

Magazine Fire-Arm.

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UNITED STATES PATENT OFFICE.

LOUIS TRIPLETT, OF COLUMBIA, KENTUCKY.

IMPROVEMENT IN MAGAZINE OR SELF-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **45,361**, dated December 6, 1864.

To all whom it may concern:

Be it known that I, LOUIS TRIPLETT, of Columbia, Adair county, State of Kentucky, have invented a new and Improved Repeating Fire-Arm; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the improved arm, having the rear portion of the stock and the forward portion of the barrel broken away. Fig. 2 is a section taken through the barrel and thimble thereof, showing the same applied to the stock-pivot and arranged in a position for firing. Fig. 3 is a sectional view of some of the parts represented in Fig. 2 when the barrel is in such position as to cause the cartridge-retractor to thrust out the blank case. Fig. 4 is a cross-section taken at the point indicated by red line *xx*, Fig. 2. Fig. 5 is a view in detail, representing the position of the barrel for receiving a charge from the magazine. Fig. 6 is a perspective view, showing the position of the cartridge-retractor and the barrel, when the former thrusts out the blank case. Fig. 7 is a side view of the arm complete.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to certain new and useful improvements in breech-loading fire-arms, and particularly to improvements on that class of arms which are adapted for receiving a number of ball-cartridges in their stocks to be automatically carried forward and inserted into the barrel after each discharge.

By my invention I am enabled to employ in a single fire-arm the automatic breech-loading principle, or to introduce each one of the cartridges into the barrel by hand, whichever plan may be most desired. I am also enabled to construct the cartridge-magazine for containing the ball-cartridges and automatically supplying them to the barrel in such manner that said magazine constitutes not only the stock of the gun, but when the latter is in use it forms a curved shoulder rest and support for the piece while loading and firing it. I

am furthermore enabled to practically employ a cartridge-retractor in an automatic breech-loading fire-arm, and to so apply said retractor that it will automatically thrust the spent or blank cartridge-case out of the barrel previously to and during the act of reloading the arm. And, finally, I provide for the loading, sighting, and firing of the gun with one hand, thus rendering its use very desirable for mounted service; and while I employ the stock of the gun as a receptacle for the charges, I so construct this stock that the weight of the charges will chiefly rest upon the shoulder of the person using the gun instead of upon his arm, all as will be hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The barrel *A* of my gun has a tube, *a*, shrunk around its rear end, or secured rigidly to this end in any suitable manner, and this tube *a* forms a part of a tubular socket, *B*, the axis of which is parallel to that of the barrel.

The breech end of the barrel is reamed out and recessed for receiving the tongue and right-angular portion of a cartridge retractor or clearer, *b*, which slides back and forth and thrusts out the blank cartridge-case after the piece is fired.

The outer edge of the vertical portion of the retractor, as well as the corresponding edge of the bore of the barrel, has a groove formed in it, which is intended to receive the bead or percussion-flange of a metallic cartridge, and when the retractor is thrown back it thrusts out the blank case, leaving the barrel ready for receiving another charge.

The tubular socket *B* receives a strong pin, *C*, which projects from, and may form a part of, the solid metal breech-block *D*. On the forward end of said pin a male screw is formed, which receives the cap *b'*, that secures the barrel in place on this pin *C* and allows it to be moved laterally thereon. The breech end of the barrel fits snugly against the face of the breech block or check *D'* when the barrel is in a position for firing the load, and as the barrel swings away from said breech-check, its rear end is exposed, to allow of the thrust-

ing out of the cartridge-case, as above described, and also of the introduction of a ball-cartridge into the barrel.

The metallic breech D may be formed of a solid piece of metal recessed in a suitable manner for receiving the hammer *c* and the lock, which is inclosed within said breech, and not shown in the drawings, for the reason that it may be made in the usual or in any desirable manner. Below the hammer-lock, and secured to the bottom part of the breech-piece D, the guard *c'* and trigger *c''* are applied. The hammer *c* is, in the present instance, arranged directly in a line with the barrel, and the striking-point of this hammer passes through the elevated breech-check D', and strikes upon the lower edge of the bead around the cartridge-case, and thus explodes the charge in the gun. The rear edge of the socket or sleeve B abuts against the face of the metallic breech-piece D, being held in contact therewith by the screw-cap *b'*, above explained; and in order to allow the retractor to move backward or outward a sufficient distance to discharge the blank cases, a portion of the breech-piece is cut away, as shown at *d d*, Figs. 1, 3, and 6, and a portion of the pin or pivot C extended back to serve as a bearing for said retractor when it projects from the breech of the gun.

To operate the cartridge-retractor automatically—i. e., to cause it to leave its seat in the barrel A, discharge the blank cases, and then return to its seat again ready for receiving a new cartridge, all by a single lateral or swinging movement of the barrel A on the pin C—I form a V-shaped groove, *e*, in one side of pin C, which is terminated at its ends by a straight groove, *e'*, uniting both of these ends. Near the upper end of the straight groove is a spring-switch, *f*, having an inclined surface, as shown in Figs. 2 and 4, and a recess formed beneath it to allow it to be depressed below the base of its slot. The longitudinal tongue or guide of the retractor *b* fits snugly in contact with the cylindrical surface of the pin C, and has a pin, *g*, projecting from it and entering the slot in the pin C. When the barrel of the gun is in the position for discharging the load, (shown in Figs. 1, 2, and 4,) the pin *g* is at the upper intersection of the oblique and straight grooves *e e'*, as represented in Figs. 2 and 4, and as the switch *f* will prevent the pin *g* from passing down through the straight slot *e'* when the barrel A is moved on its joint, said pin will pass down through the upper portion of the oblique or V groove, and thus thrust out the cartridge-retractor. When the pin *g* arrives at the angle or intersection of the two oblique grooves, and the barrel is still moved downward, the pin *g* will move forward through the lower oblique slot, and return the retractor back to its seat in the barrel. Here the pin *g* will enter the straight slot *e'*, which will keep the cartridge-retractor in its place in the barrel until this barrel is returned to its former position and the breech closed by the check-piece D'.

