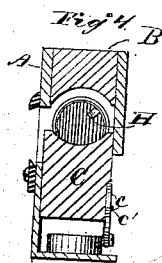
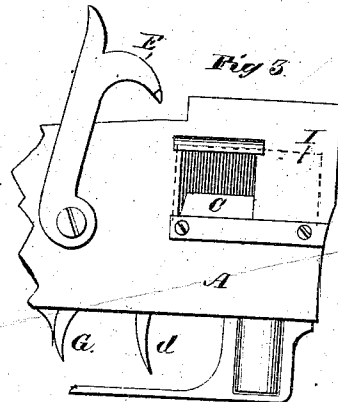
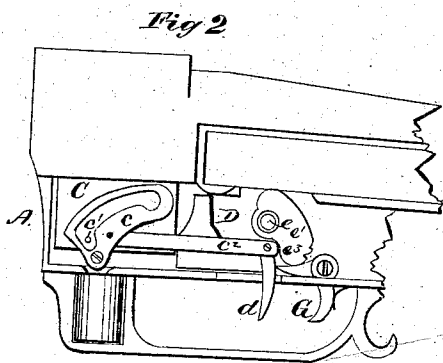
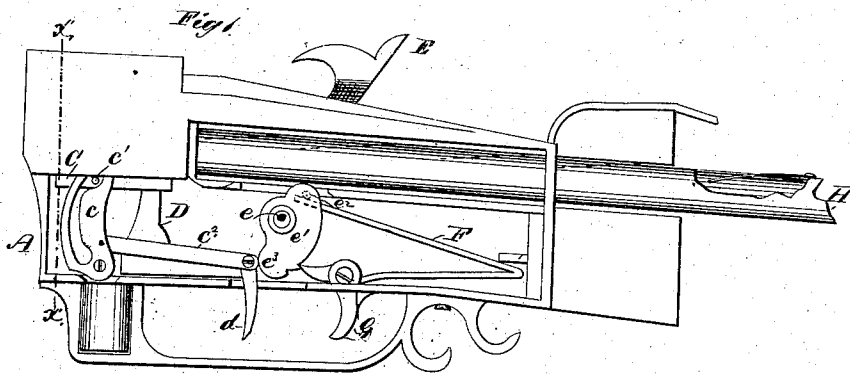


J. H. BEAN.  
Magazine Fire-Arms.

No. 141,624.

Patented August 12, 1873.



Witnesses  
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H. E. Matthews.

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# UNITED STATES PATENT OFFICE.

JOSEPH H. BEAN, OF CINCINNATI, OHIO.

## IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. 141,624, dated August 12, 1873; application filed December 27, 1872.

*To all whom it may concern:*

Be it known that I, JOSEPH H. BEAN, of Cincinnati, in the county of Hamilton and State of Ohio, have invented new and useful Improvements in Fire-Arms; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

This invention consists, first, in the employment, in connection with the cartridge-block, of peculiar mechanism for operating it; and, second, in certain details of construction, which, in connection with the foregoing, will be fully described hereinafter.

In the drawings, Figure 1 represents a side elevation of my improved gun with the side of the case removed; Fig. 2, a partial view of Fig. 1 with the parts in a different position; Fig. 3, an elevation taken from the opposite side; and Fig. 4, a sectional elevation on line *x x*, Fig. 1.

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

A represents the lock-case, which may be generally constructed of any suitable form. It is specially provided, however, with several divisions adapted to hold the cartridge carrier-block and mechanism for operating it, the lock mechanism, and the magazine. B represents the breech-block, made of any suitable material and strongly secured in the case, if not made a part of it, the lower surface of which is centrally grooved to receive the upper half of the cartridge, as shown. C represents the cartridge carrier-block, which is located below the breech-block B, and is adapted to move vertically in suitable guide-ways, as shown. Its upper surface is made to correspond with the lower surface of the block B, so that when it is moved up to the latter a chamber is formed, adapted to hold a cartridge. The cartridge carrier-block may receive its vertical movement in several ways. Among others a knuckle-joint may be used, if desired.

