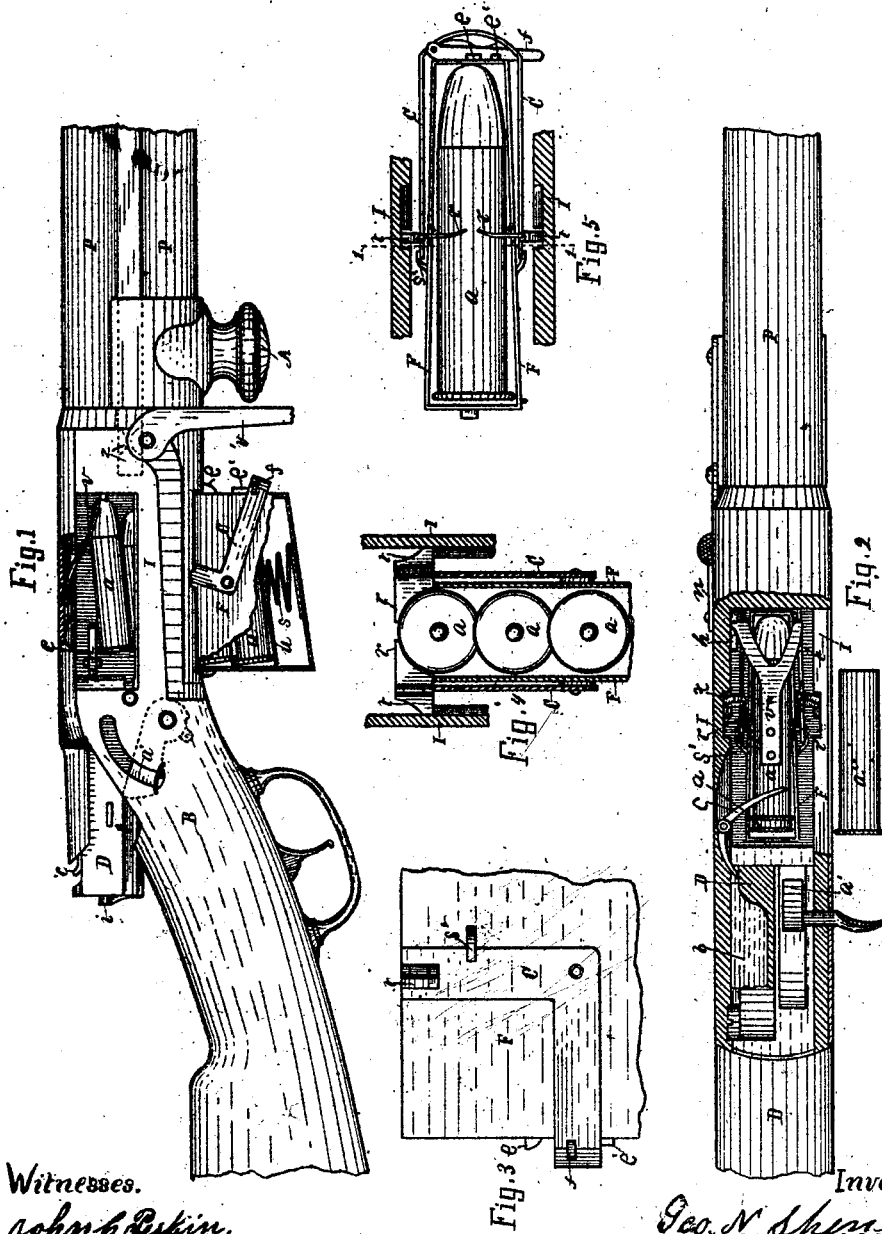


(No Model.)

G. N. SPENCER.
MAGAZINE FIRE ARM.

No. 347,072.

Patented Aug. 10, 1886.



Witnesses.

John P. Pugin.
A. J. Shellman

Inventor.

Geo. N. Spencer.
By Lucius C. Hall.
att.

(No Model.)

2 Sheets—Sheet 2.

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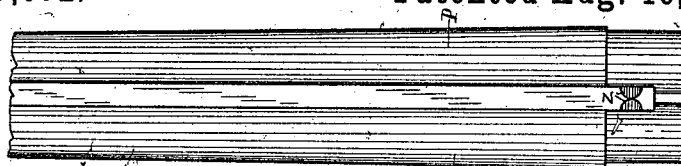


