(No Model.)

J. W. MULLINS.

FIREARM.

No. 487,423. Patented Dec. 6, 1892.

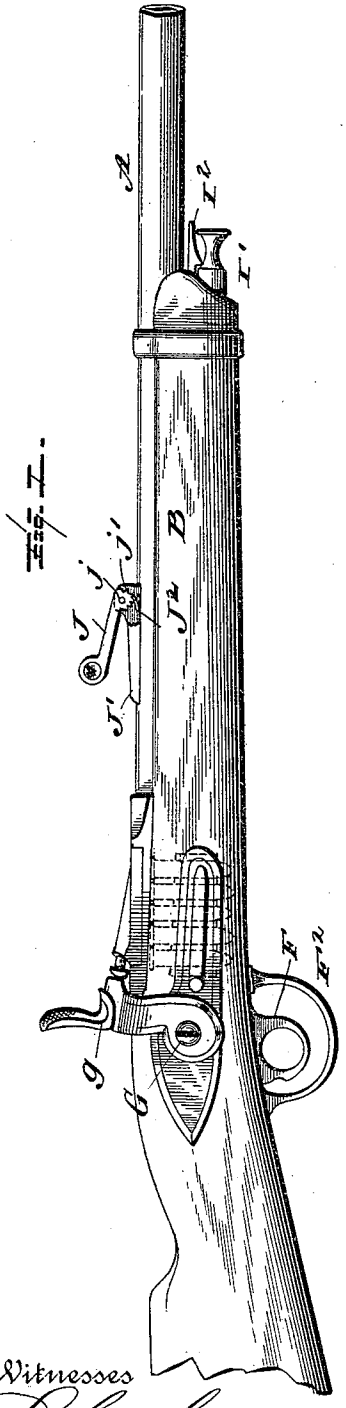

Fig. 1.

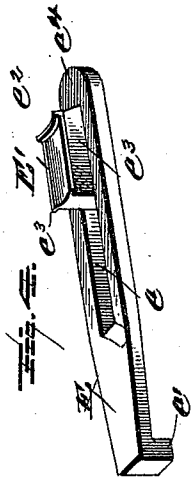

Fig. 4.

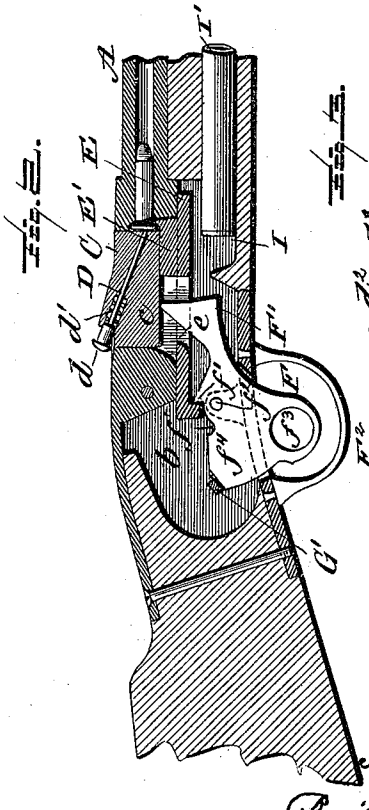

Fig. 2.

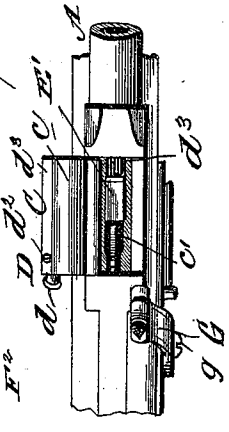

Fig. 5.

Witnesses
L. C. Hills.
E. H. Bond.

Inventor:
John W. Mullins
By E. B. Stocking
Attorney

UNITED STATES PATENT OFFICE.

JOHN W. MULLINS, OF FARISTON, KENTUCKY.

FIREARM.

SPECIFICATION forming part of Letters Patent No. 487,423, dated December 6, 1892.

Application filed October 22, 1891. Serial No. 409,518. (No model.)

To all whom it may concern:

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

This invention relates to certain new and useful improvements in firearms, as rifles; and it has for its object primarily to improve generally upon this class of devices. It has for its further object to provide improved cartridge carrying and discharging mechanism, whereby the same mechanism that actuates the hammer operates the cartridge-actuating devices. A further object is to provide means for cooling off the chamber when it becomes heated from repeated firing.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation of my improved rifle with a portion of the stock and sight broken away. Fig. 2 is a vertical longitudinal section of a portion thereof showing the operating mechanism. Fig. 3 is a top plan in detail with the rebound-block thrown up. Fig. 4 is a perspective view of the cartridge-carrier removed.

Like letters of reference refer to like parts in all the figures.

Referring now to the details of the drawings by letter, A designates the barrel and B the stock of a rifle, which in these respects may be of any known or preferred form of construction, except as hereinafter specified. The features of my invention may be employed with either a side or center hammer, the trigger or a gear and lever being so constructed as to pull off the hammer in the usual manner at the hind part of the gun.

