(No Model.)

2 Sheets—Sheet 1

F. J. EVANS.

BREECH LOADING FIRE ARM.

No. 283,089. Patented Aug. 14, 1883.

Fig. 1.

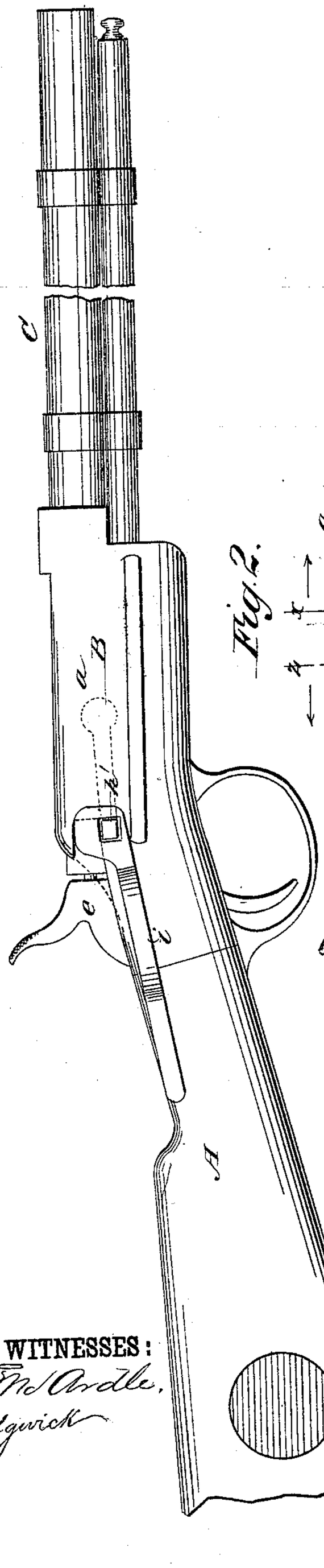


Fig. 2.

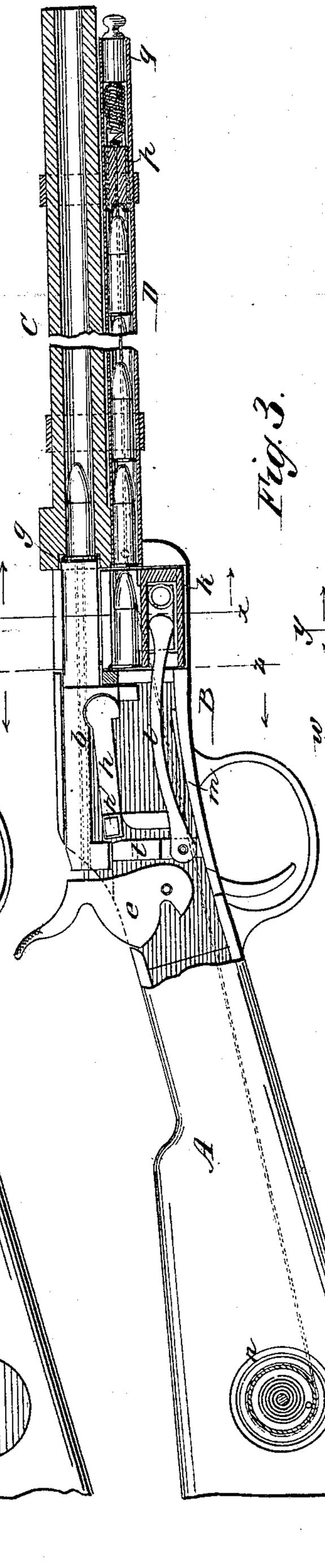
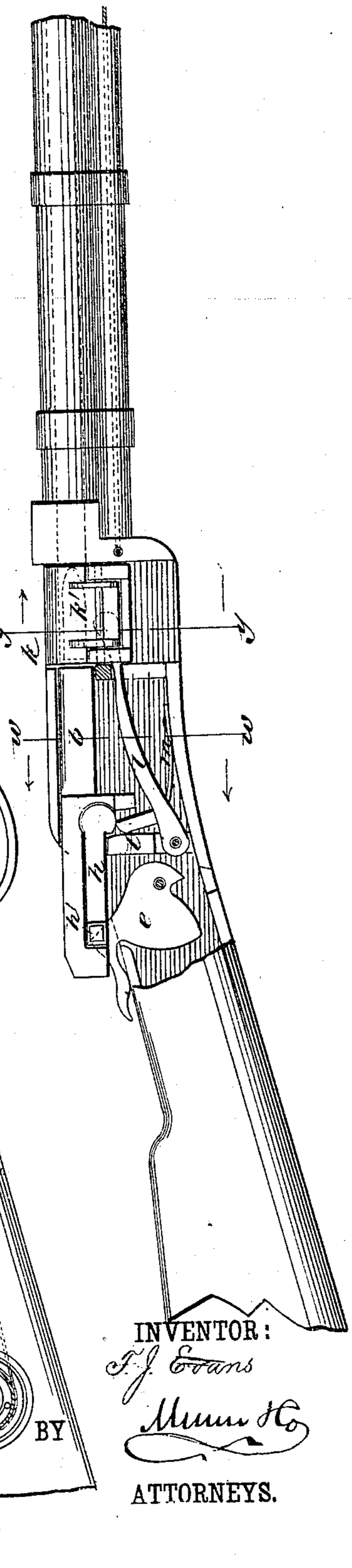


