

(No Model.)

J. WARNANT-CREON.

3 Sheets—Sheet 1.

BREECH LOADING GUN.

No. 445,880.

Patented Feb. 3, 1891.

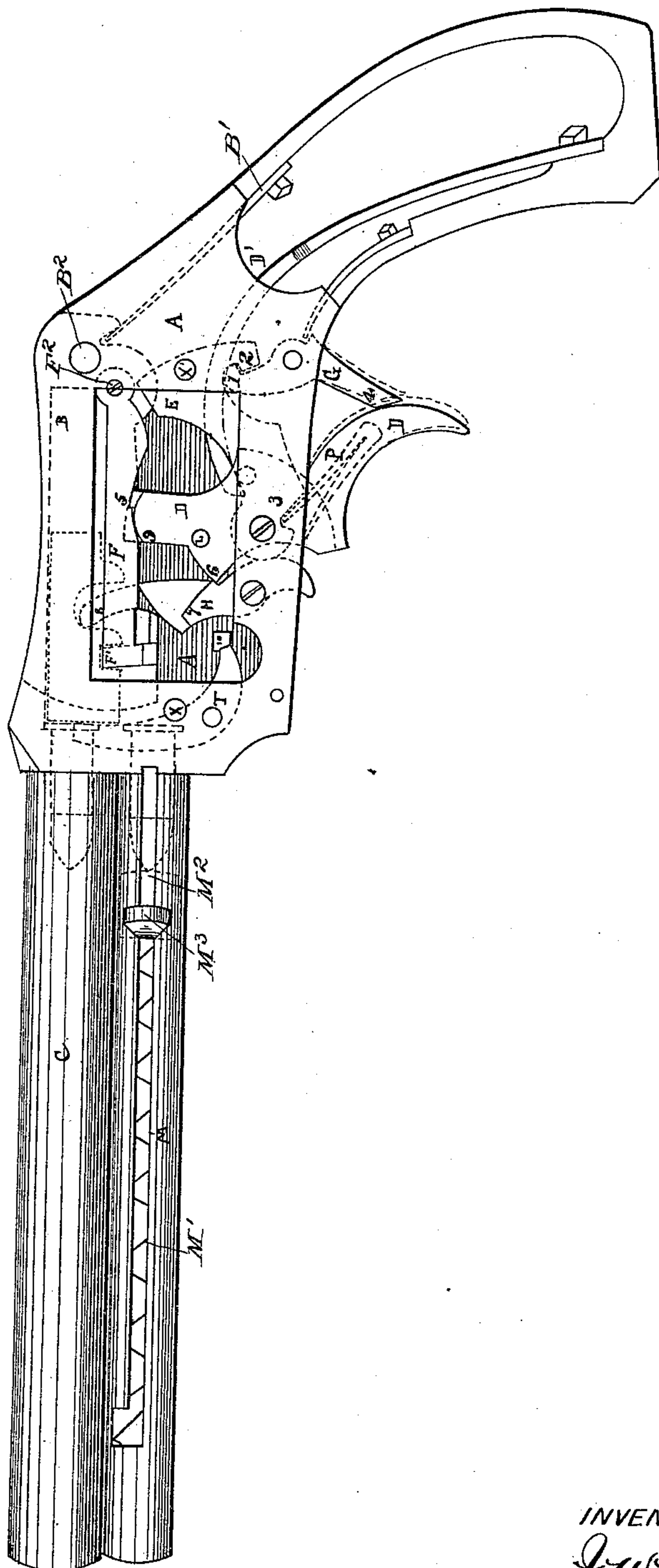


Fig. 1.

WITNESSES:

J. E. Criswell

C. Sedgwick

INVENTOR:

BY *J. W. Creon*

Mum & Co

ATTORNEYS.

(No Model.)