The stock B is formed with a chamber *b*, in which works the operating parts now to be described. The rear end of the barrel is provided with a hinged portion C, which constitutes the brace or rebound-block, which is pivoted to one side, as seen in Fig. 3, and is provided with a central enlarged portion *c*, designed to close the rear end of the bore, as seen in Fig. 2, and this block carries the needle or firing-pin D, which is arranged in an inclined direction therein, having the head *d* and the spring *d'*, serving to normally hold the firing-pin outward, as seen in Fig. 2, the spring being detachably, together with the pin, held in place by a suitable means, as the screw d^2. (Seen in Fig. 3.) This block has flanges on its under face, as seen at d^3 in Fig. 3, to rest upon the side walls of the opening, which it closes and serves to normally close the opening, as will be seen from Fig. 2. The bottom of this part of the barrel is provided with a longitudinal slot *c'*, in which works a portion of the trigger, as will be hereinafter made more clear, and fitted to slide in this slot, being guided by the upper walls thereof, is the cartridge carrier and ejector E, the form of which is best shown in Fig. 4, and which consists of the main portion formed with longitudinal slot *e*, through which works a portion of the trigger, as seen in Fig. 2, and at its rear end formed with a depending portion or lug *e'*, for a purpose hereinafter apparent. At its forward end it is provided with a raised portion E', upon which the cartridge is designed to be supported, said raised portion being provided at its forward end with the slightly-raised flange e^2, to engage the flange of the head or cap of the cartridge to limit its movement into the barrel, and upon opposite sides it is formed with the flanges e^3, which serve as guides therefor, as will be readily understood from Figs. 3 and 4. The projecting portion or flange e^4 of this cartridge carrier and ejector is designed to engage beneath the bottom of the rear end of the bore of the barrel, as seen in Fig. 2, and serve as a guide and to prevent upward movement of the carrier.

F is the trigger, pivoted at *f* to suitable lugs or bearings within the chamber, and formed with the forward upwardly-inclined arm F', which terminates in the point, as shown in Fig. 2, and which is designed to work through the slot in the bottom of the barrel and through the slot *e* of the cartridge-carrier, as clearly shown in Fig. 2. In proximity to its pivot within the chamber the trigger is formed

with a notch f^2, between the shoulders f', and in which notch and between which shoulders the lug e' of the cartridge-carrier works, as seen in Fig. 2. The trigger extends through an opening in the under side of the chamber, and is provided with suitable handle, thumb-piece, or finger-opening f^3, as shown, the projecting portion being confined within the trigger-guard F^2, in the usual manner.

The side lock with its hammer and springs may be of any well-known or preferred construction, which will serve with the parts above described, the hammer G being designed to engage the firing-pin and is pulled off in the usual way by reason of engagement of the rear end f^4 of the trigger engaging the arm G', as indicated in Fig. 2.

I is a tube arranged in any suitable location, either under the barrel or in the butt-stock and communicating with the chamber b of the stock, and in this tube is designed to work a plunger I', so constructed as to force and return or suck and blow the air therethrough and through the chamber for the purpose of cooling off said chamber when the barrel has become too hot from repeated or rapid firing. This plunger may be held against displacement in any suitable manner, as, for instance, by a spring-catch I^2. (Seen in Fig. 1.)

J is the sight. (Seen in Fig. 1.)

The operation will be readily understood from the above description when taken in connection with the annexed drawings. With the parts in the position in which they are shown in Fig. 2 the gun is loaded and ready for firing, which is accomplished by a pull on the trigger, which throws the hammer against the firing-pin, which moves endwise in its bearings against the action of the spring d' and fires the cartridge. After the cartridge is fired a movement forward of the trigger first moves the cartridge-carrier E to the rear by reason of the engagement of the forward shoulder f' of the trigger with the lug e' of the carrier and further movement in the same direction of the trigger forces the rebound-block C upward and over upside down, and the same movement of these parts ejects the empty cartridge. The location of the brace-block behind the fire is deemed to be superior in motion and strength, as it is square where it drops down both against the breech-pin and barrel, and the cartridge b sets square against its front end, which makes it extra strong and renders it more able to stand heavy charges without danger to the one using the gun.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages. For instance, I may use the trigger, as shown, or I may use the guard instead of the trigger to throw the rebound open and extract the shell, as desired, in place of trigger.

What I claim as new is—

1. In a firearm, the combination, with cartridge-ejecting devices comprising a sliding cartridge-extractor, of a hammer, a rebound-block, and a trigger arranged to operate the hammer when moved in one direction and to actuate the cartridge-ejecting devices when moved in the opposite direction, as set forth.

2. In a firearm, the combination, with a sliding cartridge-extractor and a pivoted block, of a trigger having a portion designed to engage said block to elevate the same, as set forth.

3. In a firearm, the combination, with a sliding cartridge-extractor and a pivoted block, of a trigger having a portion designed to engage said block to elevate the same, and working through a slot in the extractor, as set forth.

4. In a firearm, the combination, with a sliding cartridge-extractor and a pivoted block, of a trigger having a portion designed to engage said block and working through a slot in the extractor, and a portion to engage and move said extractor, whereby the extractor is moved horizontally and the block thrown up on its pivot simultaneously, as set forth.

5. In a firearm, the combination, with a movable cartridge-extractor having slot, raised portion, and depending portion, of a pivoted brace-block of said raised portion and a pivoted trigger having a portion working through said slot to engage the block and a portion to engage said depending portion, substantially as specified.

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

JOHN W. MULLINS.

Witnesses:
L. C. HILLS,
E. H. BOND.