Fig. 3.



WITNESSES:

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C. Sedgwick

INVENTOR:

F. J. Evans

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BY

ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2.

F. J. EVANS.

BREECH LOADING FIRE ARM.

No. 283,089. Patented Aug. 14, 1883.

Fig. 7.

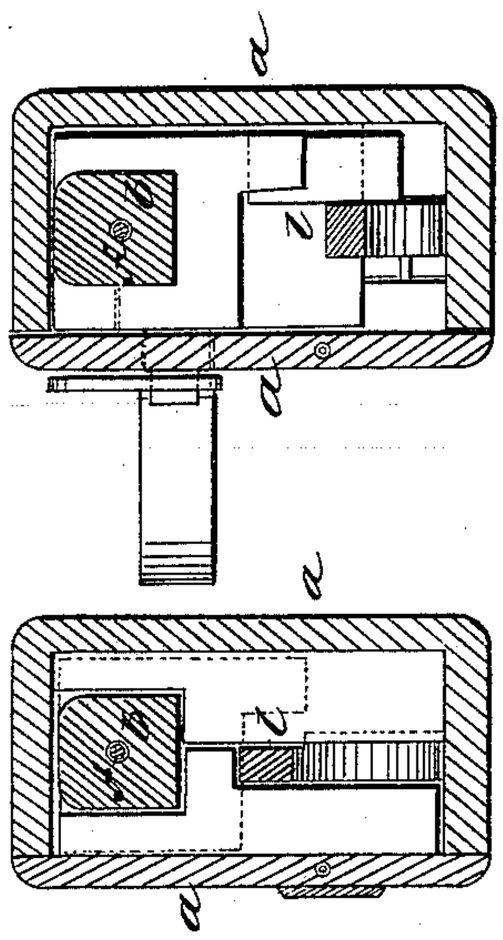


Fig. 10.

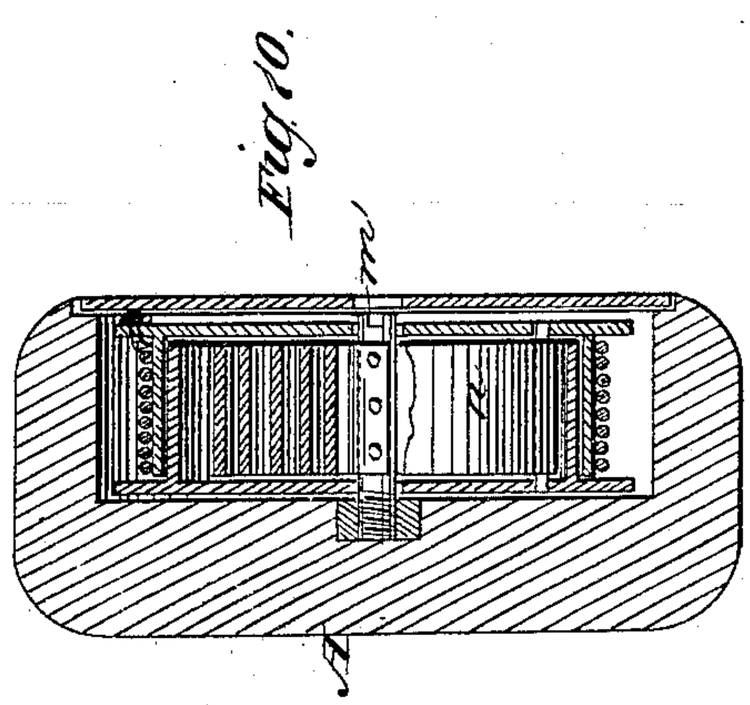


Fig. 6

Fig. 5.

