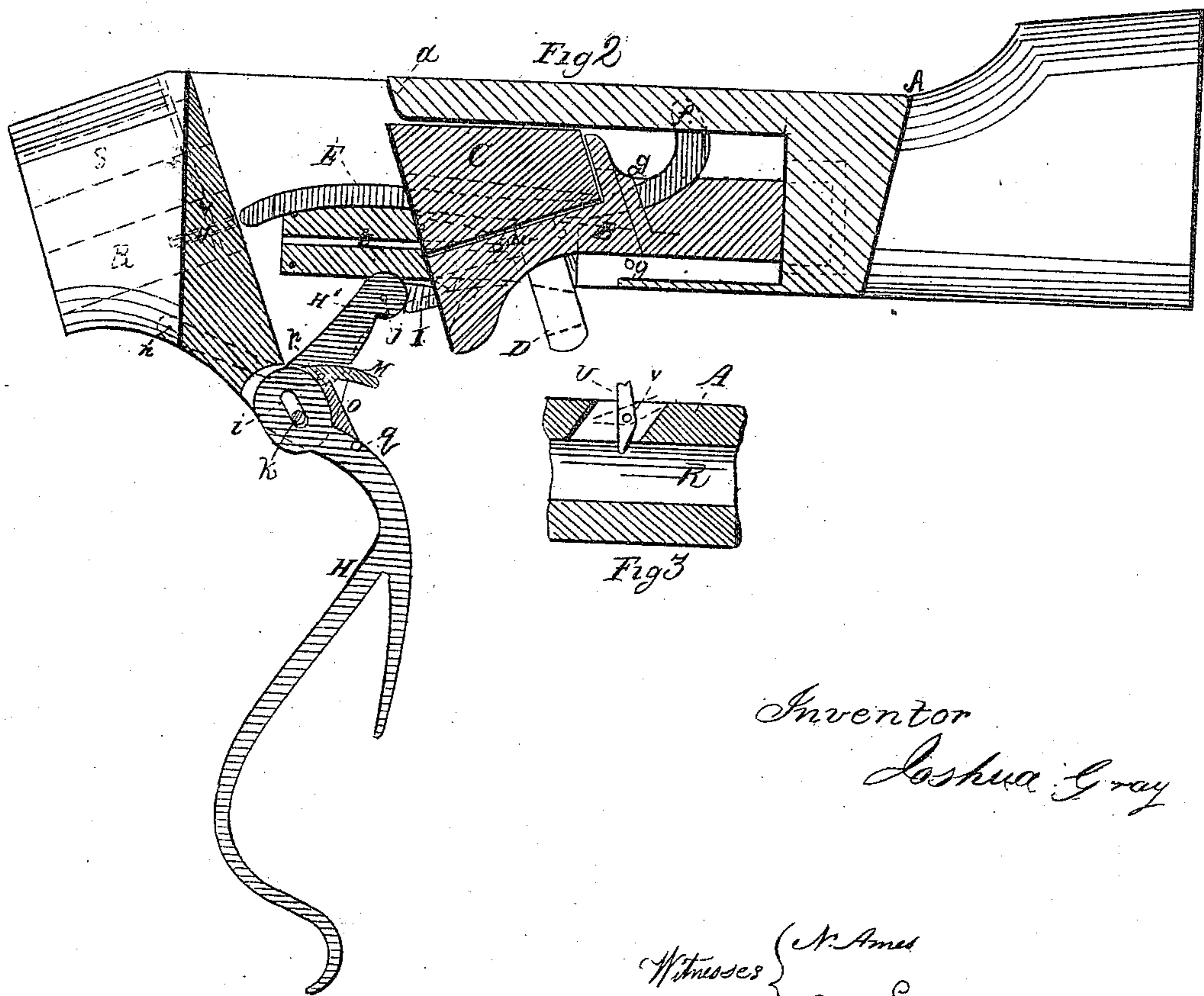
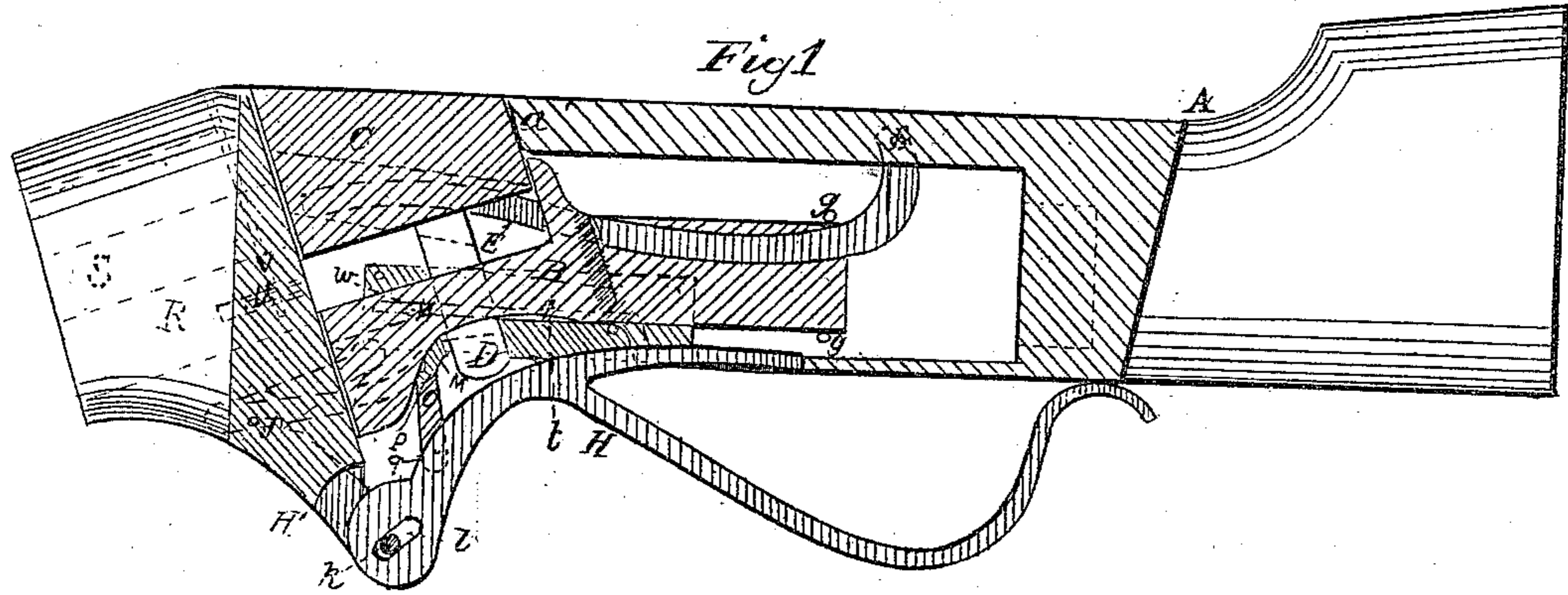