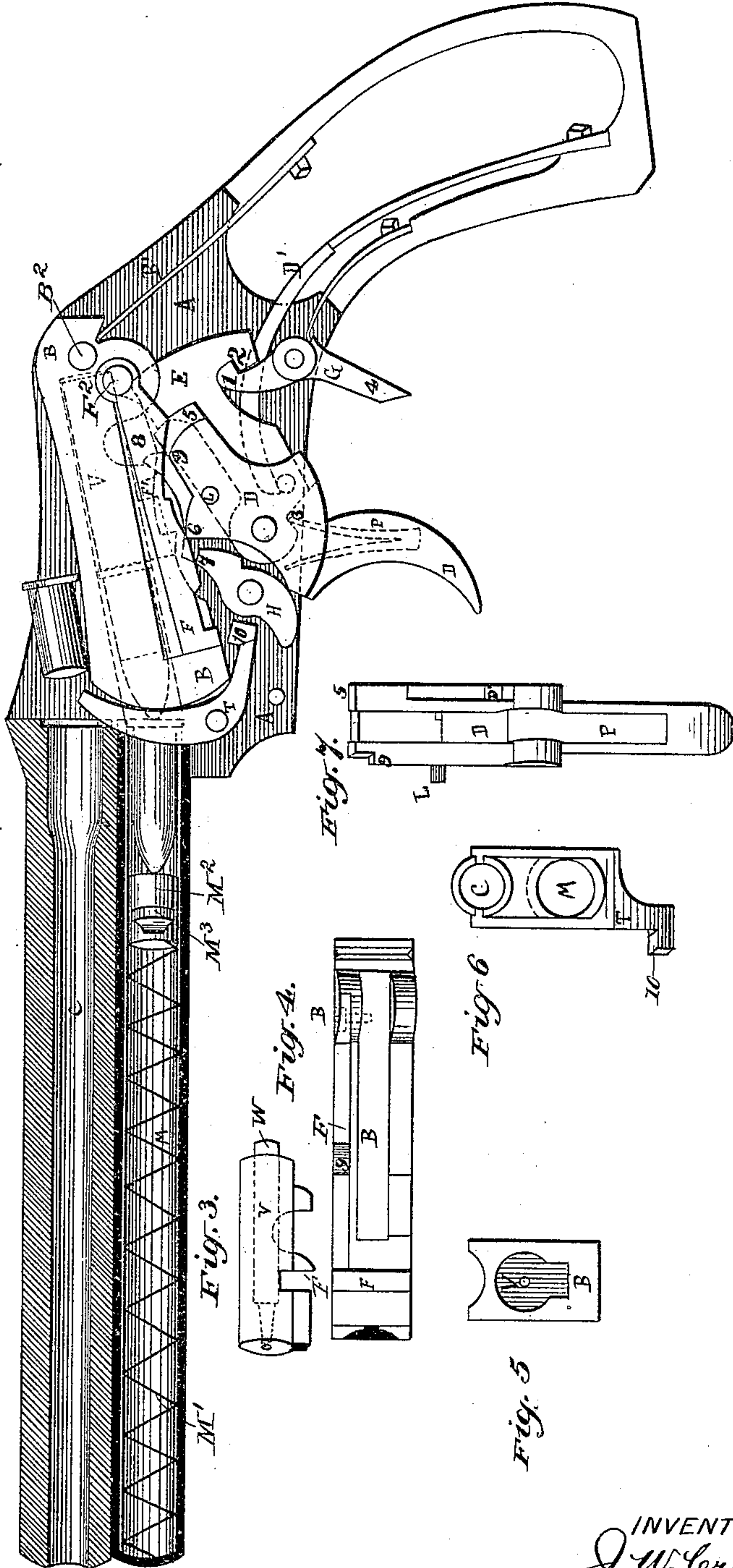
J. WARNANT-CREON.
BREECH LOADING GUN.

3 Sheets—Sheet 2.

No. 445,880.

Patented Feb. 3, 1891.

Fig. 2.



WITNESSES:

J. A. Griswold
C. Sedgwick

INVENTOR:

J. W. Creon
BY *Munn & Co*

ATTORNEYS.

(No Model.)

J. WARNANT-CREON.
BREECH LOADING GUN.

3 Sheets--Sheet 3.

No. 445,880.

Patented Feb. 3, 1891.

Fig. 10.

