(No Model.)

E. A. F. MOSES.

MAGAZINE FIRE ARM.

No. 307,407. Patented Oct. 28, 1884.

Fig. 1.

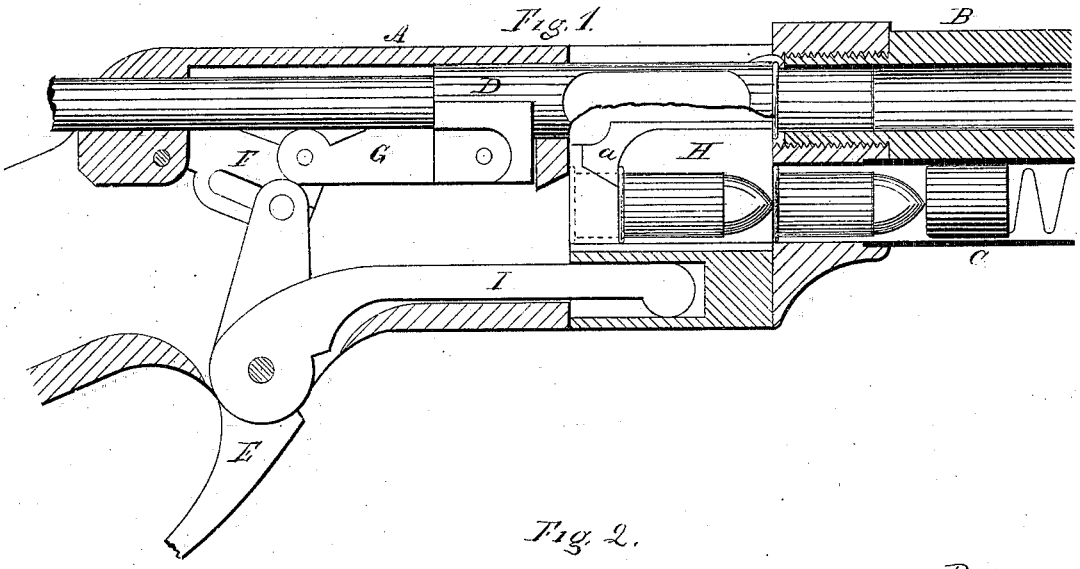


Fig. 2.

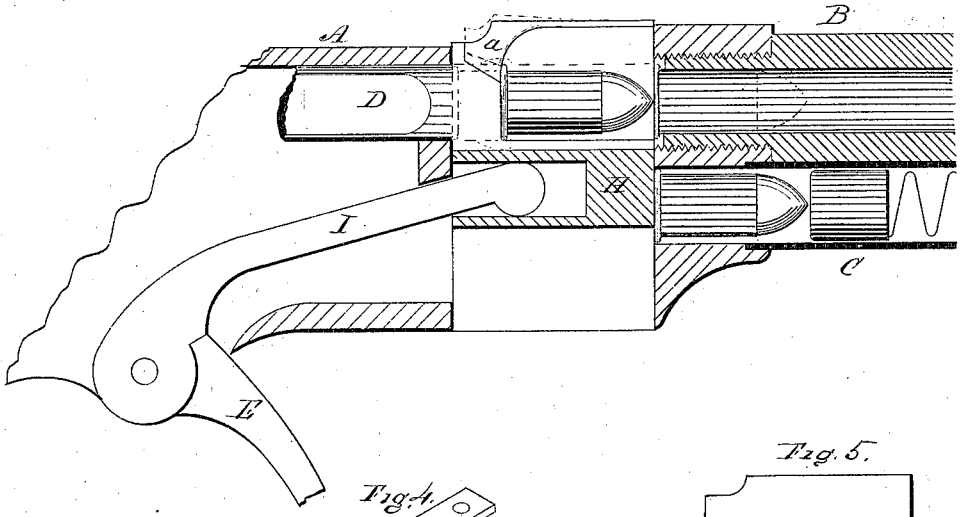


Fig. 4.

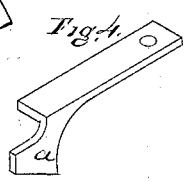


Fig. 5.

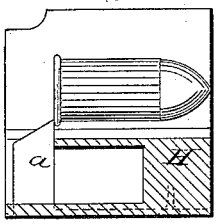
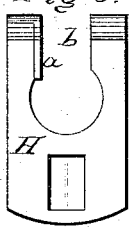


Fig. 3.



Witneses.
Lillian D. Kelsey
L. C. Crocker

Edwin A. F. Moses.
Inventor.
By atty.
Wm. Dale.

UNITED STATES PATENT OFFICE.

EDWIN A. F. MOSES, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO WINCHESTER REPEATING ARMS COMPANY, OF NEW HAVEN, CONNECTICUT.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 307,407, dated October 28, 1884.

