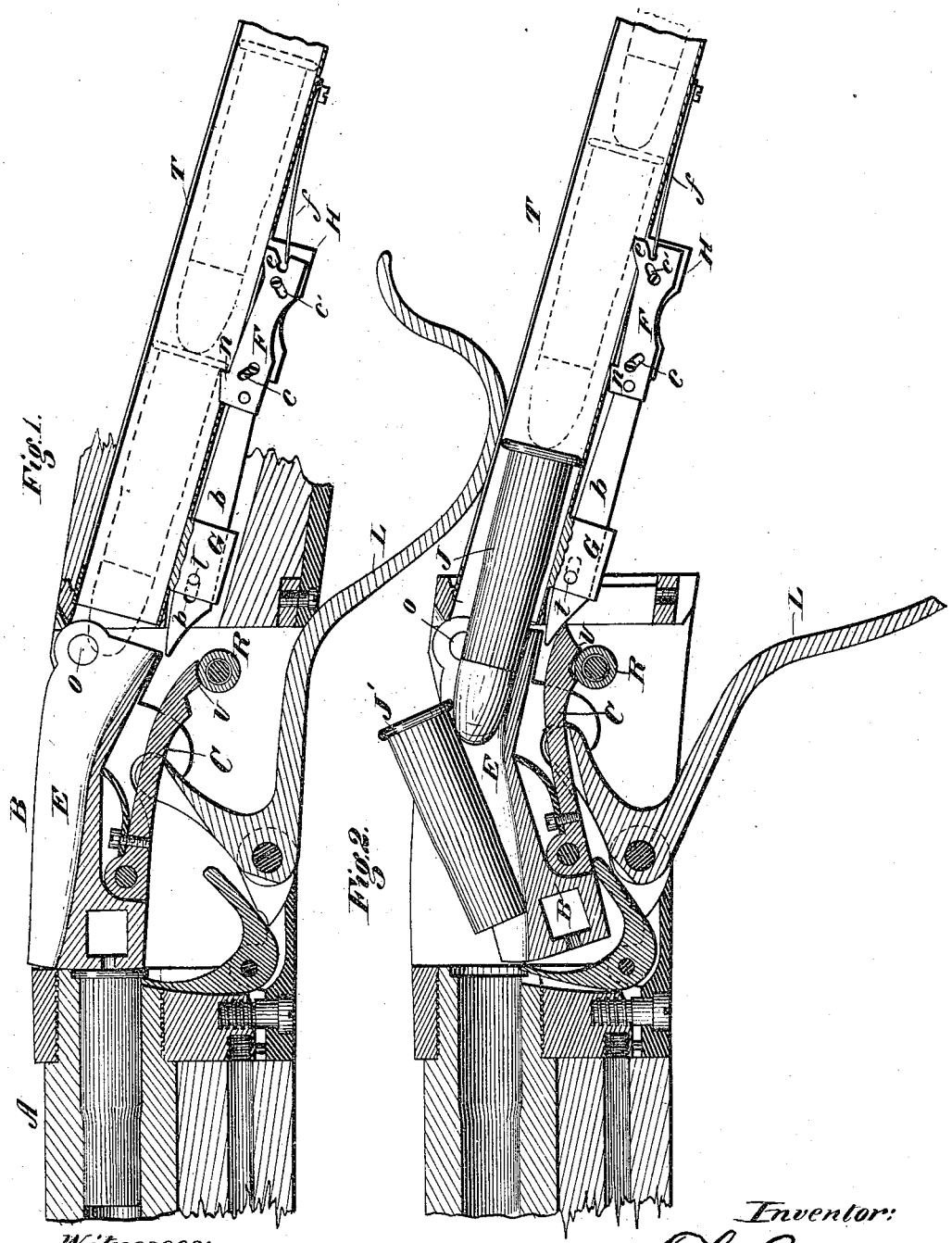
T. G. BENNETT.

MAGAZINE FIRE-ARM.

No. 188,844. Patented March 27, 1877.




Witnesses:

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. 188,844, dated March 27, 1877; application filed February 24, 1877.

*To all whom it may concern:*

Be it known that I, THOMAS G. BENNETT, of New Haven, in the county of New Haven and State of Connecticut, have invented certain Improvements in Altering Breech-Loaders into Magazine-Guns, of which the following is a specification:

My invention relates to breech-loading fire-arms; and it consists in certain alterations in and additions to the breech-loading gun known as the "Peabody gun," by which it is converted from a single breech-loader into a repeating or magazine gun, as hereinafter more fully described.

Figure 1 is a longitudinal vertical section, showing the breech closed. Fig. 2 is a similar view, showing the breech open.

The arm to which my improvements are applied is well known to the public as the "Peabody gun," it being so called after the inventor. In this arm the breech-block B is an oblong block of metal, pivoted at its rear end in the receiver, and has its front end raised and lowered by means of an elbow-lever, L, as represented in the drawings. To convert this arm into a repeater or magazine-gun I cut a groove, E, in the upper face of the breech-block, as represented in the drawings, this groove increasing in depth as it approaches the rear end thereof, its rear portion being inclined downward also, as shown in Fig. 1. At each side of the groove the block B is left of its original height, thus forming a trough, as it were, of the upper face of the block, it being pivoted by a separate screw, *o*, on each side at its rear end, the only difference in this respect being that a short screw is used on each side, whereas in the original gun the screw extended all the way through from side to side, this change being made, as also that of grooving out the upper face of the block, to permit the passage of the cartridges from the magazine-tube T, which I insert longitudinally in the butt-stock of the gun, as shown in the drawings. A hole is also made through the rear end of the receiver, in such a position as to coincide with the front end of the magazine-tube T and the rear end of the groove in the breech-block, so as to form a continuous passage for the cartridges, which are forced forward by a spiral spring, in the usual manner, or by any suitable means.

