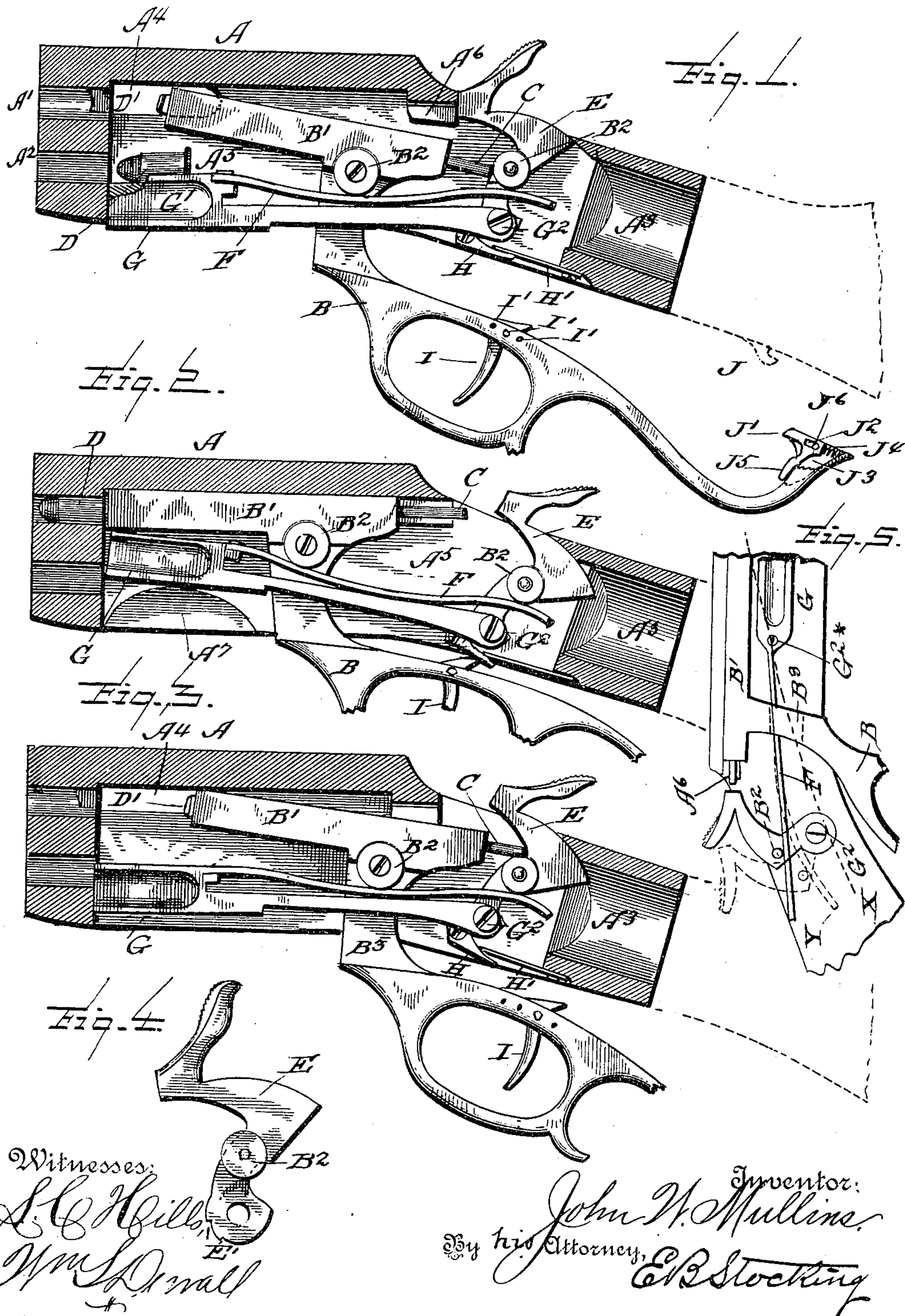


(No Model.)

J. W. MULLINS.
MAGAZINE FIRE ARM.

No. 349,282.

