C. M. SPENCER.

Magazine Gun.

No. 36,062. Patented July 29, 1862.

Fig. 1

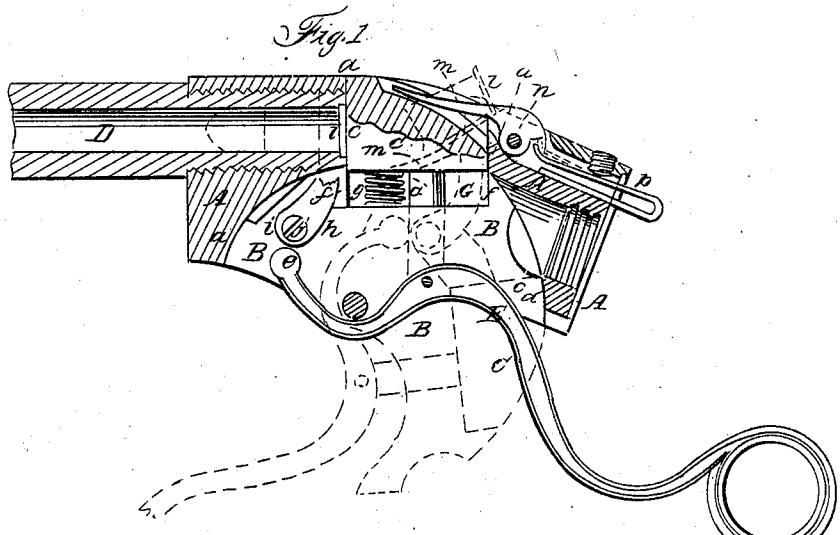


Fig 2

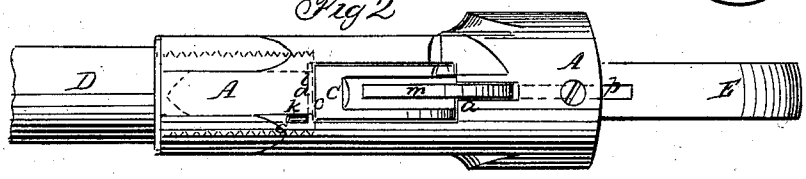
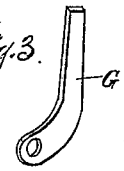


Fig. 3.



Witnesses;

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UNITED STATES PATENT OFFICE.

C. M. SPENCER, OF SOUTH MANCHESTER, CONNECTICUT, ASSIGNOR TO CHARLES CHENEY.

IMPROVEMENT IN CARTRIDGE-RETRACTOR FOR BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **36,062**, dated July 29, 1862.

To all whom it may concern:

Be it known that I, CHRISTOPHER M. SPENCER, of South Manchester, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal sectional view of the breech part of a breech-loading fire-arm with my improvement. Fig. 2 is a top view of the same. Fig. 3 is a perspective view of the device for withdrawing the discharged cartridge-cases.

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

This invention relates to breech-loading fire-arms in which are used metallic cartridges, whose cases, after having been discharged, require to be withdrawn from the chamber of the barrel in a rearward direction, more especially to those arms having a rolling breech, substantially such as is described in Letters Patent No. 27,393, obtained by me in the year 1860, and loading from a magazine. It consists in an improvement in the means of withdrawing the discharged cartridge-cases from the barrel.

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

A is the breech-holder or breech-frame, which receives within it the movable breech B C, and connects the fixed barrel D with the stock. The movable breech B C works in a parallel-sided slot, *a a*, in the breech-frame A. The said breech is made in two pieces, of which B has a simple rolling motion on the fixed pin *b*, which is inserted transversely through the frame A; and C has, besides this movement, an upward and downward movement into and from the shorter portion of the slot *a a*, immediately behind the fixed barrel. The piece C locks B in place, and its front face, *c*, fitting close behind the barrel, constitutes the face of the breech. The said piece is connected by a rod, *d*, passing through a hole in the piece B, with the trigger-guard lever E, which is connected with the lower part of the piece B, in front of the pin *b*, by means of a knuckle-joint, *e*. The connection of the rod *d* with the lever is in rear of the pin *b*.

The breech is opened by pulling down the trigger-guard lever, which first draws down the piece C of the breech from behind the barrel into the recess *f f*, provided for its reception in the piece B, and then turns the pieces B and C together to the position shown in red outline in Fig. 1, in which position they permit a cartridge to be forced by a spring from a magazine in the stock into such a position above the face *c* that the movement of the piece B back to the position shown in black outline in Fig. 1 causes the piece C to convey it into the chamber of the barrel. When the piece B is turned back far enough to bring the face *c* of the piece C up to the rear of the barrel, the latter piece is forced up by a spring, *g*, into the upper and shorter part of the slot *a*, where it closes the barrel, locks the piece B in place, and holds the trigger-guard lever close up to the frame A and stock.

I have thus far described the construction of the breech. Although it is substantially like that described in the Letters Patent hereinbefore mentioned, it is somewhat modified.

G is the device for withdrawing the cartridge-cases, which constitutes the principal feature of my invention, consisting of a thin flat lever, arranged in front of the piece C of the breech, in a recess, *h i*, provided for it in one side of the piece B, and secured to the said piece B by means of a screw-pivot, *j*, upon which it is capable of moving freely between the front and back of the recess *h i*, or between pins secured within the said recess, for the purpose of limiting its movement, the recess in the latter case being of greater width. In front of the slot *a* there is cut in the frame A and in the rear portion of the barrel D a deep notch, *k*, for the reception of the lever G, which is forced into the said notch as the breech is closed by the pressure of the back side, *h*, of the recess *h i*, and which, while the breech is closed, is held by the pressure of *h* so far in front of the face *c* of the breech as to leave room behind it for the flange *l* of the cartridge-case, as illustrated in Fig. 2, and by the position of the said lever represented in black outline in Fig. 1.

In the opening movement of the breech,

the upper part of the lever G is retained in the notch *k* by the friction of the cartridge-case, which is therefore only just started from the chamber, until the front side, *i*, of the recess *h i* comes in contact with the lever and throws it backward, thereby making it withdraw the case from the chamber. By the play allowed to the lever G between *h* and *i*, the breech has time allowed it to move back far enough for the tongue *m* to drop into the position shown in red outline in Fig. 1, for conducting the case out of the cavity *a a* of the breech-frame A. This tongue *m* works on a pin, *n*, under the control of a spring, *p*, which keeps it always pressing upon the breech, and is precisely the same as that described in my before-mentioned Letters Patent. When the closing movement of the breech takes place, the flange of the new cartridge, which has been received above the face *c* from the magazine, presses against the back of the lever G, and forces the said lever forward into the notch *k*, and as the closing movement is completed, the back *h* of the recess *h i* overtakes the said lever, as shown in black outline in Fig. 1.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement of the hinged lever G with the breech-pieces B C, frame A, and tongue *m*, in the manner herein shown and described.

CHRISTOPHER M. SPENCER.

Witnesses:

THOMAS B. CHENEY,

RICHD. O. CHENEY.