

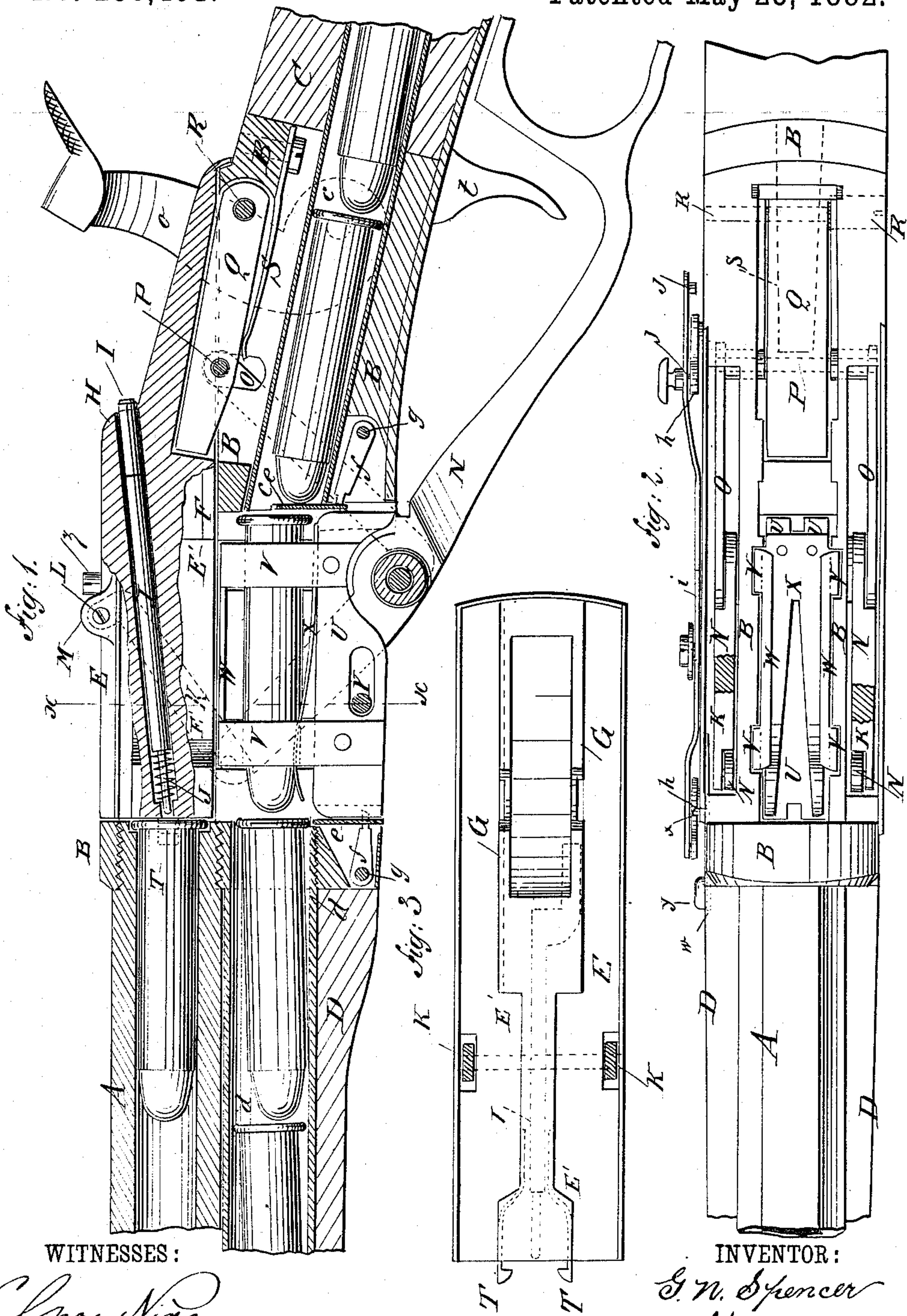
(No Model.)

3 Sheets—Sheet 1.

G. N. SPENCER.
MAGAZINE FIRE ARM.

No. 258,491.

Patented May 23, 1882.