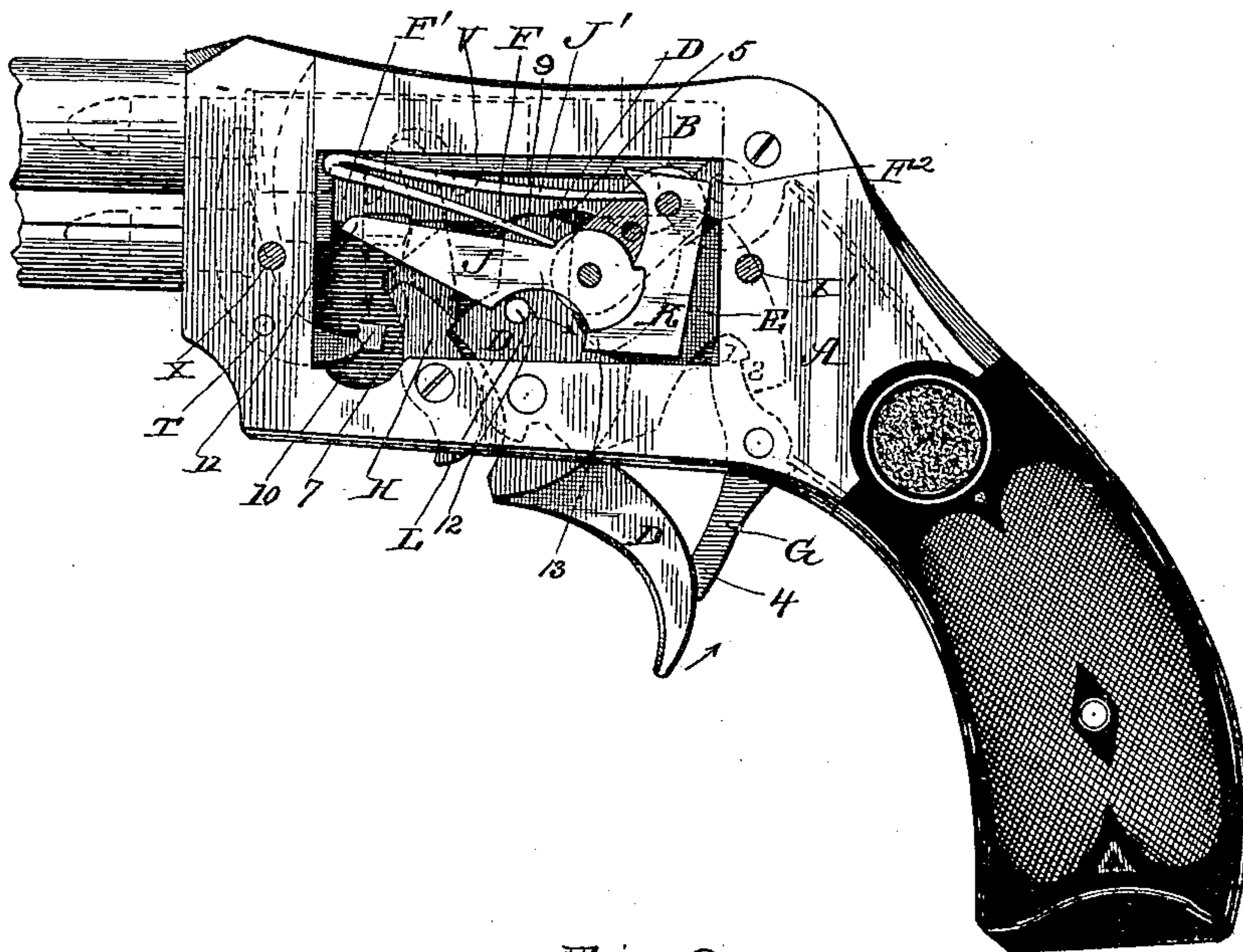


Fig. 8.

