

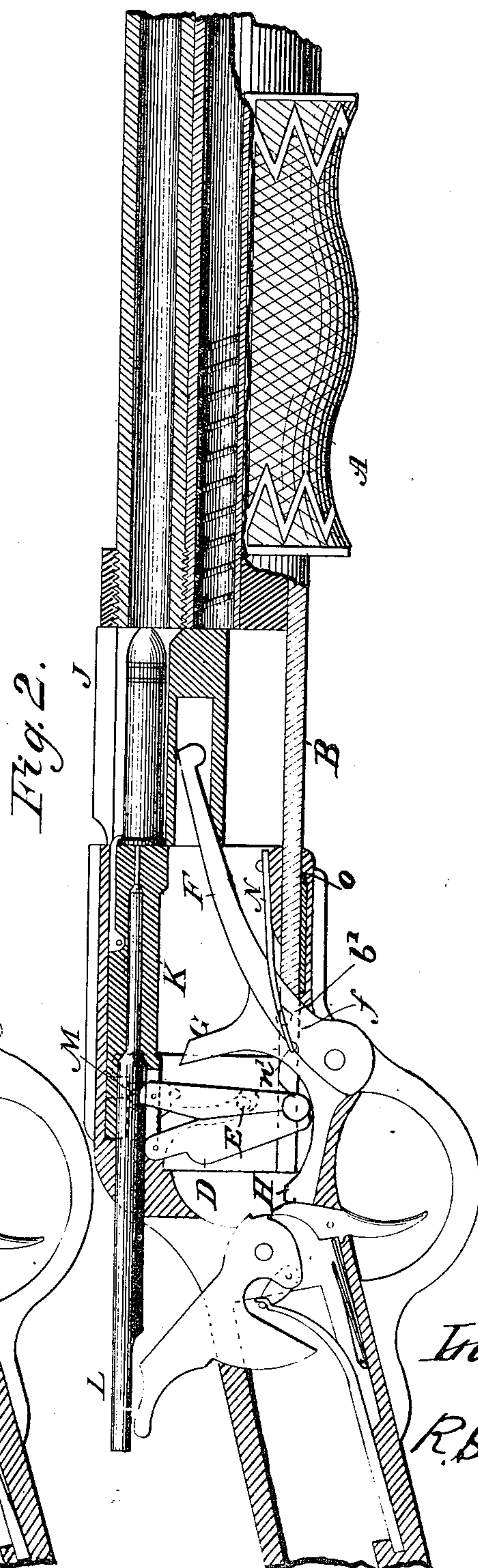
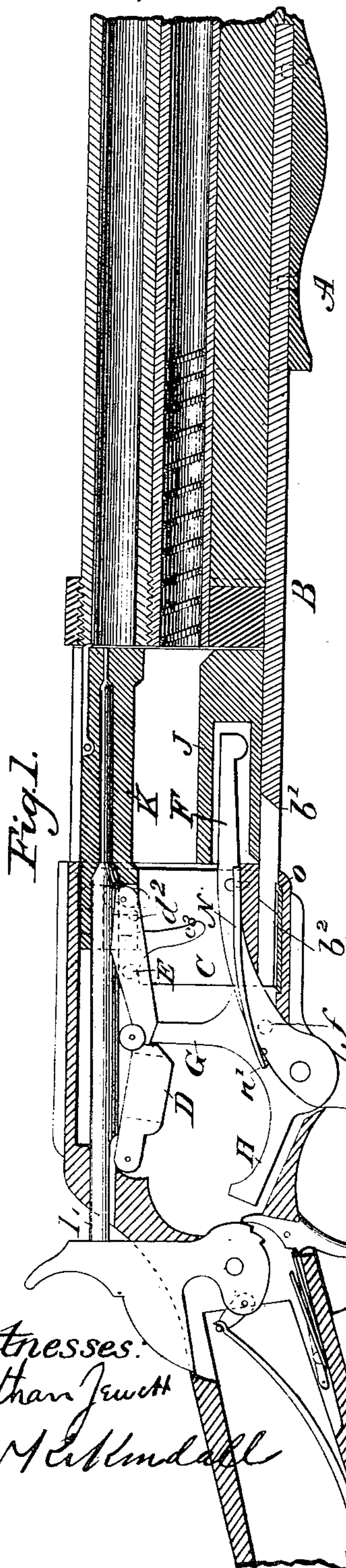
(No Model.)

