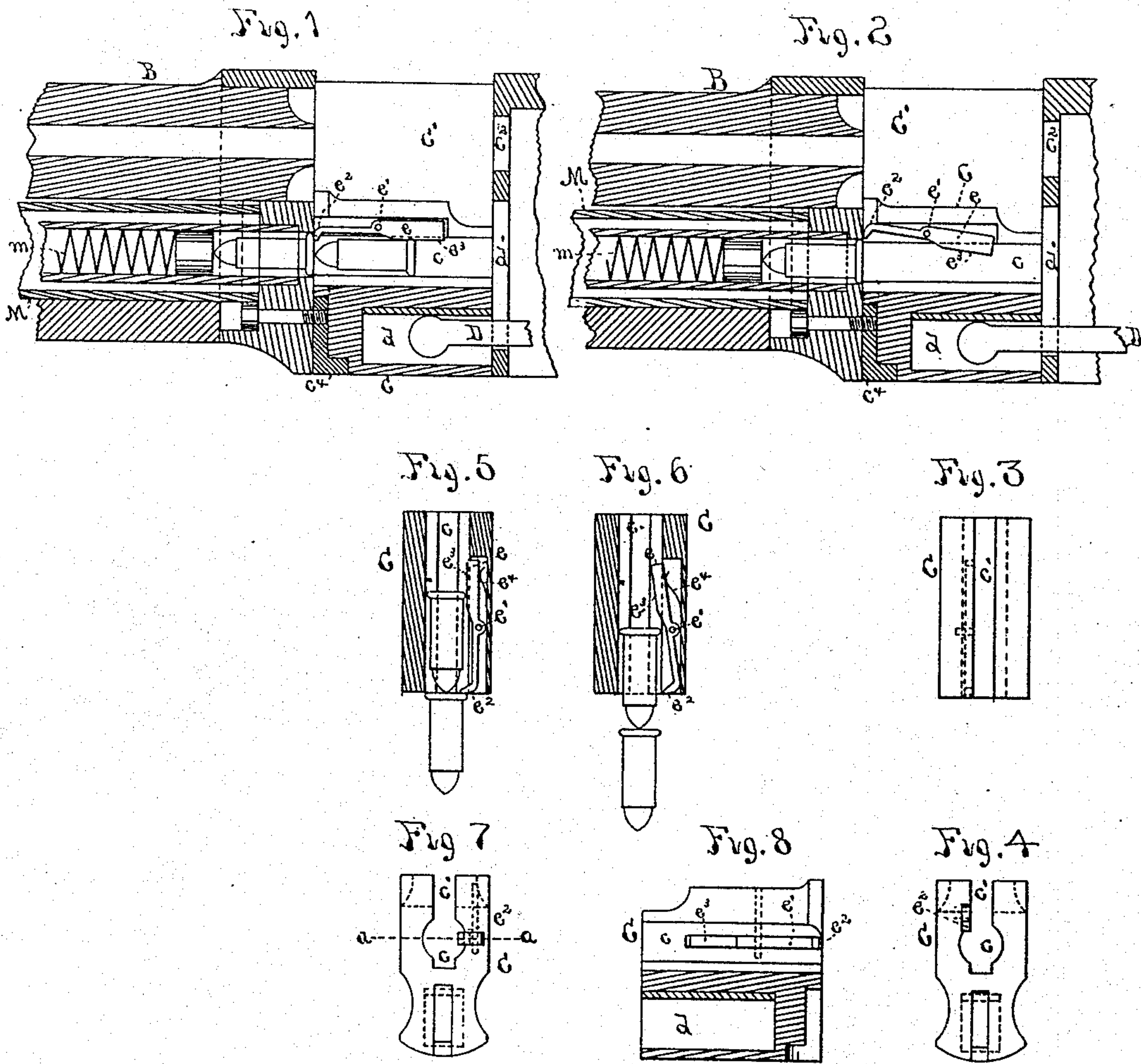


(No Model.)