WITNESSES:

Chas. N. ...
C. Sedgwick

INVENTOR:

G. N. Spencer
BY *Mum & Co*
ATTORNEYS.

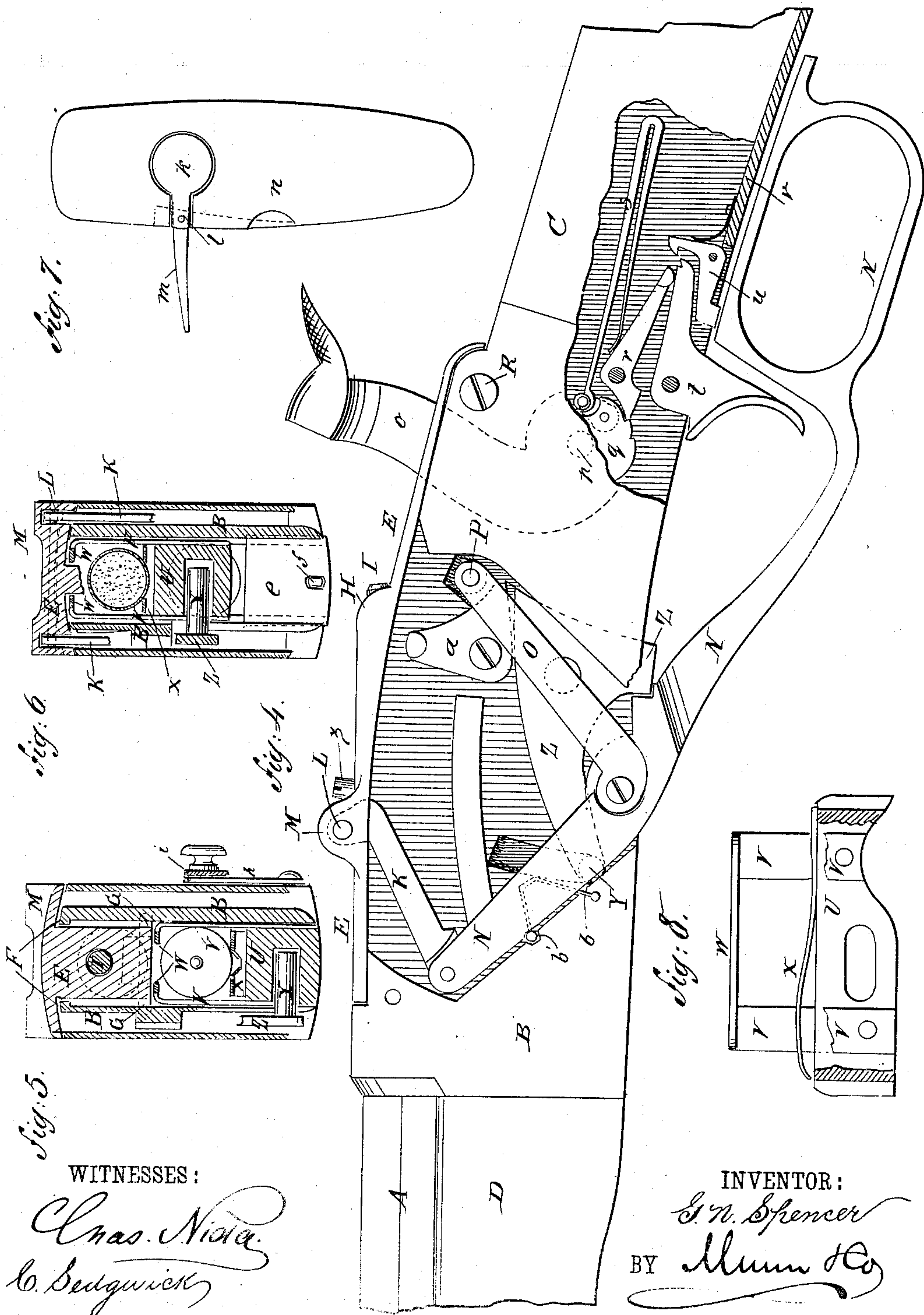
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3 Sheets—Sheet 2.

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No. 258,491.

Patented May 23, 1882.



WITNESSES:
Chas. N. Noyes
C. Sedgwick

INVENTOR:
G. N. Spencer
BY *Allen & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE N. SPENCER, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
DION C. GOLDSBOROUGH AND OBADIAH OSBORN, OF WALLA WALLA,
WASHINGTON TERRITORY.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 258,491, dated May 23, 1882.