2 Sheets—Sheet 1.

R. S. CHAFFEE.
MAGAZINE FIRE ARM.

No. 368,933.

Patented Aug. 30, 1887.



Witnesses:
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L W Kendall

Inventor:
R. B. Chaffee

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

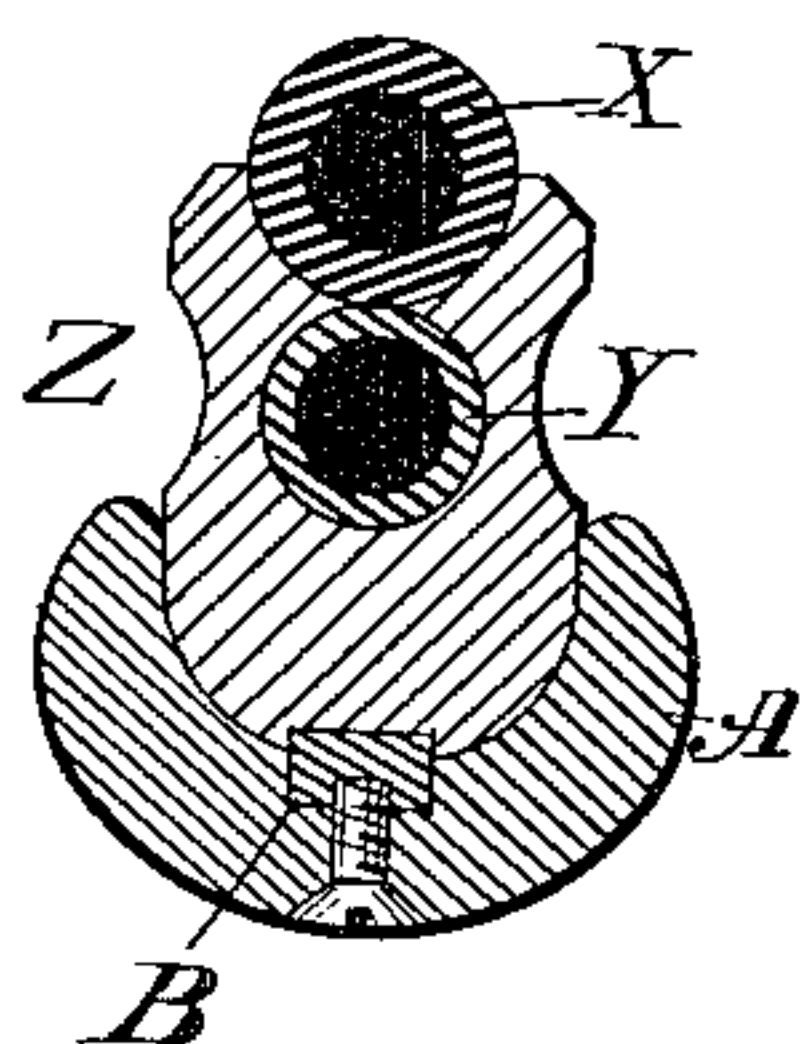


Fig. 4.

