(No Model.)

J. L. RANDALL.

MAGAZINE FIRE ARM.

No. 343,492. Patented June 8, 1886.

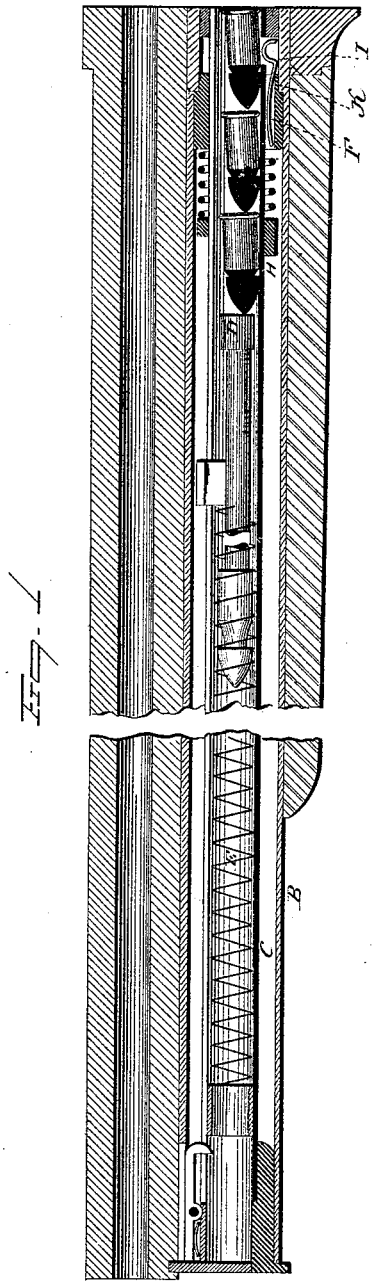

Fig. 1.

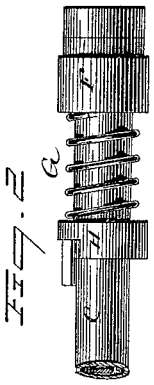

Fig. 2.

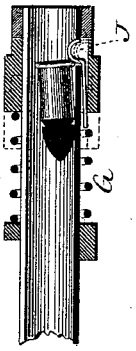

Fig. 3.

Witnesses,
J. H. Shumway
Fred C. Earle

Jason L. Randall
Inventor
By Atty.
Wm. C. Earle

UNITED STATES PATENT OFFICE.

JASON L. RANDALL, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE WINCHESTER REPEATING ARMS COMPANY, OF SAME PLACE.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 343,492, dated June 8, 1886.

Application filed March 29, 1886. Serial No. 196,925. (No model.)

To all whom it may concern:

Be it known that I, JASON L. RANDALL, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Magazine Fire-Arms; and I do hereby declare the following, when taken in connection with the 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 longitudinal central section through the barrel and magazine portion of the arm; Fig. 2, a side view of the rear end portion of the inner tube enlarged; Fig. 3, a longitudinal section of the same.

This invention relates to an improvement in that class of magazine fire-arms in which the magazine is arranged longitudinally beneath the barrel, with special reference to that class of arms which are constructed for the use of the smaller classes of cartridges, such as 32s or smaller. In arms adapted for this class of cartridges it is difficult to charge the magazine through the opening in the receiver at the rear, as is readily done in arms of larger caliber. The difficulty arises from the liability of the short cartridges to turn out of line in introduction, so as to clog the passage.

In Letters Patent of the United States No. 310,103, granted to the Winchester Repeating Arms Company, assignee in this application, a device is provided to overcome these difficulties, which device consists in a longitudinal tube arranged and fixed beneath the barrel, of a larger diameter than required for the cartridges, and having combined therewith a removable inner tube of an internal diameter corresponding to the cartridges to be employed in the arm, the said inner tube having a spring-follower arranged within it, and with a locking device which may engage the the last cartridge inserted and hold the column against the action of the spring. The inner tube is withdrawn from the forward end of the principal tube, and is charged outside the gun, the cartridges being inserted successively at the rear end, the locking device before referred to serving as a latch against the last cartridge to hold the column. This latching device is so constructed that as the tube, with the cartridges therein, is returned into the principal tube, and just as it reaches its extreme rear position, the latch is thrown out of engagement, to leave the column free to be forced successively onto the carrier in the usual manner for this class of magazines. In that patent the latching device consists of a sleeve arranged upon the outside of the inner tube, near its rear end, and over a latch, so that as the sleeve is drawn forward on the tube the latch will be thrown outward, or the sleeve, moved rearward, will throw the latch inward to form the stop for the column, and the arrangement of this sleeve is such that when thrown rearward to force the latch inward it stands in a position to strike a corresponding shoulder in the outer tube just before the inner tube reaches its extreme rear position, and so that in completing the inward or inserting movement of the tube the sleeve will be forced forward and throw out the latch. When the latch is thus thrown out, the column of cartridges is free to be moved rearward, as before stated; but if it be desired at any time to remove the cartridges which are in the magazine, the outer tube must be withdrawn. In doing this in the construction of the previous patent, and such as I am describing, the latch is prevented from engaging the column of cartridges, and the result of withdrawing the tube is to permit the column of cartridges to escape from the inner tube, and leave them in the outer tube as the inner tube is removed. Then the cartridges will slide out forward from the outer tube.