The means represented in the drawing for elevating it are as follows: *e* represents a slotted lever, pivoted at its lower end to a suitable portion of the case, and united at its upper end to the cartridge carrier-block by means of

a pin, *e*<sup>1</sup>, resting in the slot, as shown. D represents a supporting-block, adapted to move horizontally in the case, which is united by the connecting-rod *e*<sup>2</sup> to the slotted lever *e*, as shown. *d* represents a trigger or handle attached to the block D, by means of which it is moved in a backward direction. E represents the cock or hammer, rigidly attached to the shaft *e* in any proper manner, to which latter is secured the tumbler *e*<sup>1</sup>, as shown. *e*<sup>2</sup> represents a pin attached to the tumbler *e*<sup>1</sup>, which pin engages with the actuating-spring F in the usual well-known manner. The tumbler *e*<sup>1</sup> is also provided with a projection, *e*<sup>3</sup>, which, under certain circumstances, comes in contact with and actuates the supporting-block D. G represents the trigger proper, provided with a projecting end adapted to engage with the notches of the tumbler when the gun is cocked, in the usual well-known manner. H represents the magazine-chamber, consisting of a tube provided at regular and proper intervals with springs, as shown, the tube being formed preferably of a bent sheet, having recesses cut out to receive the springs, as shown. This tube opens into the chamber in which moves the cartridge-block, its discharge-opening being in line below the chamber in which the cartridge lies when in position to be exploded. This tube also extends rearward through the stock, and is provided with a suitable opening to receive the cartridges as is usual with guns of this class. I represents an opening through one side of the case, through which the exploded cartridges are discharged, and through which, if desired, new cartridges may be inserted instead of passing them through the magazine.

The operation of my improved gun will now be described. Cartridges are placed in the magazine, or, if desired, they may be inserted simply through the opening I on the side of the case. When it is desired to fire the gun the hammer is cocked, by which means the cartridge carrier-block is elevated, and the cartridge which it carries is consequently securely inclosed within the chamber formed by the grooves in the adjacent blocks B C. The block C is elevated in consequence of the projection *e*<sup>3</sup> of the tumbler *e*<sup>1</sup> moving forward the supporting-block D, which, by means of the connecting-rod *e*<sup>2</sup>, throws forward the slotted le-

ver *c*, which moves upward the pin *c*<sup>1</sup> of the cartridge carrier-block. The forward movement of the supporting-block D brings it beneath the block C, so that the latter is securely held when the explosion takes place. The trigger being pulled the hammer is thrown forward, and by means of a projecting point which strikes the cartridge through a suitable opening in the case explodes it. To remove the empty cartridge-case the supporting-block D is pulled backward by the handle *d*, by which means the cartridge carrier-block is consequently dropped and the empty case is permitted to fall out of the opening I. If the magazine is full a new cartridge enters from the magazine, and the gun may be again fired by repeating the foregoing operation.

The handle *d* should be so constructed that it cannot be touched when the gun is being fired.

Some of the advantages of the described construction are as follows: The gun may be readily loaded with a single cartridge through the magazine by simply elevating the stock; or it may be loaded through the side opening, the cartridge being securely held in the chamber without possibility of displacement by simply pulling the hammer to half-cock. The construction of the magazine is such that it is im-

possible for the cartridges to move backward; but they are compelled to move forward always, and each is compelled to occupy its allotted space, so that it is impossible for them to become bruised by contact with each other. The cartridge is securely held in its chamber without possibility of being accidentally exploded, but can be instantly brought into position for firing by simply cocking the gun. When exploded it is readily discharged through the side opening.

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

1. The combination of the cartridge carrier-block, constructed substantially as described, with the intermediate mechanism for drawing it down and the independent mechanism for moving it up, substantially as described.

2. The combination of the block C, the slotted lever *c*, connecting-rod *c*<sup>2</sup>, and supporting-block D, as described.

This specification signed and witnessed this 12th day of December, 1872.

J. H. BEAN.

Witnesses:

A. V. STEWART,  
H. W. BEADLE.