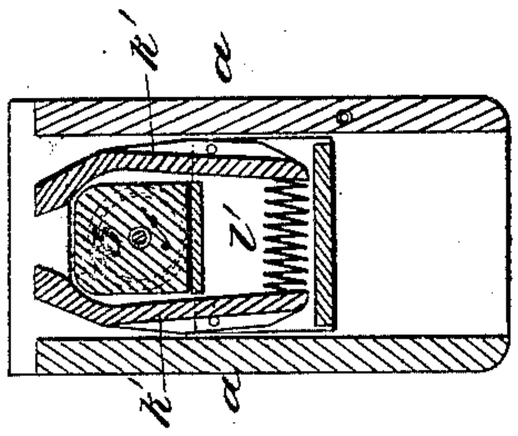


Fig. 8

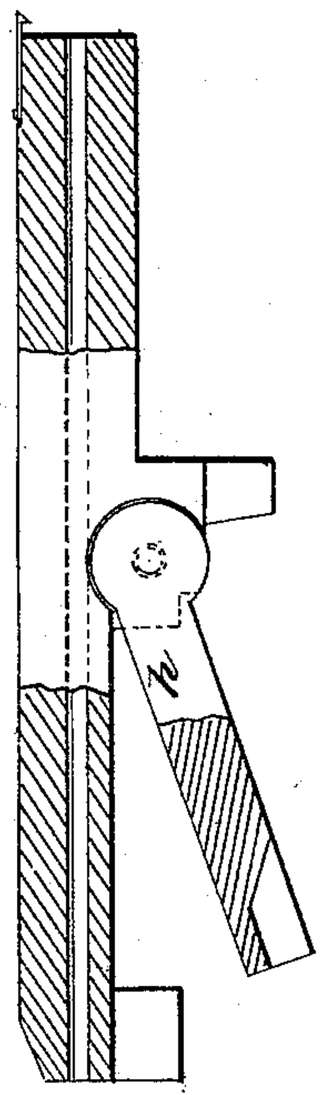


Fig. 9

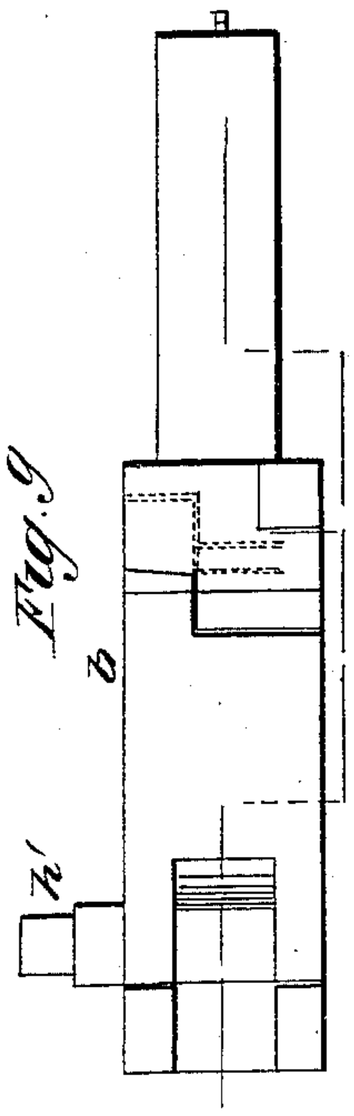
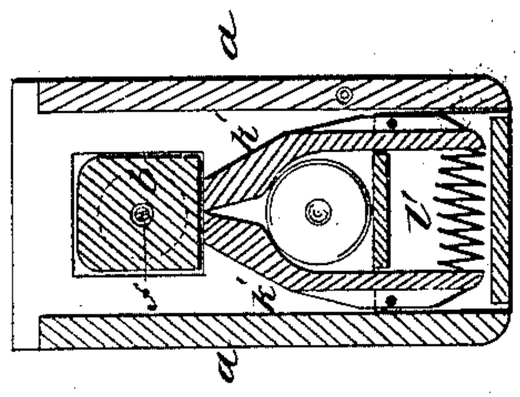


Fig. 4



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INVENTOR:

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANKLIN J. EVANS, OF IOWA FALLS, IOWA.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 283,089, dated August 14, 1883.

Application filed April 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN JAMES EVANS, of Iowa Falls, in the county of Hardin and State of Iowa, have invented a new and useful Improvement in Breech-Loading Fire-Arms, of which the following is a full, clear, and exact description.

My improvements relate to magazine breech-loading fire-arms of the class in which the breech is opened by a breech-block sliding longitudinally with reference to the barrel, and consisting in certain novel features of construction and arrangement both of the breech-block and cartridge-elevator and the mechanism for operating them, as hereinafter described and claimed.