Underneath the magazine-tube T are secured two rigid studs or plates, G and H, to the first of which I secure a longitudinal bar or plate, *b*, by means of a pin, *t*, working in a slot, as shown, whereby said bar *b* is free to slide to and fro. At its rear end this bar *b* is pivoted to another plate, F, which is provided with two oppositely-inclined slots, *c* and *c'*, through which screws pass into the fixed stud H, as shown.

This plate F is provided on its upper edge, near its front end, with a shoulder, *n*, its front end being beveled or inclined from the shoulder *n* forward; and at its rear upper edge it is provided with another shoulder or projection, *e*, which is, in like manner, inclined at its front, there being a slot cut through the magazine-tube at this point for the plate F, or its shoulders *n* and *e*, to work through. A spring, *f*, is arranged to press down the rear end of the plate or stop F, so that when at rest its front end will be elevated, thereby causing its shoulder *n* to protrude through the slot up into the tube, as represented in Fig. 1, where it will serve as a stop by engaging with the flange of the cartridge, and holding the latter in position.

It will be seen that by means of the two inclined slots *c* and *c'* this stop or plate F, when moved longitudinally back and forth, will alternately rise and fall at its opposite ends, and that thus first one shoulder, *n*, and then the other shoulder, *e*, will be projected up into the tube, one being depressed as the other is elevated.

On the under side of the breech-block B there is a spring arm or lever, C, which works over a roller, I, for the purpose of holding the breech-block up or down, there being a V-shaped projection or cam, *v*, on the under side of this lever C, in such a position that when the breech-block is raised this projection *v* will come in front of the roller R, as shown in Fig. 1, and when the breech is opened it will pass to the rear of the roller, as shown in Fig. 2, the arm or lever C thus working back and forth at its rear end.

The plate or bar *b*, which, as above explained,

and as clearly shown in the drawings, is connected to the stop F, is made of such a length, and has its front end so arranged, that when the breech is opened it will be hit by the end of the lever or arm C as the latter moves back over the roller R, thereby imparting to the bar *b* a backward movement, which, in turn, operates upon the stop F, and moving it to the position shown in Fig. 2—that is to say, it is shoved backward, whereby its front shoulder *n* is drawn down, which releases the cartridge held by it, and its rear shoulder *e* is thrown up, so as to press against or stop the next cartridge, and hold it until the stop resumes its former position, which it does as soon as released from the backward pressure of the arm C by the closing of the breech, when the cartridge moves forward until stopped by the shoulder *n*, which holds ready for the next operation.

It is obvious that the rear shoulder *e* may be dispensed with, if desired; but I prefer to use it, as I find that the device operates better with it.

It will be observed that the bottom of the groove in the upper side of the breech-block B, and along which the cartridges move, instead of being made on a straight line, is formed of two planes, intersecting each other at a slight angle, as shown in Figs. 1 and 2, and that the rear portion or plane is arranged to be on a line with the axis of the magazine when the breech is opened, as represented in Fig. 2, while the front portion or plane inclines from the lower edge of the chamber in the barrel upward to the rear, the result of which construction, in connection with the movements of the outcoming shell J′ and the ingoing cartridge J, is that the point of the cartridge enters upon the rear portion just as the shell J′ is passing up the inclined or front portion, whereby, as the cartridge J advances, its pointed end passes under the receding shell J′, which is thus deflected upward, and thrown clear from the arm, the shell being ejected from the chamber of the barrel by the ejector P, which is the same as used in the original gun, and is operated by the falling breech-block B, the same as in the arm before being altered.

It is obvious that the stop F may be arranged to be operated by the hand, and that it may be used with other magazine-guns, as well as with this particular arm, and also that the operating slide or bar *b* may be so located, arranged, or modified in form as to be operated by the breech-block itself, instead of by the arm C, without changing the effect produced.

The magazine may be loaded from the rear, if desired; but it can be loaded by shoving the cartridges in from the front, the incline of the shoulder *n* enabling the cartridges to be shoved in past it, the cartridge depressing it as it is shoved in, and the shoulder rising as soon as the flange of the cartridge has passed it, and, being in front of the flange, holds the cartridge from being shoved out by the magazine-spring.

By these means I am enabled to convert a single breech-loading arm of this style into a magazine or repeating arm at a very small expense, and without in any manner interfering with its capacity or efficiency as a single breech-loader.

Having thus described my invention, what I claim is—

1. The stop or plate F, provided with the shoulder *n* and the oppositely-inclined slots *c* and *c′*, arranged to operate in connection with a magazine-tube, T, substantially as and for the purpose described.

2. In combination with a magazine-tube, T, the stop or plate F, spring *f*, and operating slide or bar *b*, all arranged to operate substantially as described.

3. The breech-block B, having the groove E formed therein, substantially as described, in combination with the magazine-tube T, arranged in the rear thereof, so as to deliver its cartridges to the groove in said block, substantially as shown and described.

4. The combination of the grooved breech-block B, with its arm C, the magazine-tube T, and the stop F, with its spring *f* and sliding bar *b*, all constructed to operate substantially as described.

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Witnesses:
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