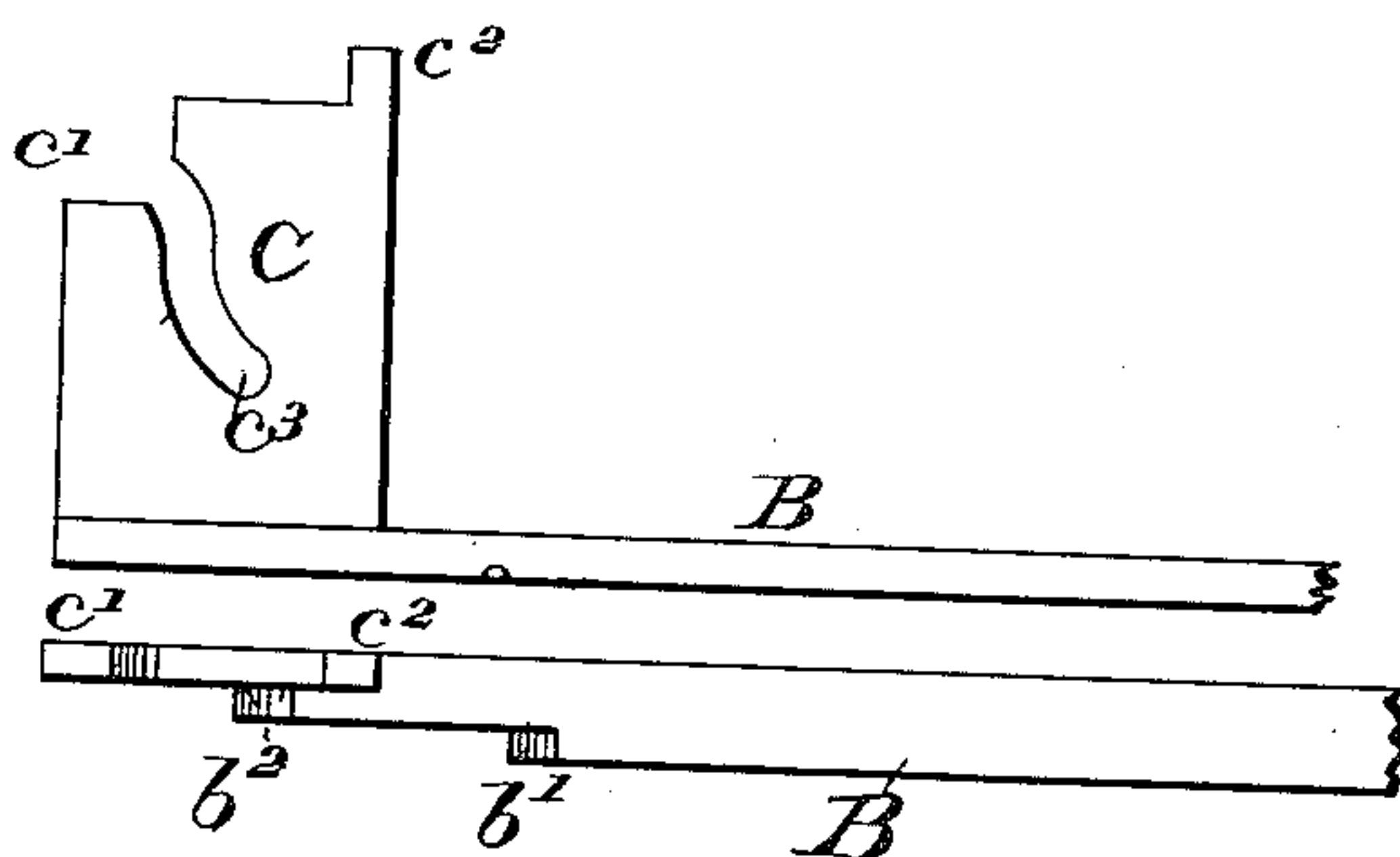


Fig. 5.