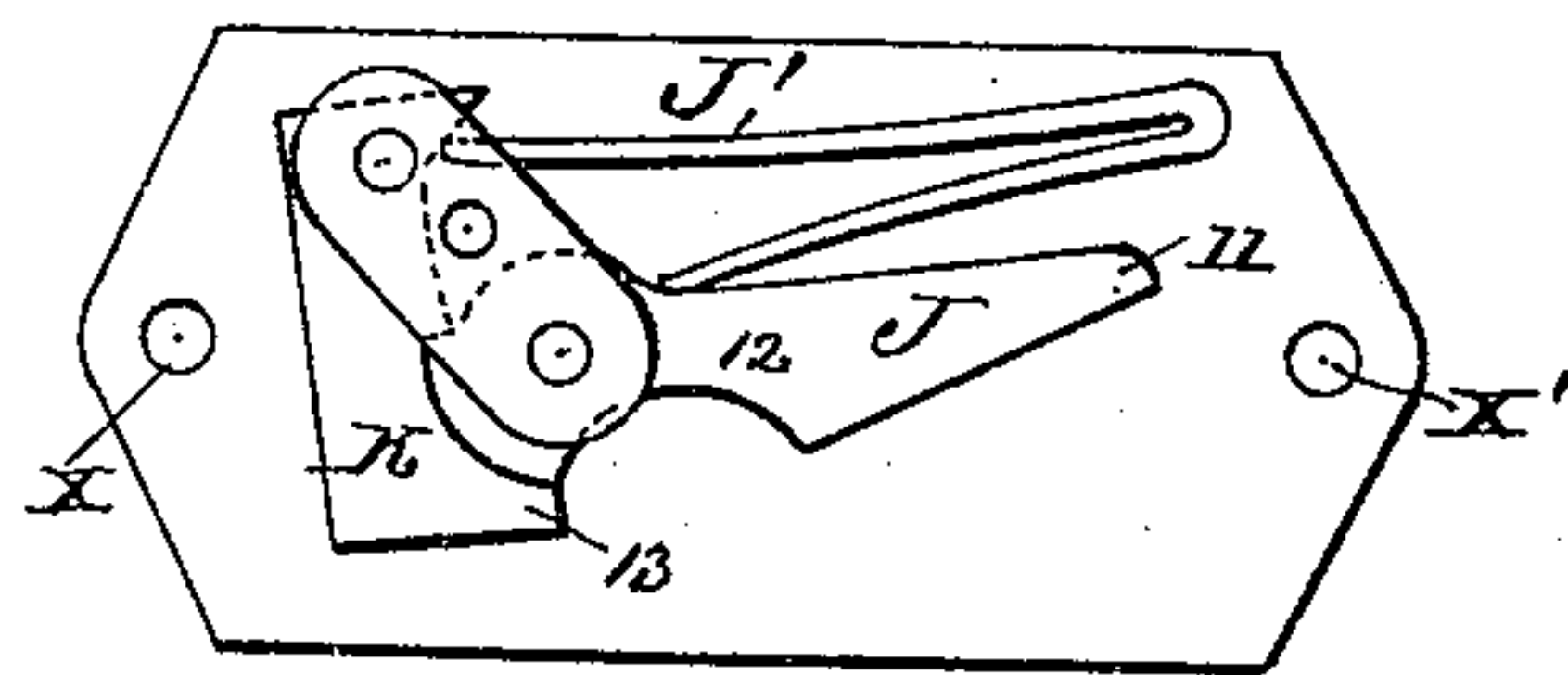
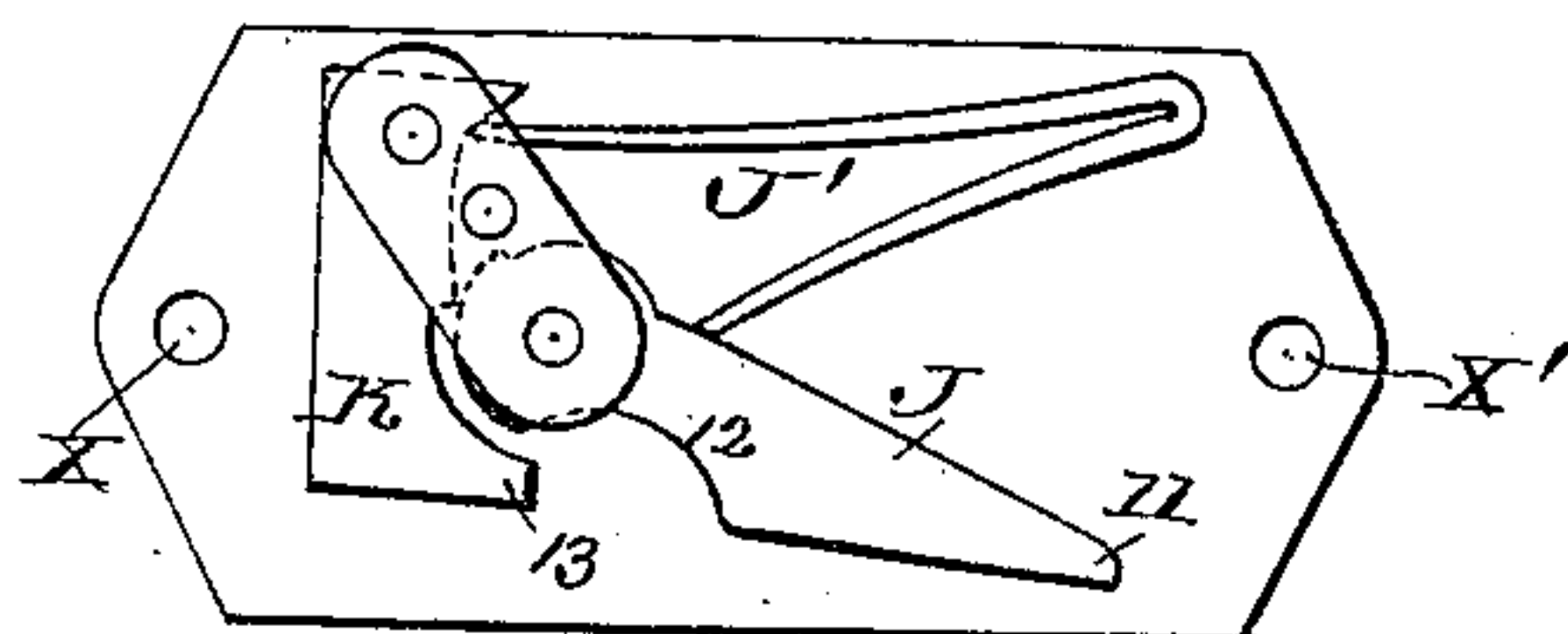