Patented Sept. 14, 1886.



UNITED STATES PATENT OFFICE.

JOHN W. MULLINS, OF LONDON, KENTUCKY.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 349,282, dated September 14, 1886.

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To all whom it may concern:

Be it known that I, JOHN W. MULLINS, a citizen of the United States, residing at London, in the county of Laurel and State of Kentucky, have invented certain new and useful Improvements in Fire-Arms, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to that class of fire-arms known as "magazine-guns," and the objects of the invention are to reduce the number of parts and simplify the construction and mode of operation.

Other objects and advantages will appear in the following description, and the novel features will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a longitudinal vertical section, with parts in side elevation and in the position they assume at the time of ejecting the empty shell and of receiving a loaded one. Fig. 2 is a similar view of the parts in a position to fire. Fig. 3 is a similar view illustrating the parts in a position to automatically bring the hammer to a full-cock. Fig. 4 is a detail of the hammer in side elevation, and Fig. 5 is a modification hereinafter described.

Like letters of reference indicate like parts in all the figures of the drawings.

A represents the breech portion of the gun, which may be formed separately or as a part of the barrels A' A², the latter being the magazine for holding the supply of loaded shells, which are ejected by means of the usual coiled spring (not shown) arranged in the front end thereof. The rear end of the breech is in the form of a cylinder or collar, A³, into which the stock (shown in dotted lines) is fitted.

A⁴ is an opening at the rear and at one side of the firing-barrel A', through which the empty shells are ejected in a manner hereinafter described.

B is the guard, which is extended upwardly, and is formed into or secured to a firing-pin bar, B', in which the firing-pin C is mounted, so as to have a slight longitudinal movement through the bar B', in order that its front end shall come into contact with the priming or cap of the shell D when in the firing-barrel. A shell extractor, D', is secured to the front end of

the firing-pin bar, so as to take in front of the flange of the shell and withdraw the same from the firing-barrel and eject it through the opening A⁴ in the breech when the bar B' and guard are drawn rearwardly, as hereinafter described. The breech is provided with a recess, A⁵, to receive the operative parts, and there is within said recess an abutment, A⁶, slotted for the reception of the rearwardly-projecting portion of the firing-pin, in order that the hammer E may come into contact therewith. This abutment also serves to assist or enable the firing-pin bar B' to overcome the recoil of a shell when it is exploded. The firing-pin bar is provided with a friction-roller, B², as is also the hammer E, in order to reduce the amount of friction existing between the said parts and the mainspring F, against which they bear.

G is a carrier, which has in its upper surface, and in one side thereof, depressions G', adapted to receive and retain a shell as it is ejected from the magazine-barrel upon said top, or as it is introduced therein through the cut-away portion A⁷ near the lower edge of the recess A⁵. The carrier G is extended rearwardly and pivoted on a screw, G², which also serves the function of the pivot of the hammer. The mainspring F is secured to the carrier at one end, and extends backward over and beyond the pivot G² and between the carrier-extension and the friction-rollers in the firing-pin bar and the hammer and to the rear of the pivot of the hammer. The lower edge of the hammer is provided with the usual ratchet-teeth, E', into which the usual pawl, H, pressed by the spring H', takes, unless released therefrom by the trigger, which is in this instance mounted in the guard, which guard is slotted, as usual, for the reception of the trigger, and provided with a series of holes, I', whereby the trigger may be pivoted at a point where it shall have a greater or less leverage upon the pawl H, in order to render the trigger more or less sensitive. On the stock is a latch-hold, J, (see dotted lines, Fig. 1,) and at the rear end of the guard B is a latch, J', slotted, as at J², and mounted in a slot, J³, formed in the end of the guard, in which is also arranged a coiled spring, J⁴, which has a tendency to push the latch J' outwardly or toward the latch-hold J, these parts being arranged, as shown,

so that if the guard is pressed against the stock the latch shall take under the hold, and so that by placing the little finger of the hand against the end J^5 of the latch J' it may be pushed backward, riding upon the pin J^6 and against the tension of the spring, in order to release the guard from the stock.