Application filed August 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, E. A. F. MOSES, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new Improvement in Magazine Fire-Arms; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a sectional side view showing so much of the mechanism of the arm as is necessary to show the application of my invention to the carrier, the parts of the arm being in the normal condition; Fig. 2, a sectional side view showing the carrier as raised to transfer the cartridge to its position forward of the front face of the breech-piece; Fig. 3, a vertical section through the carrier in rear of the latch or stop; Fig. 4, a perspective view of the spring-latch detached; Fig. 5, a modification.

This invention relates to an improvement in that class of magazine fire-arms in which the carrier consists of a vertically-reciprocating block arranged in a recess in rear of the barrel, and so that on receiving a cartridge from the magazine below the carrier is raised in front of the withdrawn breech-piece, and then the withdrawn breech-piece, passing through the carrier, transfers the cartridge so received from the magazine into the chamber in the barrel, and then the carrier returned to receive a second cartridge from the magazine, and particularly to the arm of this class known as the "Winchester repeating-arm."

It is frequently desirable, in the use of rifles for sporting and target purposes, to employ different lengths of cartridges, but as the carrier in these arms is constructed to receive only one certain length of cartridge, different arms are required when different lengths of cartridges are desired—that is to say, if the arm be constructed for a cartridge of a certain length, and a shorter cartridge be desired, if such cartridges be introduced into the magazine the rearmost cartridge will be forced to the extreme rear of the carrier, and thus permit the rear end of the second cartridge to enter the carrier and impede or prevent the rising of the carrier to present the first cartridge.

The object of my invention is to adapt the arm to cartridges of varying lengths; and it consists in a latch arranged in the carrier, and so as to form a shoulder forward of the extreme rear of the carrier, and against which the head of the shorter cartridge will abut, and thereby operate the same as if the carrier were constructed for such short cartridge, and as more fully hereinafter described.

The mechanism of the arm constitutes no part of my invention. In the illustration I show mechanism substantially that of the Winchester repeating-arm, and in which A represents the receiver, B the barrel, C the magazine, D the longitudinally-reciprocating breech-piece arranged in axial line with the barrel, E the trigger-guard lever by which through toggles F G the breech-piece is operated, H the carrier, I the lever between the trigger-guard lever and the carrier, whereby the up and down reciprocating movement is imparted to the carrier, all substantially the same as in the Winchester repeating-arm. The length of the carrier is the maximum length of the cartridge adapted to be used in the arm.

In the carrier, and preferably above, I arrange a spring-latch, *a*, the nose of which extends down into the cavity in the carrier which is to receive the cartridge from the magazine. The forward face of the latch forms a shoulder or stop in the carrier against which the head of the cartridge will abut, as seen in Fig. 1, and the bottom of the latch in rear of the front face is beveled backward and upward. Such a short cartridge standing in the carrier as seen in Fig. 1, the head rests against the said stop or latch, the stop standing in rear of the front face of the carrier the length of the cartridge, and as indicated in Fig. 1. In said Fig. 1 the maximum length of the cartridge is shown in broken lines, the shorter cartridge shown in solid lines and as received from the magazine. When the carrier is raised, as in Fig. 2, the breech-piece is forced forward in the usual manner, and passes through the recess in the carrier, its front face striking the beveled under side of the latch *a*, raises that latch, as indicated in broken lines, Fig. 2, so that the breech-piece passes into contact with the head of the cartridge, and forces that cartridge into the chamber in the barrel in the usual

manner, and the same as if the arm were constructed with a carrier the length of which was equal to this short cartridge.

The latch is best made to be secured to the top of the carrier, as seen in Figs. 2 and 3, at one side of the vertical slit *b*, through which the reduced portion of the breech-piece passes as the carrier falls, the latch being a thin plate, and so as not to interfere with such descent of the carrier.

The latch may be adjustable on the top of the carrier, so as to present the front face or stop at different positions; or different latches may be constructed for the same arm, they varying so that the front face of one may stand at a different position from that of another. When the longer cartridge is required to be used, then the latch is removed. By this invention the arm is readily adjusted to cartridges of varying lengths.

While I prefer to arrange the latch at the top of the carrier, and so as to extend down into the recess in the carrier to form the stop, it may be introduced from below, as seen in Fig. 5, and secured to the under side of the carrier. I therefore do not wish to be understood as limiting the position of the latch to any particular part of the carrier, it only being essential that it shall be so arranged that the nose may enter the carrier at a point between its extreme front face and its rear face, and form a stop for the head of the cartridge short of the extreme rear face of the carrier, and yield for the passage of the breech-piece through the carrier.

I claim—

In a magazine fire-arm in which a vertically-reciprocating carrier is employed to transfer the cartridge from the magazine to a position between the front face of the withdrawn breech-piece and the barrel, the combination, with said carrier, of a spring-latch arranged to form a stop in the cartridge-recess in the carrier forward of the rear face of the carrier, substantially as described.

EDWIN A. F. MOSES.

Witnesses:
JOHN F. R. SCHAEFER,
WM. A. COPELAND.