Fig 9



WITNESSES:

Jos. A. Ryan
 Geo. H. Coats

INVENTOR:

INVENTOR:
J. W. Creon.

BY *Maam* 

ATTORNEYS

UNITED STATES PATENT OFFICE.

JULIEN WARNANT-CREON, OF HOIGNÉE-CHÉRATE, BELGIUM.

BREECH-LOADING GUN.

SPECIFICATION forming part of Letters Patent No. 445,880, dated February 3, 1891.

Application filed April 1, 1890. Serial No. 346,150. (No model.) Patented in Belgium October 4, 1889, No. 87,986; in France February 13, 1890, No. 203,765; in England February 17, 1890, No. 2,543; in Germany February 20, 1890, No. 53,995; in Italy February 24, 1890, No. 27,029/154, and in Austria-Hungary February 24, 1890, No. 9,624 and No. 26,712.

To all whom it may concern:

Be it known that I, JULIEN WARNANT-CREON, a subject of the King of Belgium, and residing at Hoignée-Chératte, Belgium, have
5 invented a new and Improved Magazine Fire-Arm, (which is patented in France, dated February 13, 1890, No. 203,765; in Great Britain, dated February 17, 1890, No. 2,543; in Belgium, dated October 4, 1889, No. 87,986; in
10 Italy, dated February 24, 1890, No. 27,029/154; in Austria-Hungary, February 24, 1890, No. 9,624 and No. 26,712, and in Germany, February 20, 1890, No. 53,995,) of which the following is a full, clear, and exact specifica-
25 tion.

