it.

The other parts and arrangements thereof, being such as heretofore used, need not be described.

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

1. The locking-pin G and connecting cam-slotted levers C, combined with the breech-pin A and operating-lever B, for actuating and locking the breech-pin, substantially in the manner described.

2. The cartridge-ejecting levers O P, arranged as shown and described, and actuated by the breech-pin through the medium of catches R S, substantially as specified.

3. The arrangement of the cover A′ and spring B′ with the aperture Y, substantially as specified.

Witnesses: GEORGE R. STETSON.

SAMUEL HEMINGWAY,

I. K. WARD.