

UNITED STATES PATENT OFFICE

JAMES D. MOORE, OF ZANESVILLE, OHIO.

IMPROVEMENT IN SELF-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 27,374, dated March 6, 1860.

To all whom it may concern:

Be it known that I, JAMES D. MOORE, of Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Repeating Fire-Arms, or fire-arms which are automatically loaded from magazines of powder, balls, or shot, and priming connected with the arm; and that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 represents a gun complete with my improvements attached or connected with it. Fig. 2 represents on a larger scale a portion of the stock and breech-piece, and of the locking and unlocking mechanism that is connected with or operated by the cock or trigger. Fig. 3 represents the lock as removed from Fig. 2 and turned around to show its mechanism. Figs. 4, 5, and 6 represent detached portions of the fire-arm, which will be hereinafter more especially referred to.

Similar letters of reference, where they occur in the several figures, denote like parts of the fire-arm in all the drawings.

I am aware that many kinds of fire-arms have been devised for receiving their charge from a magazine or magazines connected with them, and that loose powder and ball charges have been so introduced to the bore or chamber of the gun from magazines containing them. I am also aware that a rocking or rotating chamber has been contrived which will swing to the magazine to receive its charge and then swing back into line with the bore of the gun, where it may be discharged. Some radical or practical defect must exist in this class of fire-arms, as they have failed to go into general or even public use.

While disclaiming the principle of loading fire-arms from magazines connected with them, I believe that I have so perfected such an arm as to make it practical and available for all purposes, and entirely safe, even in the hands of an inexperienced person, having thoroughly tested the fire-arm and proven its efficiency and safety.

My invention consists in the manner in which I have arranged, combined, and located

the magazines in relation to the barrel or chamber of the gun, so that the chamber may with facility and certainty receive its loose powder and ball charge, convey it into the proper position for discharging the piece, and cutting off the fire of the discharge from the magazine of powder so thoroughly as to prevent any possibility of igniting it or of an explosion; and my invention further consists in so connecting with the swinging-chamber that receives the charge from the magazine and conveys it into the proper firing position and the lock of the gun, a mechanism that will prevent the cocking of the hammer, unless said chamber be not only in its proper firing position, but locked there so that it cannot swing out of place, thus securing the arm against any improper discharge.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents the stock, and B the barrel, of an ordinary rifle. The invention, however, is equally applicable to shot-guns or pistols. Alongside of or underneath the barrel I arrange two tubes, *a b*, one of which, *a*, is to contain powder, and the other one, *b*, balls or shot. The tube *a* is connected at its lower end with a sliding piece, C, so as to move with said piece; and the one, *b*, extends down close to said sliding piece, but is not connected to it, and may consequently be rigid or fixed.

The barrel B is united to the stock or breech-piece by a pin, D, on which it can turn freely when unlocked therefrom, so that the chamber of the gun may be brought into proper position for receiving first the charge of powder and then the ball or shot, and be rammed home by a rammer, E, arranged on the supporting-piece F.

c, Fig. 2, is a bolt by which the chamber and barrel are held in proper firing position. This bolt is connected to the trigger *d* by a lever, *e*, so that it can be drawn back to unlock the barrel from the chamber by the trigger when said chamber is to be carried past the magazines or tubes of powder and balls to receive its charge.

There is a plate, G, on the front of the breech-piece H, which has upon it two shoulders, *f f*, that strike against a swung lever, I,

Fig. 4, and vibrate it on its pivot, and this lever, in turn, moves the sliding piece C past the bore of the chamber, to allow first the powder and then the ball or cartridge of shot to drop into said chamber. The rammer is then run down and drawn back, the cylinder turned into line with the barrel, and the bolt *c* should shoot into its catch to lock it there; but should the bolt fail to lock the breech and barrel in line, it will be readily detected, inasmuch as the hammer J will not stand at a cock unless the bolt is right, for the dog *g* is so connected with the bolt as that it cannot catch the hammer until the bolt is in its proper locking position.

In Fig. 5 a section through the tube *b* is shown, with a coiled spring to keep down the balls. Shot-cartridges may be similarly kept down.

The operation of charging the gun is as follows: Hold the muzzle of the gun upward; draw back the bolt *c* by means of the trigger *d*, turn the stock to the right or the barrel to the left, which brings the bore of the breech to and in line with the charge of powder previously cut off from the magazine *a*, and contained in a chamber between the slide C and the bore of the gun. This charge then drops immediately into the bore of the breech-piece. At the same instant, or closely following this operation, the shoulder *f*, striking the lever I, causes the plate C to move past the opening through which the powder had just passed, and drops a ball which said piece C had previously received in a chamber formed in it when under the ball-magazine *b*. The rammer E is now brought down and the charge is com-

plete. Reverse the motion of the stock and barrel, and the breech with its charge is brought into line with the barrel, and the piece is ready to be fired.

I have represented the gun as arranged for caps. Pellets or ribbon priming may be used, and the gun may be made to supply itself with priming automatically.

The plate C, in moving back and forth, operates as a cut-off between the magazines and the bore of the breech, so that but one of the tubes *a b* at a time can be in communication with the bore of said breech, and so that the charge to be fired shall be cut off and removed far from the powder-magazine.

Having thus described my invention, what I claim is—

1. In combination with a carrying and cut-off plate, C, the movable and stationary magazines *a b*, for containing loose powder and balls or shot-cartridges, and operating together substantially as described.

2. I also claim, in combination with a semi-rotating breech-piece, H, the plate C and magazines *a b*, substantially as described.

3. I also claim the combination of the cam-plate G and lever I, for actuating the slide-plate C at proper intervals, as set forth.

4. I also claim so connecting the dog *g* with the bolt *c* as that the hammer will not catch or stand at full-cock unless the bolt is in its proper position to lock the breech and barrel in line, substantially as described.

JAMES D. MOORE.

Witnesses:

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THOS. H. UPPERMAN.