The object of the invention is to provide a new and improved magazine fire-arm, which is simple and durable in construction, very effective in operation, self-loading and self-
20 cocking, and automatically ejects the empty cartridge-shell.

The invention consists of a bolt arranged in the casing and which is pushed back by the entrance of the cartridge, and when the
25 breech-block is in line with the barrel proper the bolt, being acted upon by a lever controlled by the trigger, pushes the cartridge into the barrel and becomes fixed or locked by a locking-bar engaging a transverse notch
30 in the bolt, which latter contains the firing-pin, and also forms the abutment at the base of the cartridge at the time of the discharge.

The invention further consists of a projection on the trigger which effects the closing
35 of the breech and simultaneously sets the hammer at full-cock, it being held in this position by an independent sear arranged behind the trigger and released only when the trigger is pulled back far enough to operate
40 it, the mainspring of the trigger then being in full tension.

The invention further consists of an ejector, which is of the usual construction, except that it is operated by a side lever and a spring,
45 which is suddenly released when the free end of the breech-block falls sufficiently to clear the barrel.

The invention also consists of certain parts and details and combinations of the same, as
50 will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures. 55

Figure 1 is a side elevation of the improvement with parts of the extracting mechanism removed. Fig. 2 is a sectional side elevation of the same with the breech-block in a lowermost position. Fig. 3 is a side elevation of
60 the bolt containing the firing-pin. Fig. 4 is an inverted plan view of the breech-block. Fig. 5 is an end view of the same. Fig. 6 is a face view of the extractor. Fig. 7 is an end view of the trigger. Fig. 8 is a side elevation
65 of part of the extracting mechanism. Fig. 9 is a similar view of the same in a different position; and Fig. 10 is a side elevation, the ejecting mechanism being shown in its relation to the other mechanisms. 70

The improved magazine fire-arm is provided with a suitably-constructed casing A, in the front end of which are fixed the barrel C and the magazine M, one located above the other. In the magazine M is arranged a spiral spring
75 M', provided with a thimble M² and a button M³, which extends through a slot in the side of the magazine and serves to move the thimble outward when filling the magazine with cartridges. When released, the thimble M²,
80 by the action of the spring M', serves to move the cartridges into the casing A.

The breech-block B, provided with a longitudinal aperture, is pivoted at B² in the casing A, and is adapted to register at its front end
85 opening with the barrel C and the magazine M. A spring B', secured in the casing A, presses against the under side of the said breech-block near its pivot-pin, so as to hold the said breech-block in a lowermost position,
90 as illustrated in Fig. 2, in order to receive a cartridge from the magazine M.

In the longitudinal aperture of the breech-block is fitted to slide a bolt V, which supports the firing-pin W, and is pressed rear-
95 ward by the entrance of a cartridge into the opening of the breech-block. The mechanism of the lock or action is provided with a trigger D, having the form of a detent and supporting a spring P, which acts on the ham-
100 mer E, fulcrumed loosely on the pivot of the trigger D. The latter is always returned to

its normal position (shown in Fig. 2) by the action of a spring D', secured in the casing A. When the trigger D is in its normal position, the catch 1 of the sear G engages the notch 2 of the hammer E and holds it back, while the trigger D is actuated for raising the breech-block B. As the trigger D is actuated it causes the spring P to approach the resisting-point of the hammer E, which is at the end of the branch 3, so that the spring is compressed, as shown in Fig. 1. The contact of the trigger with the end 4 of the sear disengages the latter from the hammer E, so that said hammer is free to be acted on by the previously-compressed spring P, whereby the hammer swings upward and forward and strikes the pin W in the bolt V. By the turning movement of the trigger D its end 5 comes in contact with the lower face of the breech-block B, which is thus raised into the position shown in Fig. 1, so that its longitudinal opening, which contains the cartridge, stands in line with the barrel C.

