

(No Model.)

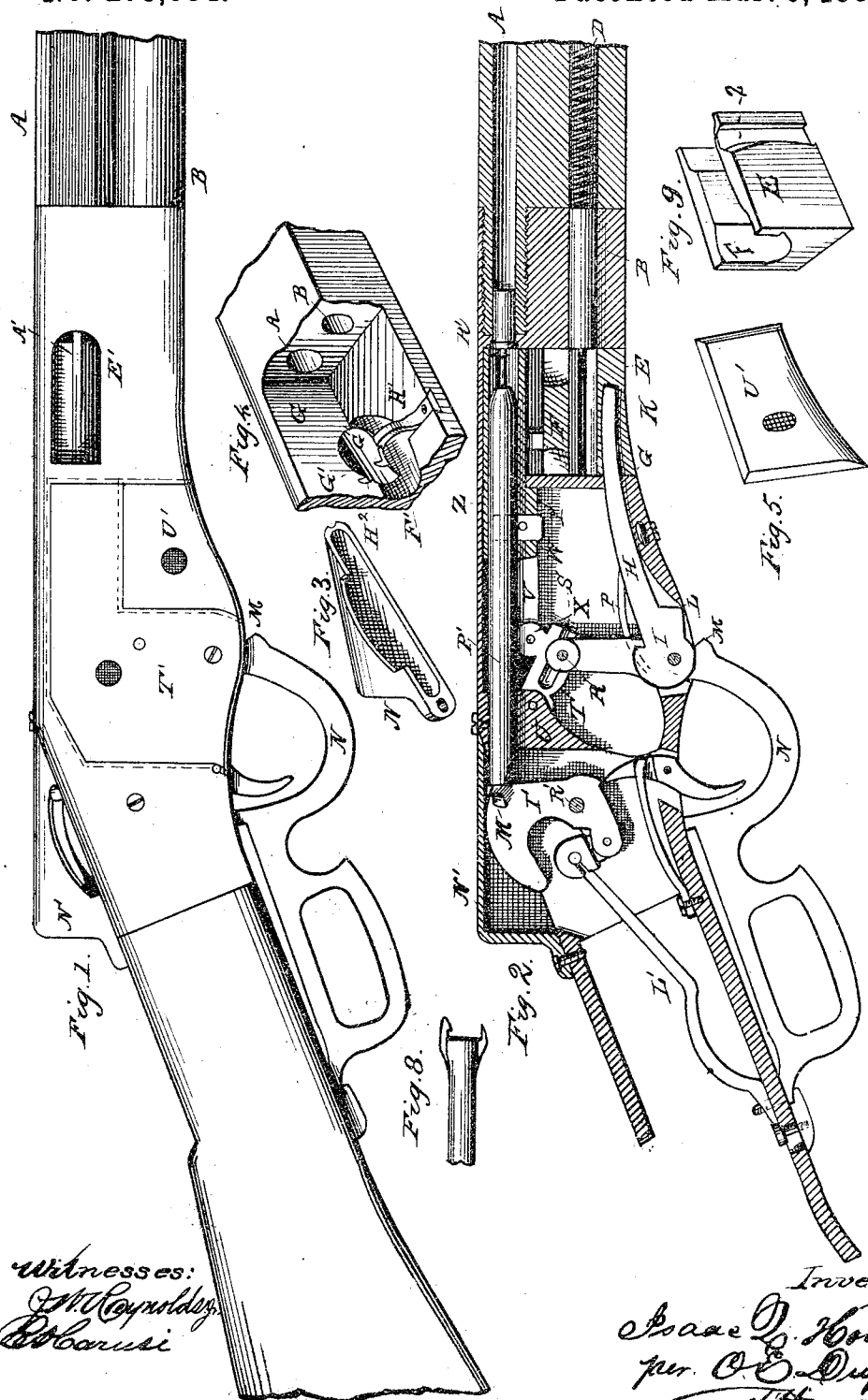
2 Sheets—Sheet 1.

I. Q. HOLMES.

BREECH LOADING FIRE ARM.

No. 273,684.

Patented Mar. 6, 1883.



Witnesses:
J. H. Reynolds
R. C. C. C.