Application filed December 22, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE NELSON SPENCER, of the city, county, and State of New York, have invented a certain new and useful Improvement in Combined Magazine and Needle Gun, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of my improvement, the parts being shown in position for firing. Fig. 2 is a plan view of the same, the breech-block being removed and the levers being shown in section. Fig. 3 is an under side view of the breech-block. Fig. 4 is a side elevation of the improvement, the face-plate being removed and parts being broken away. Fig. 5 is a sectional end elevation of the same, taken through the line *xx*, Fig. 1, and showing the cartridge-carrier lowered. Fig. 6 is a sectional end elevation of the same, taken through the line *xx*, Fig. 1, but showing the cartridge-carrier raised. Fig. 7 is an elevation of the stock-butt. Fig. 8 is a side elevation, partly in section, of the cartridge-carrier. Fig. 9 is a side elevation of the improvement, the face-plate being removed and the breech-block being thrown back. Fig. 10 is a side elevation of the same, showing the mechanism for operating the magazine-gates. Fig. 11 is a plan view of a part of the forked lever.

The object of this invention is to promote security and rapidity in discharging repeating fire-arms.

The barrel A is screwed into a screw-hole in the upper part of the forward end of the breech-frame B in the usual manner. To the rear end of the breech-frame B is secured the butt-stock C.

To the forward end of the breech-frame B, and to the barrel A, is secured the fore stock D in the usual manner.

E is the breech-block, which slides forward and back in line with the bore of the barrel A, and is kept in place by tongues F, formed upon the inner sides of the upper part of the

breech-frame B to enter grooves in the sides of the said breech-block, and by tongues G, formed upon the sides of the rear part of the breech-block to enter grooves in the said breech-frame.

Upon the middle part of the upper side of the breech-block E is formed a shoulder, H, from which to the forward end of the said breech-block is formed a perforation to receive the needle I and the spring J, that holds it back.

To the under side of the breech-block E, at a little distance from its forward end, are pivoted the upper ends of two short connecting-bars, K, by a pin, L, which passes through a cross-rib or shoulder, M, formed upon the upper side of the said breech-block and having its end parts recessed to receive the ends of the said connecting-bars K, as shown in dotted lines in Figs. 1, 4, 9, and 10 and in full lines in Figs. 3 and 6. The lower ends of the connecting-bars K are pivoted to the ends of the arms of the forked lever N, which arms pass up upon the opposite ridges of the breech-frame B.

To the opposite sides of the lever N, at the base of its fork, are pivoted the lower ends of two connecting-bars, O, the upper ends of which are pivoted to a pin, P, passing through short slots in the breech-frame B and through the locking-block Q. The locking-block Q is placed in a recess in the rear part of the breech-frame B, and its rear end is convexed to fit into a concaved solid shoulder in the breech-frame B. The rear end of the locking-block Q is hinged to the breech-frame B by a pin, R, to allow the forward end of the said locking-block to be raised into a recess in the lower side of the breech-block E, so that a solid shoulder of the breech-block E will rest against the forward end of the locking-block Q. With this construction the breech-block E will have a solid support against the back-pressure of the explosion when the gun is discharged. The forward end of the locking-block Q is raised into and held in the recess in the breech-block E by a spring, S, the rear end of which is attached to the breech-frame

B, and its forward end rests against the forward part of the lower side of the said locking-block Q, as shown in Fig. 1.

To the opposite sides of the forward end of the breech-block E are attached two spring-hooks, T, which, when the said breech-block is thrown forward, pass and catch upon the rim of the cartridge, as indicated in dotted lines in Fig. 1, so as to withdraw the cartridge-shell from the bore of the barrel A squarely when the said breech-block is thrown back. The cartridge-shell is raised out of the breech-frame B by the rise of the cartridge-carrier U. The carrier U has bars or ribs V upon its sides, which slide in guide-grooves in the breech-frame B when the said carrier is raised and lowered, and which are connected at their upper ends at each side by longitudinal bars W. The upper ends of the bars V and the top bars W form a bed to receive the cartridge-shell when withdrawn from the barrel A by the extractor T and raise the said shell from the breech-frame B.