It will be seen from this description that on swinging the barrel from the breech-check D' the retractor *b* will move outward far enough to discharge the blank cartridge. Then, on continuing the movement of the barrel in the same direction, the retractor will be drawn back into the barrel again, in which position it will remain until the barrel is moved back to a position for discharging the load, and then moved from this position again, as before described.

I will here state that the pin *g* depresses the switch *f* as it passes upward through the straight slot *e'*, and after the passage of said pin over the switch the latter springs outward and switches the pin *g* into the oblique groove.

To lock the barrel in place when it is in position for discharging the load I use a spring-latch, *h*, which is shown in Fig. 2. This latch is pivoted to the end of a spring-pin, *k*, which is inserted into a hole drilled in the end of pin C. A spring being inserted behind said latch, the tendency will be for it to force the latch outward through a hole in the pin C and into a notch made in the socket B. The head of the pin *k* projects through the end of cap *b'*, and may be conveniently depressed by the fingers when it is desired to release the barrel. The spring will force the latch *h* back into place when the barrel is moved in front of the breech-check D'.

The stock of my gun is constructed of a slotted metallic tube, G, one end of which is secured rigidly to the rear end of the breech-piece D, while the opposite end of this tube is carried along beneath the breech-piece D, and terminated at a point (represented in Figs. 1 and 4) where the barrel A can be brought exactly opposite to it, as represented in Fig. 5.

The forward end of the tube G is closed by a cap, *l*, which is formed on the end of a spring, *l'*, which is secured on one side of the breech-piece D, as shown in Fig. 1 in dotted lines.

The spring to which the tube-closer *l* is applied keeps the tube closed, except when it is pressed away by swinging the barrel around, as shown in Fig. 5, for the purpose of loading the gun.

The tube G is fashioned in the manner represented in Fig. 7, thus forming a stock which has a looped or semicircular rear end. At a suitable point in this looped tubular stock G a curved bar, H, is used as a brace for the upper and lower portions of the stock, and also as a butt to bring the gun up against the shoulder of the person using it.

It will be seen that by cutting the tube G off just back of the cross-brace H we have a skeleton stock, the contour of which resembles very much that of the common wooden stock; but instead of cutting off the tube in this manner we form it into a half-circle back of the butt or brace H, through which the person using the gun passes his arm and adjusts this stock upon his shoulder, thus forming a shoulder-support for the gun when it is moved

downward in the act of loading and firing it. This semicircular portion of the stock serves also the purpose of a conduit for the ball-cartridges placed in the tube G, and allows said charges to be carried over the shoulder of the gunner and passed forward under his arm, thus throwing much of the weight of the stock back of the shoulder of the gunner, which will, to some extent, counterbalance the weight of the forward portion of the gun upon the gunner's arm.

Another object of giving this peculiar form to the stock of my gun is to enable me to carry in it a large number of cartridges, and to feed them into the barrel of the gun by the reaction of a spiral spring, *p*, upon them, which is arranged in the upper portion of the stock.

Instead of employing the skeleton stock, a solid stock may be used, with one tube extending from its curved portion H up to the point *l*. (Represented in Figs. 1 and 4.)

Whatever may be the form and construction of the magazine for containing the charges to be introduced into the barrel, the supply end of the magazine should be arranged below the line of the barrel A, and in such a position that when the barrel is swung round opposite said end the charge will be automatically inserted into its place.

By so applying the cartridge-retractor to the pivot-pin C that by a single movement of the barrel A said retractor will thrust out the cartridge case and then return to its former position, I am enabled to practically employ it in conjunction with the automatically-loading magazine which I have above described, and by a single movement of the barrel discharge the cartridge and reload the gun.

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

1. Gradually but fully discharging the cartridge-case and gradually returning the retractor to a position for removing another cartridge-case by the means substantially such as described, or the equivalent thereof, during the downward circular movement of the barrel, substantially as set forth.

2. Retaining the retractor in position for withdrawing another cartridge-case and in position for admitting of the full introduction of a loaded cartridge by hand by the means substantially as described, or the equivalent thereof, during the upward circular movement of the barrel and at any desired point, substantially as set forth.

3. In combination with a barrel that is hinged or pivoted to the breech-piece D, I claim the V-slot *e*, straight or return slot *e'*, switch *f*, and cartridge-retractor *b*, or the equivalents thereof, substantially as described.

4. The application of a latch to the pivot-pin C and tubular socket D, for locking the barrel in a position for discharging the load, substantially as described.

5. So constructing the tubular magazine for containing the cartridges and automatically feeding them into the barrel that it constitutes the sole stock of the gun, substantially as described.

6. A gun-stock constructed with a looped extension beyond the butt, whether the same be made tubular or solid, substantially as and for the purposes described.

Witness my hand in matter of my application for a patent for an improved repeating fire-arm for cavalry use.

LOUIS TRIPLETT.

Witnesses:

E. SCHAFER,
W. T. SCOTT.