D. H. RICE.  
MAGAZINE GUN.

No. 316,485.

Patented Apr. 28, 1885.



Witnesses

*W. C. Brown*  
*A. P. Ockington.*

Inventor

*David Hall Rice*



# UNITED STATES PATENT OFFICE.

DAVID HALL RICE, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO THE  
MARLIN FIRE ARMS COMPANY, OF NEW HAVEN, CONNECTICUT.

## MAGAZINE-GUN.

SPECIFICATION forming part of Letters Patent No. 316,485, dated April 28, 1885.

Application filed February 24, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID HALL RICE, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Magazine-Guns, of which the following is a specification.

My improvement relates to magazine-guns; and it consists in certain novel appliances and their arrangement for rendering the delivery of the cartridges into the carrier or from the magazine into the carrier more certain and accurate, substantially as hereinafter described and claimed.

In the drawings, Figure 1 represents a vertical longitudinal section of a portion of a magazine fire-arm provided with my invention. Fig. 2 is the same view with the working parts in a different position. Fig. 3 is a top plan view of the carrier removed from the arm. Fig. 4 is a front end view of the same. Fig. 5 represents a horizontal transverse section of the carrier provided with my invention in a somewhat different form on the line *a a* of Fig. 7. Fig. 6 represents the same as Fig. 5, with the working parts in a different position. Fig. 7 is a front end view of the carrier shown in Figs. 5 and 6. Fig. 8 is a vertical longitudinal section of the same.

B is the barrel of the gun. M is the magazine. C is the carrier. D is the lever attached to the lock and breech-bolt mechanism, which moves the carrier up and down, extending into chamber *d* in the carrier.

As such lock and breech-bolt mechanism is well known, it need not be further shown or described here. The carrier slides vertically up and down in the slot *C'* in the frame of the arm. It has a chamber, *c*, of the ordinary construction extending through it, and a slot, *c'*, above the chamber *c*, to allow the breech-bolt to pass through it. When the chamber *c* is in line with the bore of the barrel, the breech-bolt, which is worked by the lock and breech mechanism in the usual manner, enters through the passage *c'* in the frame, and, passing into the carrier-chamber *c*, forces the cartridge into the bore of the barrel. As this operation of the bolt is well understood it is not shown, forming no part of the invention. The lever D plays up and down through the slot *d'* in the frame of the arm.

In the side of the carrier C, and upon one side of the chamber *c*, I form a longitudinal slot extending from the forward end of the carrier backward a proper distance, and in this slot I place a small lever, *e*, of peculiar construction, hanging it upon the pivot *e'*. As shown in Figs. 1, 2, 3, and 4, this lever *e* has its pivot horizontal when the gun is held in position for firing. One end of this lever reaches to the front end of the chamber *c*, where it abuts against the magazine and barrel and has its extreme end, *e''*, bent or formed into a projection or stop, which, when this end of the lever is swung toward chamber *c*, projects into the chamber and forms a stop against which the head of the adjacent cartridge in the magazine will abut, and thus be prevented from entering the carrier-chamber. The other end of lever *e* is formed with an edge, *e'''*, which just barely lies within the chamber *c* when the lever is in the position last mentioned, and so that a cartridge in chamber *c* will have its head lying against this edge *e'''*, and thus keep the lever in that position, as shown in Figs. 1 and 5. When no cartridge is in chamber *c*, the end of the lever carrying the edge *e'''* being heavier drops down, as shown in Fig. 2, and the stop *e''* is withdrawn from the chamber *c*, thus allowing a cartridge to enter it. The part of the edge *e'''* nearest to the pivot is beveled off to allow the head of the cartridge to press the rear end of the lever gradually backward out of the chamber *c* as the cartridge is pressed into the chamber from the front end and bring the stop *e''* gradually forward into the chamber. This beveled part of the edge *e'''* is placed at a distance from the stop *e''* corresponding to the length of the cartridge from the rear side of its head to the conical incline of the ball end of it, or, in other words, of the cylindrical part of the cartridge, in order that as the head end acts upon the edge *e'''* and punches it back at one end of the lever, and brings the stop *e''* forward into the chamber at the other, the latter may enter the space ahead of the cartridge with little friction, as shown in Figs. 1 and 5; but by making the end of the lever *e*, which carries the stop *e''*, sufficiently elastic, the stop *e''* and edge *e'''* might be placed nearer together and operate substantially the same. This action of the cartridge entering