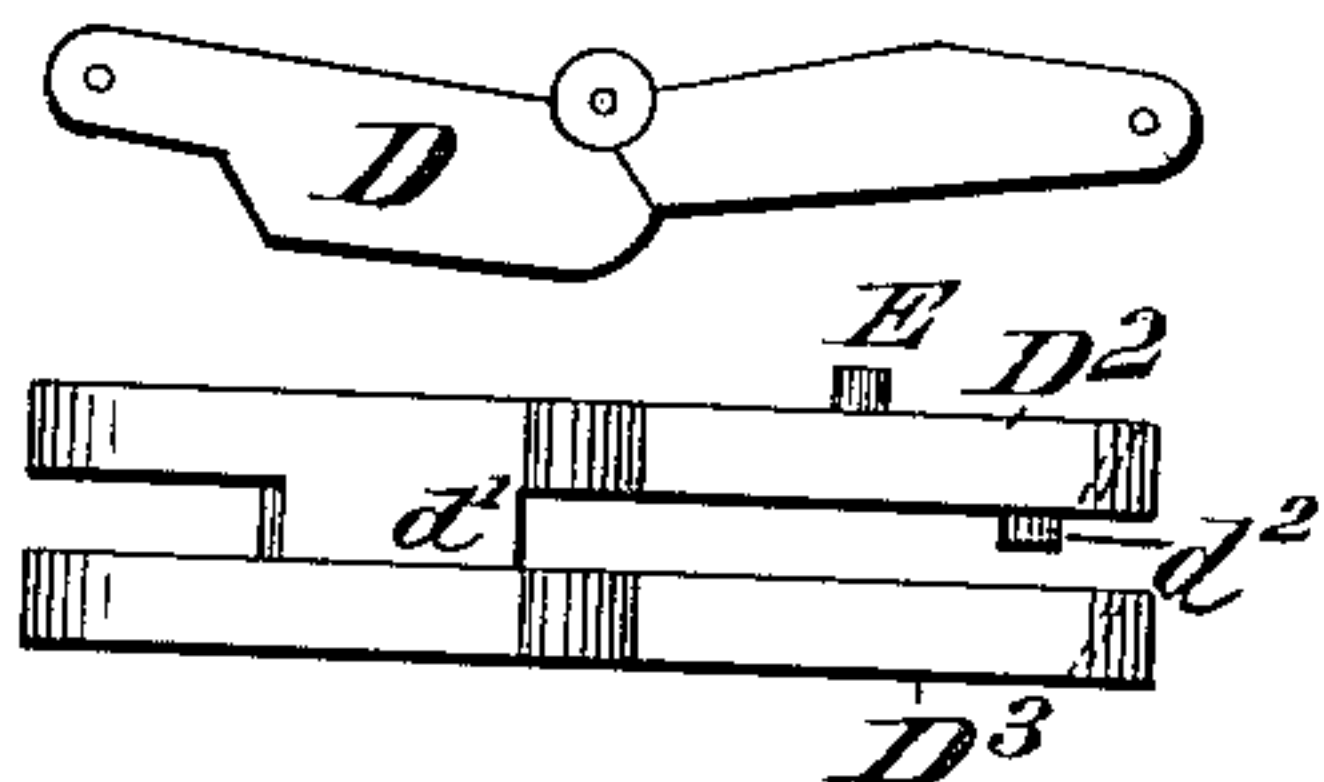


Fig. 7.