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

Figure 1 is a side elevation of my improved gun. Fig. 2 is a sectional side view with the breech closed. Fig. 3 is a sectional side view with the breech opened. Fig. 4 is a cross-section on line *x x* of Fig. 2. Fig. 5 is a cross-section on line *y y* of Fig. 3. Fig. 6 is a cross-section on line *z z* of Fig. 2. Fig. 7 is a cross-section on line *w w* of Fig. 3. Fig. 8 is a sectional side view of the breech-block detached. Fig. 9 is a plan view of the breech-block. Fig. 10 is a cross-section of the stock, showing the spring-barrel for feeding the cartridges.

A is the stock, B is the breech, and C is the barrel.

a a are side plates covering the breech-cavity, in which the operating mechanism is carried.

b is the breech-block, fitted to slide longitudinally at the upper part of the breech-cavity, and projecting at its rear end in front of the hammer *e*, so that when drawn outward it carries the hammer down and cocks the gun. Longitudinally through the breech-block is an aperture, in which is the firing-pin *f*. At its forward end the breech-block is provided with a hook, *g*, to pass over the flange of the cartridge, so as to draw the empty shell out when the breech is opened.

h is an arm pivoted in a recess at the under side and rear part of the breech-block, and provided with a lug, *h'*, on its moving end, which projects through the side plate, *a*, for connection of a lever, *i*, by which the mechanism is operated.

K is the cartridge-elevator, fitted to slide longitudinally in the breech-cavity behind the barrel C and magazine D, and hung on the end of an arm, *l*, that is pivoted at the rear of the breech-cavity. The elevator K is formed with pivoted sides K' K', between the lower ends of which is a spiral spring, *l'*, that tends to close the upper edges of the sides K' together upon the cartridge, as shown in Fig. 4.

m is a spring attached within the breech-cavity, and bearing at its outer end upon the arm *l*, for throwing the cartridge-elevator upward behind the barrel.

n is a spring-barrel fitted in a recess in the stock A upon a stud, *n'*.

o is a cord attached to barrel *n*, extending through the stock and through one of the side plates, *a*, to the magazine-tube D, within which the cord is connected to a follower, *p*. The cord extends to and is connected with a plug, *q*, that is inserted in the outer end of the magazine-tube D. This plug *q* and extension of the cord *o* are for use in drawing the follower *p* to the outer end of the magazine-tube when the cartridges are to be put in place.

The gun is manipulated as follows: To fill the magazine the follower *p* is drawn out of the outer end of the magazine-tube and the cartridges then put in until the tube is filled, or nearly so, when the follower is put back and the plug *q* also inserted. The spring-barrel *n* being then under tension, the follower *p* acts to press the cartridges toward the elevator K. In the closed position of the breech the elevator is in its lowest position, as shown in Fig. 2, and the cartridge at the rear of the magazine passes between the pivoted side plates, *k'*, of the elevator. The breech-block is prevented from moving backward by the downward position of its pivoted arm *h*, in which position the rear end of arm *h* takes behind a stop, *t*, in the breech-cavity. To open the breech the operator raises the lever *i*, thereby carrying the arm *h* above the stop *t*, and then by pulling upon the lever the breech-block is drawn straight backward to the position shown in Fig. 3. This position of the breech-block allows the cartridge-elevator K

to rise, its spring *m* acting to throw it upward. The breech-block *b* is then moved inward, and its forward end passes between the pivoted sides K′ of the elevator, carrying the cartridge forward into the barrel. The lever *i* is then pressed downward to carry the arm *h* in front of the stop *t*, and at the same time the elevator K is moved downward in position for receiving another cartridge from the magazine, its pivoted sides K′ moving outward in order to pass the breech-block and springing together again beneath the breech-block.

The mechanism of this gun is of simple character, and there are no parts likely to get out of order or become deranged. The breech mechanism can be quickly operated and moves easily and smoothly. The elevator is held open by the breech-block long enough to allow a cartridge to enter from the magazine, and then allowed to close on the cartridge, so as to form a stop for the next cartridge.

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

1. In fire-arms, the combination, with the side plate, *a*, lever *i*, stop *t* in the breech-cavity, and breech-block *b*, of the arm *h*, pivoted in a recess of the inner and rear part of said breech-block, and provided with a lug, *h′*, passing through the side plate, to connect with the lever, whereby the mechanism may be operated, as described.

2. The combination, with the spring-barrel on stud *n* of stock, and a cord, *o*, attached to barrel, of the magazine D, having a plug, *q*, and follower *p*, both connected with said cord, as and for the purpose specified.

FRANKLIN J. EVANS.

Witnesses:
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S. P. SMITH.