The object of my invention is to retain the cartridges in the inner tube, if desirable, as for the purpose of removal.

To this end my invention consists in combining with the inner tube and the sleeve which actuates the latch a spring, the tendency of which is to force the sleeve rearward or toward the forward end of the tube, but yield for the rear movement of the sleeve as the tube approaches its extreme inward position, and so that when the outward movement of the inner tube is permitted the first action of the spring is to force the sleeve rearward and throw the latch into the inner tube, to serve as a stop for the column of cartridges therein.

In illustrating my invention I show the same construction as that in the patent before referred to, and in which—

A represents the barrel; B, the outer tube, arranged longitudinally beneath the barrel portion of the magazine, but of larger diameter than required for the cartridges to be used, and open at both ends.

C is the inner tube, adapted to be introduced from the forward end of the tube B, and of a length to extend to the rear end of the barrel. At the forward end the tube is provided with an interlocking device, to secure it in its inward position.

D is the follower; E, the usual magazine-spring, adapted to force the follower rearward; F, the sleeve upon the outside of the inner tube, at the rear end, and adapted to slide thereon.

Forward of the sleeve F is a spring, G, one end of which bears against the sleeve F, and the other rests against a fixed collar, H, on the tube C, the tendency of the spring being to force the sleeve F to the rear.

I is the latch over which the sleeve works, the same as in the patent before referred to, and so that when the sleeve stands in its extreme rear position, as seen in Fig. 3, the nose of the latch extends through an opening, J, in the tube, and so as to form a stop for the last cartridge; but when the sleeve is drawn forward, as seen in Fig. 1, and in broken lines, Fig. 3, then the nose of the latch is thrown outward, and the passage of the cartridges to or from the magazine is free.

As in the patent before referred to, the outer tube is provided with a shoulder, K, near its rear end, against which the sleeve F will strike as the inner tube approaches its extreme rear position. Then, in completing the inserting movement of the tube, the sleeve will be forced forward, as indicated in Fig. 1, and cause the latch to turn outward to clear the passage. If, now, it be desired to withdraw the magazine-tube, the spring acting upon the sleeve F forces it rearward as the outer movement of the inner tube is commenced, and so as to throw the latch inward to come in rear of the head of a cartridge in the magazine, and serve as a stop for the column. In the withdrawal of the tube, the column of cartridges will be drawn out with it, and may remain therein until at some future time they are wanted.

In charging the magazine the latch may be of a spring-like character, so as to yield for the insertion of the cartridges; or the sleeve may be drawn forward on the tube, as indicated in broken lines, Fig. 3, to positively take the latch out of the way for the introduction of the cartridges, and then, when the requisite number of cartridges are introduced, the sleeve left free will return and throw the latch into action.

I do not describe the interlocking devices at the forward end of the tube, as they are the same as in the patent before referred to, and constitute no part of my invention.

What I claim as an improvement on the invention set forth in Letters Patent of the United States No. 310,103 is—

In a magazine fire-arm, the combination of a tube arranged longitudinally beneath the barrel, a second tube arranged longitudinally therein and removable therefrom, a spring-follower in said inner tube, a sleeve on said inner tube near its inner end and movable longitudinally thereon, a latch the nose of which is adapted to work into or from the inner tube at its rear end, and the said sleeve arranged to impart such movement to said latch, a shoulder in the outer tube arranged to engage said sleeve as the inner tube approaches its extreme rear or inserted position and arrest the advance of the sleeve, and a spring arranged to bear against the forward end of said sleeve with a tendency to force it toward the rear end of the tube, substantially as described.

JASON L. RANDALL.

Witnesses:
JOHN E. EARLE,
FRED C. EARLE.