A pivot is arranged in front of the trigger D, and on it is held a lever H, the upper end 8 of which is adapted to engage the bolt V, and is also provided with a sliding shoulder 7, adapted to be operated on by a nose 6, formed on the trigger D. When the said nose 6 of the lever engages the shoulder 7, the lever H is thrown forward, so that the latter carries the bolt V in the same direction, whereby the cartridge is pushed into the barrel C. The return of the bolt is obtained by the action of the trigger D on the tail end of the said lever H.

The closing is secured by an elbow piece F, pivoted on the breech-block B near its rear end at F², so as to permit the piece F to swing up and down. A transverse bar is formed on this elbow-piece F and occupies the whole thickness of the block, in which is formed a corresponding slot for its reception. The closing piece F swings upward when engaged by the shoulder 9, formed on the upper end of the trigger D, and the said transverse bar enters and fills the slot F' of the bolt V, so as to fasten it securely, to form a good resistance to withstand the shock of the discharge.

The extractor T is arranged in the form of an L-shaped lever, and is provided at its upper end with a fork, between the prongs of which the cartridges from the magazine M can pass, the prongs extending in the rear of the flange of the cartridge, so that the extractor can withdraw the cartridge-casing after the discharge.

The lower end of the extractor T is provided with a block 10, adapted to be engaged by the end 11 of a hammer J of the ejector mechanism. (Shown more fully in detail in Figs. 8 and 9.) The ejector mechanism is provided with the hammer J, a detent or catch K, and a double spring J', each branch of which acts on one of the parts J or K. The entire ejector mechanism is mounted on a cover-plate, which is fastened by two screws

X and X' over the open side of the casing A. A lug L projects from one side of the trigger D, and is adapted to engage the hammer J of the ejector mechanism at 12, so as to move the said hammer-lever J to its set position, as shown in Figs. 8 and 10, when the trigger D is pulled back. When the spring D' returns the trigger to its normal position, the lug L abuts against the end 13 of the detent K and disengages it from the said hammer or lever J. The hammer J of the ejecting mechanism, when so released, strikes on the block 10 of the extractor T, throwing its forked end rearward, and the cartridge-shell is extracted quickly from the barrel, which at this time is uncovered, as the breech-block B is in its lowermost position, into which it is forced by the action of the spring D'.

When the fire-arm is in the position shown in Fig. 2, the cartridge-shell has just been drawn out of the barrel C by the extractor T and rests on top of the breech-block B, and the latter is in its lowermost position and receives a cartridge from the magazine M, pressed into the longitudinal aperture of the breech-block and moving the bolt V into the rearmost position. When the operator now presses the trigger D rearward, the breech-block B is swung upward by the upper end of the trigger and at the same time the bolt V is shoved forward by the action of the said trigger on the lever H, which, by its arm 8, engages the said bolt. The latter is locked in place, as previously described, and the cartridges in the magazine M are locked in place by the extractor T. Now, when the operator presses the trigger D back still farther, the sear G is acted on by the said trigger and releases the hammer E, which swings upward and forward by the action of the spring P, so that the firing-pin W is struck and the arm is discharged. As soon as the operator releases the pressure on the trigger D the spring D' forces the same into its normal position, so that the breech-block is free to swing downward, the empty shell of the cartridge is extracted, as previously described, and a new cartridge passes into the breech-block B, so that the arm is again ready to be loaded and fired on pressing the trigger.

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

1. In a magazine fire-arm, a movable breech-block having a cartridge-receiving aperture, a bolt sliding in said aperture to throw the cartridge into the barrel and form an abutment therefor, a locking-bar pivoted to the breech-block to engage said bolt when it is thrown and lock it against retraction, and a firing-pin carried by the said bolt, substantially as described.

2. In a fire-arm, the combination, with a trigger having a spring for returning it to its normal position, of a firing-hammer in the path of and brought to the full-cock by the rearward movement of the upper part of the trig-

ger and released by the rearward movement of the lower part of the trigger, substantially as described.

3. The combination, with a trigger pivoted
5 between its ends and having a spring for returning it to its normal position, of a firing-hammer in the rearward path of the upper end of the trigger and brought to the full-cock thereby, a spring carried by the trigger,
10 engaging the hammer to throw it, and a sear behind the trigger and in the rearward path of its lower end and holding the hammer at full-cock, substantially as described.