To the upper side of the rear end of the carrier-block U is attached the rear end of a spring, X, the forward end of which is forked and rises above the surface of the said carrier-block U to support the forward end of the cartridge, while the rim of the said cartridge rests upon the said carrier-block, as shown in Fig. 1, so that the cartridge will be supported in a horizontal position, ready to be forced into the bore of the barrel A by the advance of the breech-block E. The opposite sides of the breech-block E are cut away at a little distance from its forward end, as shown at E' in Figs. 1 and 3, to allow the carrier to be lowered after the breech-block has been moved forward into place.

In the middle part of the carrier-block U is formed a short longitudinal slot to receive a pin, Y, formed upon or attached to the end of the forward arm of the three-armed lever Z, and which passes through a curved slot in the side of the breech-frame B, as shown in Fig. 9. The three-armed lever Z is pivoted at its middle part to the breech-frame B, and its lower arm projects through an aperture in the bottom of the breech-frame B, so as to be struck and operated to lower the carrier U by the lever N as the breech-block E completes its forward movement.

Upon the upper arm of the three-armed lever Z rests the lower arm of the triangular trip-lever a, which is pivoted at its angle to the breech-frame B, with its upper end projecting into such a position as to be struck by a shoulder formed upon the lower side of the forward end of the connecting-bar K, so that the trip-lever a will operate the three-armed lever Z to raise the carrier U as the breech-block E completes its rearward movement. The cartridge-carrier U is held up while the breech-block E is being moved forward to force the cartridge into the barrel A by an angular spring, b, the angle of which rests against the end of the forward arm of the three-armed

lever Z, and the end of its lower arm is pivoted to the breech-frame B. The upper arm of the spring b slides in a groove in the breech-frame B, as shown in Fig. 9, and has a projection, b', formed upon its end to be struck by an arm of the forked lever N as the breech-block E completes its forward movement to withdraw the said spring b from the end of the three-armed lever Z to allow the carrier U to be lowered. The angle of the spring b that rests against the end of the three armed lever Z is inclined or beveled, as shown in full lines in Fig. 9 and in dotted lines in Fig. 4, so that the carrier U can be forced down by pressure applied to its top to adapt the gun to be used as a breech-loader, in which case the cartridge is laid upon the top of the carrier and pressed downward, lowering the carrier and bringing the cartridge opposite the bore of the barrel A, so that it will be forced into the said barrel by the forward movement of the breech-block E. The carrier U is opened at both ends, so that it can receive a cartridge from the magazine c, secured in the butt-stock C, and also from the magazine d, secured in the fore-stock D and to the barrel A. The inner ends of the magazines c d are closed and opened, as desired, by gates or cut-offs e, which slide in vertical grooves in the breech-frame B, and have slots or apertures in their lower parts to receive the inner ends of the short levers f. The outer ends of the levers f are rigidly attached to pins g, which work in holes in the breech-frame B, and to the ends of which are attached the lower ends of the short levers h.

To the upper end of the forward lever h is pivoted, by a rivet or other suitable means, the forward end of the connecting-bar i.

To the rear part of the connecting-bar i, at its rear end, and at a little distance from its rear end, are attached two pins, j, to engage with the upper end of the rear lever h. With this construction, when the rear lever h is connected with the forward pin j one of the gates e will be closed and opened as the other is opened and closed, and when the rear lever h is connected with the rear pin j the two gates e will be opened and closed together. With this construction, by connecting the rear lever o with the rear pin j both gates can be opened at the same time to allow both magazines to be filled from the butt of the stock; and both gates can be closed at the same time to allow the gun to be used as a breech-loader. By connecting the rear lever h with the forward pin j the gates will be opened and closed successively, so that the firing can be done from either magazine, as may be desired, the closed gate serving also as a stop to prevent the cartridge entering the carrier from being pushed past its proper position.

w is a spring secured in a recess in the breech-frame B, and provided with a pin, x, which projects through a hole in the breech-frame B to engage with either edge of the forward lever

h to lock the gates *e* in any position into which they may be adjusted.

To the forward end of the spring-catch *w* is attached a knob, *y*, for convenience in operating it.