Inventor
I. Q. Holmes
per C. E. Duffy
Atty

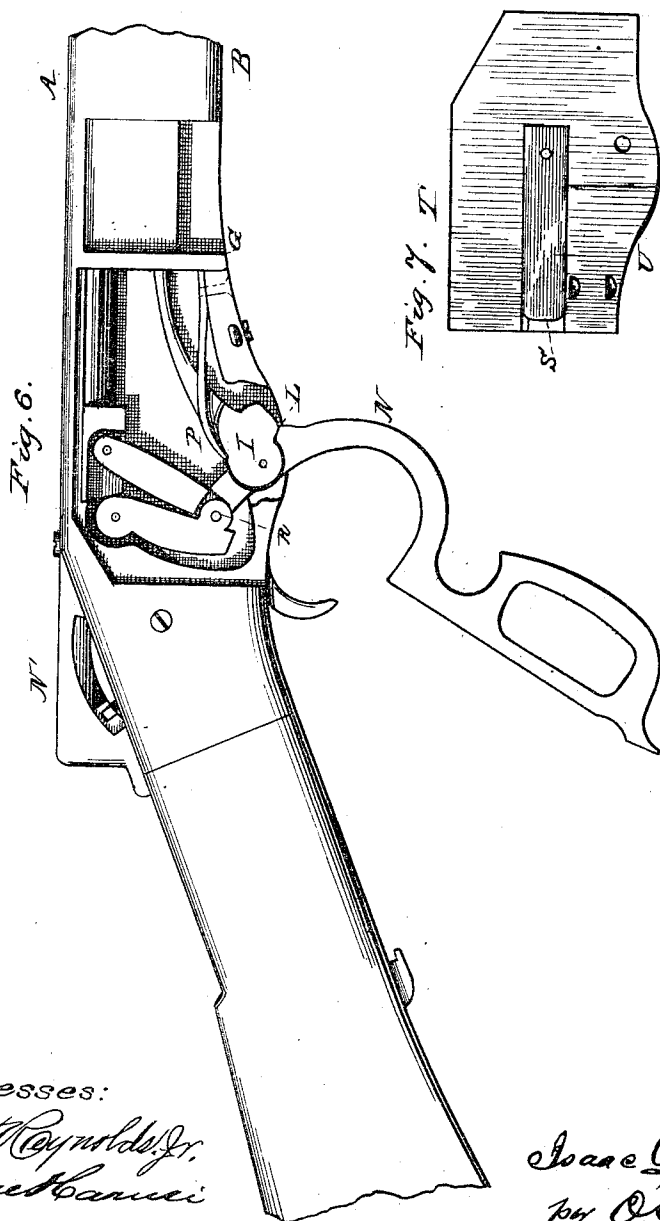
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Witnesses:
J. W. Reynolds, Jr.
August Hamer

Inventor:
Isaac Q. Holmes
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UNITED STATES PATENT OFFICE.

ISAAC Q. HOLMES, OF CLARKSVILLE, ARKANSAS.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 273,684, dated March 6, 1883.

Application filed November 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, ISAAC Q. HOLMES, of Clarksville, in the county of Johnson and State of Arkansas, have invented certain new and useful Improvements in Breech-Loading Guns; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in fire-arms of that class in which the cartridges are automatically loaded from a magazine into the breech of the barrel, and the empty shells automatically discharged; and it has for its object to provide certain improved mechanism for loading and discharging the empty shells and throwing back the hammer to cock the arm, as more fully hereinafter specified. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of a gun embodying my invention; Fig. 2, a longitudinal vertical section of a gun illustrating my invention; Fig. 3, a detached view of a hood which sets over the hammer of the gun; Fig. 4, a detached perspective view of a portion of the breech of the gun, showing the mechanism for discharging the empty shells; Fig. 5, a detached view of a slide for closing the loading-opening. Fig. 6 represents a side elevation with the side plate of the lock-casing removed, showing the parts thrown back in position to force the shell into the breech of the barrel; and Fig. 7, a detached view of one of the sides of the lock-casing, showing a spring-guide by means of which the cartridges are directed into the magazine in loading the same. Fig. 8 shows a detail view of the spring-catch and lug; and Fig. 9, a perspective view of the carrier, taken from the rear side, showing the slot therein.

The letter A indicates the gun-barrel, and B a tubular magazine located directly below it. Both the barrel and magazine are open at the breech, and the magazine is closed at its muzzle by a removable stopper, (not shown,) and has located within it a spiral spring, D,

the object of which is to force the cartridges to the rear and deliver them to a movable carrier-block having the vertical slot 2 in its side E, which is provided with a semi-cylindrical recess, F, on its upper side to receive the cartridges. The said block is located in a vertical recess, G, at the breech of the gun, and is adapted to slide vertically therein, being operated by a lifting-lever, H, fulcrumed at I in the lower part of the gun-casing. The long arm of this lever sets in a recess, K, in the carrier-block, having the vertical slot 2 in its side, and the said lever is provided with a shoulder, L, on its lower side, which is engaged by a shoulder, M, on the guard-lever N of the gun when the same is thrown down, as shown in Fig. 5, so as to elevate the carrier-block and bring the cartridge which it carries in line with the barrel, ready to be forced forward therein by means of the plunger.