Fig. 9

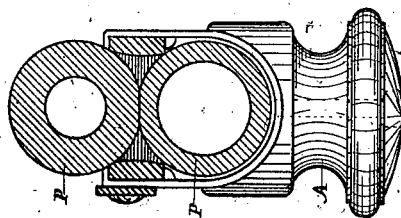


Fig. 10

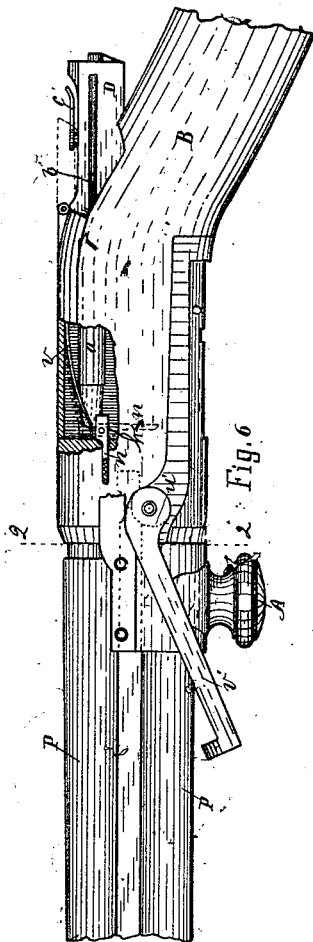


Fig. 6

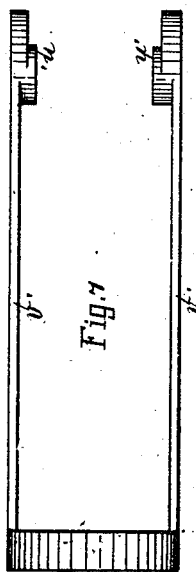


Fig. 7

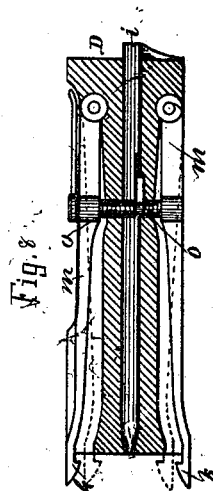


Fig. 8

Witnesses.

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Inventor.

Geo. N. Spencer.
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Atty.

UNITED STATES PATENT OFFICE.

GEORGE N. SPENCER, OF THREE RIVERS, MICHIGAN.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 347,072, dated August 10, 1886.

Application filed November 24, 1885. Serial No. 187,835. (No model.)

To all whom it may concern:

Be it known that I, GEORGE N. SPENCER, a citizen of the United States, residing at Three Rivers, county of St. Joseph, State of Michigan, have invented a new and useful Magazine Fire-Arm, of which the following is a specification.

This invention has for its object certain improvements in this class of fire-arms, important features being the manner of loading the gun and of discharging the empty shells through a side exit in the breech-chamber.

In the drawings, forming a part of this specification, Figure 1 is a side elevation, parts being broken away; Fig. 2, top view of Fig. 1; Fig. 3, an enlarged detail in elevation referred to by like letters; Fig. 4, a section on line 1 1 in Fig. 5; Fig. 5, parts in Fig. 2, enlarged. Fig. 6 shows the opposite side of Fig. 7, with cartridge-case or magazine removed; Fig. 7, an enlarged top view of the lever in Figs. 1 and 6, used to extract the barrel from the breech; hereinafter described; Fig. 8, a side view of shell-extractor with the sliding breech-block in vertical section; Fig. 9, a side elevation of gun-barrels; and Fig. 10 is a section, enlarged, on the line 2 2 in Fig. 6.

The fire-arm here shown is illustrated with double barrel P, rifle, and shot-gun, and some of the improvements pertain thereto; but so far as the plan of loading the cartridges and freeing the breech-chamber of the exploded shells is concerned the barrel may be double or single.

The magazine F is inserted in the breech-chamber from the lower side, said magazine being open at the upper side. The cartridges are tiered in the magazine, and are forced upward by the spring s pressing upward on the movable bridge u, Fig. 1.

C C are elbow-levers, pivoted on the sides of the cartridge-case or magazine F, at or near the turn of the elbow, Figs. 1 and 3. To the upper end of the upright arms of the levers C are hinged wings *c* *t*, the part *r* of the wings extending through a slot in the walls of the magazine, Fig. 5, and extending onto the cartridges *a* to hold them down against being thrown out of the magazine when not in use by the upward pressure of the spring s. The part *t* of the wings, when the latter are swung so as to disengage the cartridges, Fig. 2, catch

on shoulders or shelves in the side walls of the breech-chamber, and thus lock the magazine in said chamber. These wings are operated by carrying the horizontal portion of the levers C up and down. In Fig. 1 said levers have been swung downward, which action, by the contact of the parts *r* of the wings with the side of the slots in the magazine through which they pass, throws the wings to position shown in Fig. 2, thus releasing the cartridges and locking the magazine to the gun, as above explained. A pivoted spring-actuated lever, *f*, Fig. 5, is connected with the levers C and adapted to catch under lug *e'*, Fig. 1, to hold the levers C in their tilted position. The lugs *s'* receive the levers C when in position to hold cartridges down, Fig. 5. The lug *e* limits the upward insertion of the magazine into the breech-chamber beyond the proper point. A forked spring, *v*, is secured to the upper wall of the breech-chamber, and the forward end bears with a yielding resistance down on the forward end of the cartridge, so that it will be raised just high enough under pressure upward of the spring *s* to enter the barrel of the gun, Figs. 1, 2, 6. In the latter figure a stop, *h*, is shown pivoted to the wall of the breech-chamber, a pedal connecting with the pivotal axis of the stop on the outside of the gun at *u*, Figs. 2 and 6, by which to adjust the stop *h* in accordance with the size of the cartridges used, and thus to limit the downward pressure of the spring *v* that is, as adjusted in Fig. 6 the spring *v* bears on the side of the stop when using rifle cartridges; but by adjusting as indicated by dotted lines of these parts in said Fig. 6 the spring rests on the end of the stop *h*, thus being held higher up, and this adjustment would be for shot cartridges, which of course are larger than those used for rifle-barrel. In Fig. 10 the upper barrel P is the rifle and the lower barrel P the shotgun.