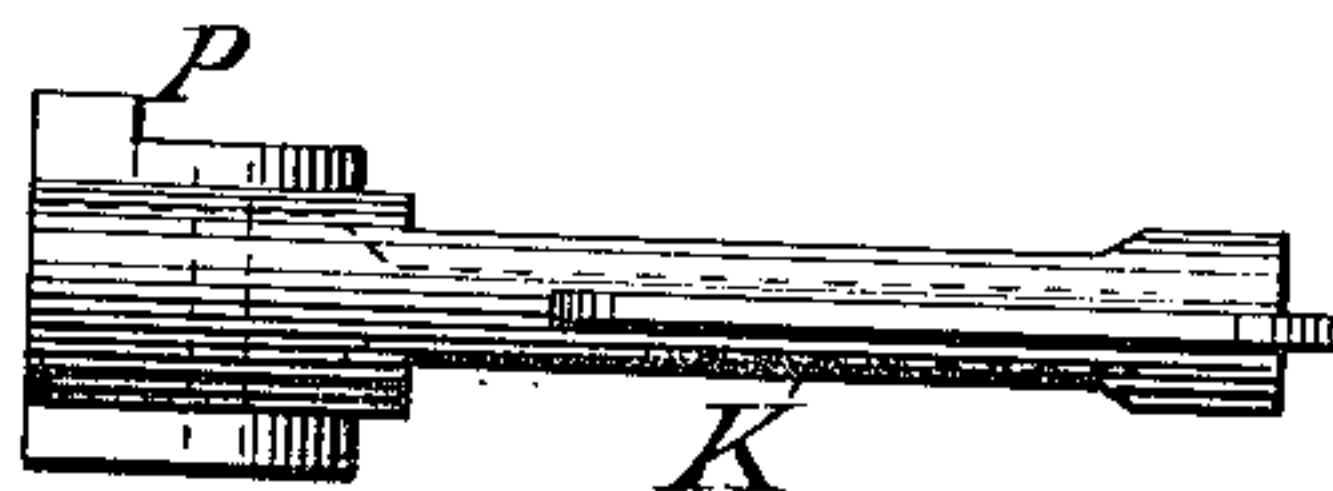
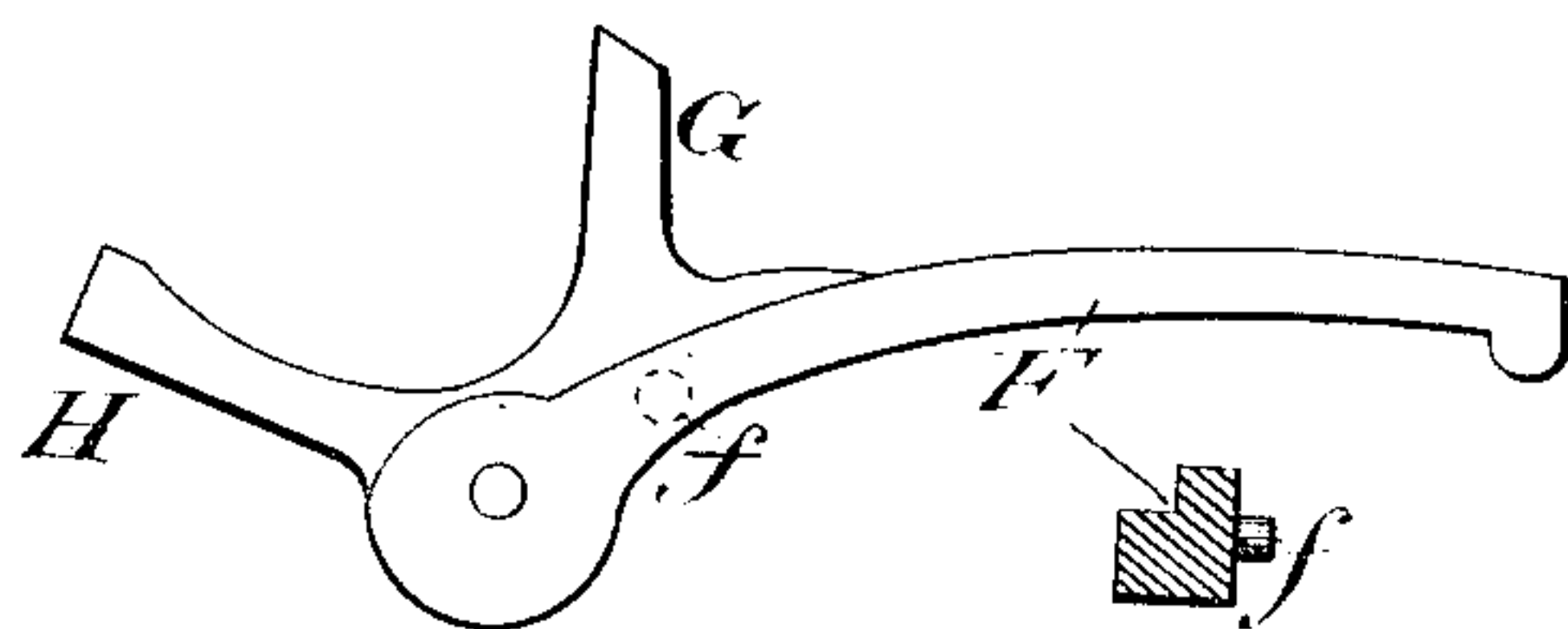


Fig. 6.