The cartridges are pushed from the magazines *c d* into the carrier *U* by followers and spiral springs in the ordinary manner, which followers and springs are not shown in the drawings. The rear magazine-tube and its spring and follower are removable, and the rear or outer end of the said tube is closed by a cap or plug, *k*. Upon one side of the closed outer end of the removable magazine-tube *c* are formed two lugs, *l*, to and between the outer ends of which is pivoted a lever, *m*, which, when the tube *c* is to be put in and taken out, is turned up, as shown in Fig. 7, and passes through a slot in the butt-plate *n*. When the magazine-tube *c* is in place the lever *m* is turned down into a recess in the side of the butt-stock *C* at the inner side of the butt-plate *n*, so that it will be held in place, locking the said magazine-tube in the perforation in the stock. With this construction the magazine-locking mechanism will not be liable to be injured by the contact of the butt-plate with hard ground or other hard substance.

o is the hammer, which is placed at the side of the breech-frame *B*, and is attached at its base to a pivot, *p*. The pivot *p* works in a hole in the face-plate *B'*, attached to the breech-frame *B* and to the stock *C*, and to its inner end is attached the tumbler *q*, with the notches of which engages the dog *r*. The dog *r* is held against the tumbler *q* by the spring *s*, and its outer end projects into such a position that it can be operated by the inner arm of the trigger *t*.

To the trigger-plate *v*, at a little distance from the end of the inner arm of the trigger *t*, is pivoted the angle of the bent lever *u*, which has a hook or catch shoulder formed upon the end of its upper arm to engage with the inner end of the trigger *t* and hold the said trigger from being moved when the main lever *N* is thrown forward or partly forward. The lower arm of the lever-hook *u* is made heavier than the upper arm, so that its weight will hold the said upper arm forward to engage with the trigger *t* and lock the said trigger. The end of the lower arm of the lever-hook *u* projects through an opening in the trigger-plate *v* into such a position that the main lever *N*, when thrown back, will strike the said end and raise it, raising its upper end or hook away from the trigger *t* and releasing the said trigger.

To the breech-block *E*, at the rear side of the forward shoulder or rib, *M*, is attached a pin, *z*, which, when the said breech-block *E* is thrown back, comes in contact with and carries back the hammer *o* to a full-cock.

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

1. The combination, with a magazine-gun having a magazine arranged to feed in the usual manner, placed under the barrel, and a similar magazine in the stock, of an open-ended carrier arranged, as described, in line with both magazines, and mechanism, substantially as described, for shutting off one magazine while permitting the other to feed to the carrier, as set forth.

2. The combination, with the lever *N*, of the bars *O*, pivoted on pin *P*, connected to the locking-block by a pin at each side thereof, the recessed breech-frame *B*, having concaved shoulder, the hinged locking-block *Q*, having convexed rear end bearing on said shoulder, and the spring *S*, bearing on the locking-block, as shown and described.

3. In a magazine-gun, the combination, with the carrier *U* and the magazines *c d*, of the gates *e*, the levers *f g h*, and the connecting-bar *i*, substantially as herein shown and described, whereby the inner ends of the magazines, either or both, can be opened and closed, as set forth.

4. In a gun, the combination, with the carrier *U*, the forked lever *N*, and the connecting-bars *K*, of the three-armed lever *Z* and the triangular lever *a*, substantially as herein shown and described, whereby the said carrier will be raised and lowered by the movements of the said forked lever, as set forth.

5. The combination, with the sliding breech-block *E*, the levers *N Z*, the carrier *U*, and the grooved breech-frame *B*, of the angular spring *b*, having the end of its lower arm pivoted to and its upper arm sliding in a groove of said frame, and provided with a projection, *b'*, as shown and described.

6. The combination, with the carrier *U* and three-armed lever *Z*, of a spring, *b*, having a beveled angle or bend arranged to rest against the end of said lever, whereby the said carrier can be forced down, as and for the purpose specified.

7. The combination, with the removable magazine-tube *c*, having plug *k* and lugs *ll*, of the recessed stock *C*, the lever *m*, pivoted to and between said lugs, and the slotted plate *n*, as and for the purpose specified.

8. The combination, with the trigger *t*, the lever *N*, and the plate *v*, of the bent lever *u*, pivoted at the angle to said plate, having a shoulder upon its upper arm and having its lower arm made heavier than its upper one, as and for the purpose described.

GEORGE N. SPENCER.

Witnesses:

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C. SEDGWICK.