This being the construction, the operation is as follows: Taking the parts as illustrated in Fig. 2, wherein the hammer is at full-cock and under the influence of the tension of the spring F from its center to its rear end, a pull upon the trigger explodes the shell in the firing-barrel through the medium of the firing-pin. Now, by releasing the latch J' and depressing the guard, the parts are brought into the position illustrated in Fig. 1—that is to say, the shell is extracted by the extractor and ejected out of the gun through the aperture A^4 , and the carrier is depressed to receive a new shell from the magazine. Now, if desired, a further backward and downward movement of the guard and parts attached may be had for the purpose of automatically cocking the hammer, as shown in Fig. 3; or this movement may be omitted and the parts returned to position shown in Fig. 2 by an upward and forward movement of the guard, when the shell received upon the carrier, which now rises, will be forced into the firing-barrel, and the firing-pin bar will be forced upwardly and in front of the abutment A^6 , ready for firing.

In the modification illustrated in Fig. 5, instead of pivoting the carrier at the same point that the hammer is pivoted, it is pivoted in front of said point, as at G^2 , I have extended therefrom and in rear of the pivot the mainspring F , and have provided the hammer with a pin or friction-roll, B^2 , projecting over the spring. Now, the operation of the carrier is the same, in that by depressing the guard B , which, in this instance, is slotted, instead of recessed, as in the other modification at B^3 , for the passage therethrough of the mainspring F , the mainspring is also depressed, so that it and the carrier assume the position indicated by the dotted line X —that is, to elevate the front of the carrier, so as to carry a shell received from the magazine-barrel to and in rear of the firing-barrel, so that a return movement of the firing-pin-bar will force said shell into the firing-barrel, when the parts would assume the position indicated in full lines, Fig. 5. Now, by drawing the hammer backward to a full-cock, the pin or roller B^2 therein acts to depress the spring F to the position shown by dotted lines Y , whereby the necessary power for throwing the hammer is produced.

Having thus fully described my invention and its operation, what I claim is—

1. In a gun of the class described, a breech recessed, as at A^5 , for the reception of the movable parts constituting the loading and firing mechanism, in combination with a guard arranged in said recess and provided with a firing-pin bar, a firing-pin arranged therein, a hammer pivoted within the recess, a loading-block extended rearwardly and pivoted within the recess, and a spring connected with the carrier and bearing against the hammer to operate the same, substantially as specified.

2. In a gun of the class described, a carrier pivoted in the breech for movement from the magazine to the firing-barrel, and provided with a spring extended over and beyond the pivot of the hammer, and having a bearing against the hammer to operate the same, substantially as specified.

3. In a gun of the class described, the combination of a hammer, a mainspring extending above and back of its pivot and having a bearing upon said hammer, a carrier directly connected with the spring and pivoted for vertical movement, and a guard constructed and arranged to cause the carrier to perform its function, substantially as specified.

4. In a gun of the class described, the combination, with the breech A , recessed as at A^5 , and provided with the slotted abutment A^6 , of the guard B , provided with the firing-pin bar B' , having thereon a shell-extractor and having arranged therein a firing-pin and a carrier, G , rearwardly extended and pivoted at G^2 , and a spring, F , secured to the carrier in front of its pivot and extending over and back of its pivot, and having a bearing on the hammer to operate the same, substantially as specified.

5. The combination, with the guard B , the latch J' , slotted for longitudinal movement, as at J^2 , and mounted upon a pin, J^6 , arranged in the slot J^3 , formed in the guard, and having a spring, J^4 , for outward pressure upon the latch, of a holder secured to the stock, substantially as specified.

6. The combination of the guard B , having the aperture I' , and the trigger I , adapted to be pivoted at either of the apertures for the purpose of varying its leverage upon the dog or pawl H , substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. MULLINS.

Witnesses:

C. N. SCOVILLE,
W. R. RAMSEY.