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UNITED STATES PATENT OFFICE.

REUBEN SHIPLEY CHAFFEE, OF SPRINGFIELD, ILLINOIS.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 368,933, dated August 30, 1887.

Application filed January 8, 1887. Serial No. 223,707. (No model.)

To all whom it may concern:

Be it known that I, REUBEN SHIPLEY CHAFFEE, of Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Magazine Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification.

The object of my improvement is to make an easier-working and also a lightning-motioned magazine fire-arm, which can be operated with ease without taking the gun from the shoulder or the finger off the trigger.

The invention is based on the well-known Winchester-rifle type, from which I discard the reloading-lever and certain other parts and substitute a construction hereinafter described.

The invention relates more particularly to a hand-hold and sliding cam-plate adapted to move parallel with the barrel of the weapon and certain connections whereby this longitudinal straight-line movement is capable of performing the various operations incident to the repeated firing of a magazine-rifle in a simple and effective manner.

My invention can best be understood by reference to the accompanying drawings, in which I have shown a means for carrying it into effect.

In said drawings, Figure 1 represents in longitudinal vertical section a rifle of the Winchester type modified in accordance with my invention. The position of the parts is that after firing. Fig. 2 is a similar sectional view with the breech-pin withdrawn and a cartridge raised to position for reloading. Fig. 3 is a cross-section through the sliding bar and hand-hold. Fig. 4 shows, by a side and plan view, the rear portion of the sliding cam-bar detached. Fig. 5 shows, by a side and plan view, the links for operating the breech-pin. Fig. 6 shows, by a side and sectional view, the carrier-block lever; and Fig. 7 is a plan view of the breech-pin.

The barrel X, magazine Y, stock Z, carrier-block J, firing-pin L, retractor M, retractor-pin d' , carrier-block spring N, and the hammer and

trigger with their springs belong to the well-known Winchester rifle and need no description.

B is a sliding bar properly seated in the under side of the stock, and adapted to be moved forward and backward by the hand-hold A, secured thereto.

C is a plate forming virtually a part of the bar B, and provided with various operating-surfaces, hereinafter described. The plate has suitable sliding engagement with the receiver, and is cut away on one side, as shown at b' .

D D' D' (shown detached in Fig. 5) are links hinged together and pivoted at their ends, as shown, by which the movement of the breech-pin K is governed. Upon the latter is a shoulder, P, (see Fig. 7,) situated in the path of the lug c' on plate C.

E is a pin projecting laterally from the link D', and adapted to be engaged and held up by the surface c' of plate C when the links are straightened out into the position shown in Fig. 1, thus locking the breech-pin in its forward position. A cam-slot, c'' , in plate C, by the engagement of its upper forward face with the pin E, is adapted to initiate the downward movement of the pin and links. The lug c' , engaging with shoulder P, co-operates with the slot c'' in the latter part of said downward movement. When the parts A B C are returned to their forward position, the rear face of said slot serves to raise the pin, and consequently the links, and thus return the breech-pin to introduce the cartridge and close the barrel.

The above operation also cocks the hammer in the ordinary way through the medium of the firing-pin L.

The movement of plate C, just described as effecting the withdrawal of the breech-pin, also brings the cartridge up from the magazine into line between the barrel and breech-pin by appliances which will now be described.

The carrier-block J, when in its lower and normal position in the receiver—if the magazine be wholly or partly charged—will always contain a cartridge, as is usual.

A pivoted lever, F, termed by me the "carrier-block" lever, is adapted to engage with

the block J in any suitable manner. In the construction shown it enters a chamber in the block for about half of the length of the latter, so as to be able to bear upon the same at approximately its middle. A pin, *f*, projecting laterally from lever F, is situated in the path of the incline or cam *b'* of bar B.