Levers *c'* *c'* are pivoted to the breech on each side, and are provided with cams *u'*, Fig. 7, adapted to engage with the cam lugs *z* of the barrels P to force them out of the sockets of the breech when desiring to reverse the barrels by turning them over so as to bring whichever barrel is desired to be used uppermost. The back end of the cartridge is held down until ready to be forced in the barrel by the

bow-lever *e*, which is pivoted in a recess in the wall of the breech-chamber, Figs. 1 and 2.

In the operation, when the breech-block D is carried forward, it comes in contact with the forward portion of the lever *e*, tilting it off from the cartridges, which are forced into the upper barrel by the forward movement of said breech-block. The rear end of said lever *e* tilts inward around the shoulder D of the breech-block, Fig. 2. When the breech-block is slid backward, the shoulder D contacts with the rear end of the lever *e*, throwing the forward end over the next cartridge forced upward by the spring *s*.

The mode of operating the sliding breech-block D and of firing the cartridge by the firing-pin *i* are well understood from prior illustrations of the art without giving details here.

In Figs. 2 and 6, *b* shows the channel-recess in which the rear end of the lever *e* plays.

By referring to Figs. 1 and 2 it will be seen that the breech-chamber has an opening through the wall of said chamber on one side for the exit of the shell *a* laterally out of said chamber after firing, and drawing the shell from the barrel back into the chamber. The shell is thus thrown out by the forward end of the lever C contacting with the shell *a* when the sliding breech-block D is drawn back. Thus the lever C performs a double function. A suitable shell-extractor draws the shell *a* from the barrel during the backward movement of the breech-block D, and, so far as throwing the shell out of the side opening in the breech-chamber is concerned, any well-known shell-extractor may be employed; but in Fig. 8 I have shown a shell-extractor adapted for adjustment to extract shells of different sizes. It consists of two elastic bars pivoted on the top and bottom sides of the sliding breech-block. The free ends of these bars are provided with hooks *k*, for catching over the flange at the rear end of the shell *a*. The bars are provided between their free or pivoted ends with threaded holes, in which the threaded ends of bolt *o o* are inserted. A lever, *c'*, connects with the end of the bolt to turn it by, and thus separates the bars farther or draws them nearer each other. The lever C forces the end of the shell laterally out of the hooks when throwing the shell out of the chamber.

In Figs. 1 and 2, *a'* is the hammer of the gun, and *i*, in Figs. 1 and 8, is the firing-pin which the hammer strikes; as in other guns, all understood by prior construction.

Having thus described my invention, what I claim as new is—

1. The combination of the breech-chamber having a side exit for the empty shell, a bowed lever pivoted at the center to the wall

of the breech-chamber in position to be tilted on its pivot by the sliding breech-block, and an open-top magazine having a spring-actuated bottom to press up on the cartridges, whereby the lever holds down the upper cartridge and throws the empty shell out of the side of the breech-chamber, substantially as set forth.

2. The combination of the breech-chamber having a bottom opening to receive the magazine, and having a side opening for the exit of the exploded cartridge-shell, a magazine open at the top and having a secondary movable spring-actuated bottom, levers for holding the cartridges down in the magazine before the latter is inserted in the breech-chamber, and adapted for releasing the cartridges after the magazine is inserted in said chamber, a spring in the upper side of the breech-chamber for pressing on the forward end of the upper cartridge, and a pivoted lever actuated by the sliding breech-block and adapted to hold the rear end of the upper cartridge down and to throw the exploded shell out of the side opening in the breech-chamber, substantially as set forth.

3. The combination of the double reversible barrels, a magazine having a loose secondary spring-actuated bottom, a magazine-chamber provided with the spring for engaging or bearing upon the forward end of the cartridges, and adjustable stop for controlling the pressure of said spring in accordance with the size of cartridge used, substantially as set forth.

4. The combination of the double reversible barrels provided with cam-lugs on the sides of their shouldered or tenoned ends, and cam-lever pivoted to the sides the breech and adapted to force the tenoned ends of the barrel out by contact with the cam-lugs, substantially as set forth.

5. In a fire-arm provided with a double barrel for both rifle and shot cartridges, a shell-extractor adapted for adjusting to the different sizes of cartridges, consisting of elastic hook-bars pivoted to opposite sides of the sliding breech-block, and having threaded holes between the hook and pivoted end, and a bolt having threaded ends in said holes of the bars, and a lever for turning said bolt to adjust the hook-bars, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two witnesses.

GEORGE N. SPENCER.

Witnesses:

E. C. SOUTHARD,
C. E. HOUGHTON.