The letter P indicates a spring secured within the lock-casing and bearing upon the lifting-lever H, the said spring serving to throw the lever down to return the carrier-block to its normal position. The guard-lever N is pivoted to the pin I, before mentioned, and its inner end is provided with a pin, R, projecting at each side and extending into the grooves S in the inner sides of two short levers, T, between which the inner end of the guard-lever sets and is adapted to work. These levers are fulcrumed to an abutment, U, in the lock-casing, and they are provided with lugs X, between which the arms V are pivoted at one end, the other ends of the arms being pivoted in recess W at the sides of a block, Y, at the rear of the plunger Z. The said plunger is hollow and works through a circular opening in the forward wall of the back casing, into the vertical recess in which the carrier-block slides, and it is provided with a longitudinal groove on one side, in which is located a flat spring, a', fastened to the plunger at its rear, the forward free end of said spring being provided with a beveled catch in order to seize the cartridge for the purpose of withdrawing the empty shell from the barrel. The forward end of the plunger, directly opposite the spring-catch, is provided with a short lug, against which the base of the cartridge rests at the side in order to hold it to the catch until forced onward by

the releasing device. At one side of the breech of the gun is an opening, E', through which the shell is discharged, and in the wall of the opposite side is a recess, F', in which is located a curved metallic shell, G', secured to the free end of a spring, H', fastened within the carrier-block recess. The said shell is provided with projections H², the objects of which are to engage the base of the empty shell when drawn back and discharge it through the opening above mentioned.

The letter I' indicates the hammer, which is located in the rear of the lock-casing and works on a pin, R'.

I' indicates the hammer-spring, secured within the lock-casing, as usual, and connected with the hammer by means of the ordinary link. The upper part of the hammer extends through a slot in the upper part of the lock-casing, and is provided with a lug, M, by means of which it may be cocked by hand when necessary. Above the hammer is located a hood or shield, N', which is fastened to the upper rear part of the lock-casing by means of screws or otherwise, the lug on the hammer working through a slot at one side of said hood or shield. The hammer operates against a sliding rod, P', which extends into the plunger, and is provided at the forward end with a central or firing pin, R', which strikes the cap or priming of the cartridge when the hammer is thrown forward.

The letter S' indicates a leaf-spring secured to the removable side piece, T', of the lock-casing. The said spring is slightly hollowed out longitudinally on its outward side, and is so located as to set directly behind the rear of the magazine when the side T' is in place. The side T' is cut away first opposite the spring, so as to leave an opening for the insertion of the cartridges into the magazine, the spring serving as a guide for the same, and the opening is provided with a small slide, U', by means of which it may be closed.

The operation of my invention will be evident from the above description, and is as follows: The cartridges are inserted one by one at the rear of the magazine by pressing them upon the spring and forcing them forward through the recess in the carrier-block, which is thrown down for the purpose. When the magazine is fully charged the carrier-block is elevated by means of the levers and the plunger forced forward, carrying one of the cartridges before it into the breech of the gun-barrel. The depression of the guard-lever causes the hammer to be thrown back and cocked, making the gun ready for firing. After discharging the gun,

upon again throwing down the guard-lever, the plunger will be withdrawn, and with it the shell of the cartridge, and when the shell has cleared the barrel the lugs on the shell, attached to the spring before mentioned, will engage the empty cartridge-shell, and the spring will force it out of the opening at the side of the carrier-block recess. The breech-block will also be thrown down to receive a new cartridge from the magazine, and the hammer will be thrown back, ready for loading and firing the gun.

Having thus described my invention, what I claim as new is—

1. The combination, in a magazine-gun, of the carrier-block located and adapted to slide in a vertical recess at the breech of the gun, and provided with a receiving-recess, as described, on its upper side, and with a vertical slot in its side for operating the ejector, and in combination an ejector located substantially as described, and the lifting-lever and guard-lever, whereby the carrier-block and ejector are operated, as specified.

2. In combination with the carrier-block provided with the vertical slot for operating the ejector when said carrier is in motion, the magazine, the spring lifting-lever, the guard-levers, the hollow plunger, and the spring-catch and lug, and the connecting-lever, whereby said plunger is operated by the guard-lever, the whole arranged for joint operation, as described.

3. In combination with the carrier-block slotted on its side, the plunger, and its spring-catch and lug-extractor and retaining-pin, the ejector provided with lugs and secured to a spring fastened in the receiver, whereby the empty shell is discharged sidewise when drawn back, substantially as specified.

4. In combination with the magazine and the sliding carrier provided with a vertical side slot, the ejector and the guide-spring arranged so that a cartridge can be fed into the carrier, all arranged to supply the barrel of the gun, the parts being also arranged to discharge the empty shell from the side of the gun, as specified.

5. In combination with the lock-casing, the hood secured to the rear thereof, over the hammer, and provided with a recess through which the lug on the hammer projects, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ISAAC Q. HOLMES.

Witnesses:

B. F. MORSELL,
O. E. DUFFY.