G is an upwardly-projecting arm moving with and preferably in the same piece with lever F, and adapted to be engaged with a shoulder, *d'*, Fig. 5, on link D.

H is a second arm, also rigid and moving with lever F, which is of such length as to abut against the forward side of the upper end of the trigger when the lever F and block J are up, and thus prevent any accidental disengagement of the trigger from the hammer at such times.

The operation of the invention, beginning with the position of the parts shown in Fig. 1, is as follows: To bring the cartridge into position for firing, the operator, ordinarily with his left hand, slides the hand-hold, by which he will be supporting the weapon in firing position, backward, carrying with it bar B and plate C. Pin E is released by surface *c'* and depressed by slot *c'*. Lug *c'*, striking shoulder P, also co-operates in carrying down the links D D' D'', and consequently withdrawing breech-pin K and cocking the hammer. Incline *b'*, having met pin *f*, raises lever F, with the carrier-block J and contained cartridge, into line with the barrel, Fig. 2. At the same time arm H abuts the trigger and prevents its displacement. A forward movement of hand-hold A returns plate C. Slot *c'* raises pin E with the links, forcing forward breech-pin K to load and close the barrel, and locking it by surface *c'*. As the cartridge is taken from carrier-block J, shoulder *d'*, striking arm G, depresses lever F and the carrier, which receives another cartridge. Arm H releases the trigger, and the piece is ready for firing. A spring-catch, O, retains B in its forward and normal position. A similar catch, N n', brings F to rest when J is opposite the barrel.

The reciprocating motion of the hand-hold and the pulling of the trigger may be kept up alternately with the piece at the shoulder till the magazine is exhausted.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a magazine fire-arm, the combination, with a carrier-block, of a pivotal lever having one end in engagement with said block, an upwardly-projecting arm, G, secured to the inner end of the lever, the longitudinally-movable breech-pin K, located above said block, two jointed links, the outer ends of said links

being engaged, respectively, to the inner end of the breech-pin and to a fixed part of the casing, and a sliding plate for locking said jointed links and actuating the lever, substantially as described.

2. In a magazine fire-arm, the combination, with a carrier-block, of a pivotal lever having one end in engagement with said block, the inner end of said lever being provided with an upwardly-projecting arm, G, and a rearwardly-projecting arm, H, in line with and adapted to abut against the trigger, a trigger and hammer, as specified, the longitudinally-movable breech-pin K, located above said block, two jointed links, the outer ends of said links being in engagement, respectively, with the inner end of the breech-pin and with a fixed part of the casing, and the cam-slotted slide engaging with a projection upon the links, substantially as described.

3. The combination of the carrier-block J, the lever F, having its outer end engaged with said block, said lever being provided with an upwardly-projecting arm, G, and a pin, *f*, the longitudinally-movable breech-pin K, jointed links connected with said pin and situated substantially in line with said arm, the longitudinally-movable bar B, provided with an incline for engaging the said pin *f*, the inner end of said bar being provided with a slotted cam-plate, C, and a lug, E, on one of the links aforesaid, adapted to engage the slot in the plate aforesaid, substantially as described.

4. In a magazine-gun, the combination, with the movable plate B, having inclined notches in its side and provided on its inner end with an upwardly-projecting plate, C, provided with stop *c'*, the seat or surface *c'*, and the cam-slot *c'*, the jointed links provided with pin E, adapted to engage the slot aforesaid, the carrier-block J, lever F, having its outer end engaged with said block, said lever being provided with an upwardly-projecting arm in line with the links, and provided also with the pin *f*, in line with and operated by plate B, and the longitudinally-movable breech-pin K, jointed to said links, substantially as described.

5. The combination, with the carrier-block and breech-pin, of the sliding bar B and plate C, said plate being provided with slot *c'*, the lever F, engaging the carrier-block situated in line with bar B, and having arm G, and the jointed links provided with pin E, adapted to engage the slot in the plate aforesaid, the arm G being in the path of the links, whereby the lever F and connected parts may be depressed, substantially as described.

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Witnesses:

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