the carrier in automatically moving inward the stop  $e^2$  between itself and the cartridge in front of and pressing upon it always causes the line between the cartridge in the carrier and the next one in the magazine to come directly at the front face of the carrier, and prevents the latter from jamming against either of these cartridges in conveying the one in it to the bore of the gun.

10 The magazine M is provided with a spiral spring,  $m$ , in its tube in the usual form, to press the cartridges, one by one, into the carrier-chamber  $c$ , and it will be noticed that the pressure of this spring upon the cartridges furnishes the power which causes the one passing into the chamber to automatically operate the stop  $e^2$  in so doing. The carrier C is brought to register accurately with the magazine by a stop,  $e^4$ , attached to the frame of the arm below it, as shown.

In Figs. 5, 6, 7, and 8 I show a modification of my invention by pivoting the lever  $e$ , with its stop  $e^2$  and edge  $e^3$ , in a slot in the side of the carrier, and employing a light spring,  $e^4$ , behind the rear end of the lever to keep the edge  $e^3$  pressed forward into the chamber  $c$  until forced back by the head of the cartridge, as before described. I prefer to use the spring  $e^4$  in this manner, as it gives greater certainty of action to the stop in any position in which the arm may be held.

Although I have shown the stop  $e^2$  and the edge  $e^3$  as directly attached to and forming a part of the lever  $e$ , it is obvious that they may be made in separate pieces and work in and out through holes in the side of the carrier against the lever with the latter pivoted in a longitudinal slot in its exterior surface instead of inside, as shown, without departing from the spirit of my invention; also, that other power than that of spring  $m$  may be used to press the column of cartridges toward the carrier, and so operate the stop.

When the spring  $e^4$  is used, it should be much weaker than the force used to press against the column of cartridges and cause them to enter the carrier, as described.

What I claim as new and of my invention is—

1. In the carrier C, the combination of the chamber  $c$  and the lever  $e$ , pivoted in said carrier, and carrying upon one side of its pivot and at the forward end of said chamber the stop  $e^2$ , and upon the other side of its pivot and into the path of the cartridge in said chamber the vibrating edge  $e^3$ , substantially as described.

2. In combination with the magazine M and its spring  $m$ , the carrier C, provided with chamber  $c$ , and the lever  $e$ , pivoted in said carrier and carrying upon one side of its pivot, and at the forward end of said chamber the stop  $e^2$ , and upon the other side of its pivot and into the path of the cartridge in said chamber the vibrating edge  $e^3$ , substantially as described.

3. In the carrier C, the combination of the chamber  $c$ , the lever  $e$ , pivoted in said carrier and carrying upon one side of its pivot and at the forward end of said chamber the stop  $e^2$ , and upon the other side of its pivot and into the path of the cartridge in said chamber the vibrating edge  $e^3$ , and the lever-spring  $e^4$ , substantially as described.

4. In combination with the magazine M and its spring  $m$ , the carrier C, provided with the chamber  $c$ , the lever  $e$ , pivoted in said carrier and carrying upon one side of its pivot and at the forward end of said chamber the stop  $e^2$ , and upon the other side of its pivot and into the path of the cartridge in said chamber the vibrating edge  $e^3$ , and the lever-spring  $e^4$ , substantially as described.

DAVID HALL RICE.

Witnesses:

WILLIAM P. BLAKE,  
N. P. OCKINGTON.