4. The combination, in a magazine fire-arm
15 provided with a vertically-movable breech-block having a cartridge-receiving aperture and carrying the firing-pin, of a trigger pivoted between its ends, with its upper end engaging the lower side of the breech-block to
20 throw it upward, a spring for returning the trigger to its normal position, a sear behind the trigger in the path thereof, a firing-hammer in the rearward path of the upper part of the trigger and thrown thereby into engage-
25 ment with its sear, and a hammer-operating spring carried by the trigger and compressed when the trigger is pulled, substantially as described.

5. The combination, with a magazine-gun
30 provided with an ejecting mechanism, and a swinging breech-block apertured for the cartridge and carrying the firing-pin, of a hammer, a trigger having a spring for returning it to its normal position and simultaneously
35 throwing the hammer rearward to the full-cock, a sear in rear of the trigger and holding the hammer cocked till struck by the trigger, a hammer-operating spring carried by the trigger and engaging the hammer, and a
40 projection on the trigger to operate the ejecting mechanism, substantially as described.

6. In a fire-arm, the combination, with a pivoted trigger and a firing-hammer mounted on the same pivot, of a spring for returning
45 the trigger when released to its normal position, the said hammer projecting into the rearward path of the upper part of the trigger and brought to the full-cock thereby, a sear engaging the hammer when retracted
50 and projecting into the rearward path of the lower part of the trigger, and a hammer-operating spring mounted on the trigger and compressed to throw the hammer by pulling on the trigger, substantially as set forth.

55 7. In a magazine fire-arm, the combination, with a spring-pressed pivoted trigger and a spring held on the same, of a pivoted breech-block adapted to be moved upward by the said trigger, a hammer fulcrumed loosely on the
60 pivot of the said trigger and adapted to pass into the said breech-block by the action of the said spring on the trigger, and a firing-pin

held in the said breech-block and adapted to be engaged by the said hammer, substantially as shown and described.

8. In a magazine fire-arm, the combination, with a swinging breech-block provided with a longitudinally-sliding bolt to seat the cartridge and form an abutment therefor, of a trigger pivoted between its ends and engaging
65 the lower side of the breech-block with its upper end to raise it when said end is thrown forward, and a lever pivoted between its ends in front of said trigger and engaging the said bolt with its upper end, said trigger
70 when pulled engaging the upper half of the lever and throwing it and the return movement of the lower half of the trigger striking the lower part of the lever to retract the bolt, substantially as set forth.

9. In a fire-arm, the combination, with the pivoted ejector, of a spring-pressed lever or hammer J, into the path of which the said ejector projects, a detent K for holding said
85 hammer retracted or set, and a trigger for releasing the said detent, substantially as set forth.

10. In a fire-arm, the combination, with the main operating-trigger pivoted between its ends and having a spring for throwing it into
90 normal position, of an ejector pivoted in front of the upper end of the trigger, a pivoted lever or hammer, the front end of which is adapted to operate the said ejector, a pivoted detent engaging the rear end of said lever or
95 hammer to hold it set, a spring bearing at its ends on the said hammer and its detent, and a projection on the upper part of the main trigger to set the said hammer when the trigger is pulled and release the detent when the
100 trigger is returned by the spring to its normal position, substantially as set forth.

11. The combination, in a magazine-gun having a vertically-swinging longitudinally-apertured breech-block provided with a slid-
105 ing cartridge-projecting bolt forming an abutment and provided with a firing-pin, of an ejecting mechanism, a trigger having a projection to operate said ejecting mechanism, a spring returning the trigger to its normal position, a lever in front of the trigger to throw the said bolt when the trigger raises the breech-block and retract the bolt when the trigger is released and the block descends, and
110 a hammer brought to the full-cock by the trigger when the latter is released and released by pulling the trigger, substantially as described.

In witness whereof I have hereunto signed my name, in the presence of two subscribing witnesses, this 3d day of March 1890.

JULIEN WARNANT-CREON.

Witnesses:

ED. WERVIN,
C. DASSY.