J. GRAY.
Magazine Gun.

No. 44,995.

Patented Nov. 8, 1864.



Inventor
Joshua Gray

Witnesses {
N. Ames
C. W. Eldridge

UNITED STATES PATENT OFFICE

JOSHUA GRAY, OF MEDFORD, ASSIGNOR TO HIMSELF, E. H. ELDRIDGE, OF BOSTON, MASSACHUSETTS, S. S. BUCKLIN, OF PROVIDENCE, RHODE ISLAND, AND W. G. LANGDON, OF MALDEN, MASSACHUSETTS.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 44,995, dated November 8, 1864.

To all whom it may concern:

Be it known that I, JOSHUA GRAY, of Medford, in the county of Middlesex and State of Massachusetts, have invented a new and useful Repeating-Rifle; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation, representing the parts as they are when the rifle is fired, the stock being cut away upon one side for the purpose of inspection. Fig. 2 is a similar view with the breech-pin and its appendages drawn back for the purpose of inserting the cartridge; and Fig. 3 is a horizontal section through the center of the magazine, disclosing a top view of the stop U.

Like parts are indicated by the same letters in all the drawings.

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

A is the stock or receiver, which is mortised, as represented in Figs. 1 and 2, to receive the breech-pin and its appendages.

B is a sliding block, of suitable metal, the shape of which is clearly shown in Fig. 1. This block moves freely in a direct line parallel with the stock A, being guided by means of the pins *g g*, which are fast in the stock, and the pin *w*, (shown in dotted lines in Figs. 1 and 2,) which plays in the groove *t*.

C is the breech-pin, which sets down upon the block B when the latter is drawn back, as shown in Fig. 2.

D is a pin or cylindrical continuation of the lower side of the breech-pin, passing freely through a round hole in the block B, one purpose of said continuation D being to raise the breech-pin up into the position shown in Fig. 1, which it does by resting on the guard-lever H.

E is the cartridge-carrier, shaped as shown in Figs. 1 and 2, and pivoted to the stock at *f*, there being a central slot (shown by dotted lines in Figs. 1 and 2) in the block B and breech-pin C, through which said carrier plays with freedom. The free end of the carrier ex-

tends nearly to the magazine R and barrel S, and is carried up and down from the one to the other by the vertical movements of the breech-pin C. When a cartridge is forced out of the magazine R above the free end of the carrier E, the latter, as it rises, will obviously carry the cartridge into a line with the barrel S, into which it will be forced by the forward movement of the breech-pin C.

H is the guard-lever, (the shape of which is clearly shown in Fig. 2,) provided with an oblong slot, *l*, through which passes the fulcrum-pin *k*, said slot being made oblong, so as to allow the lever to drop far enough to give the requisite vertical motion of the breech-pin past the rest *a*.

H' is an arm or continuation of the guard H, and I is a link, one end of which is pivoted to H' at *j*, and the other jointed or pivoted to the block B, as shown by dotted lines in Fig. 2. Thus by moving the guard-lever H to or from the stock A it is obvious that the block B will be moved toward or from the magazine and barrel.

M is a lever, one end of which is pivoted to the stock at *n*. O is a link, pivoted to the arm M at *p* and to the guard H at *q*. The free end of the lever M, as the breech-pin C rises, enters a slot in the pin or continuation D, as shown in Fig. 1, and when the guard is first moved down from the stock said lever M operates to draw the breech-pin down vertically past the rest or abutment *a* till its bottom comes in contact with the top of the block B, when it will be in a position to be carried away from the barrel and into the position shown in Fig. 2.

U is a short lever, turning on the fulcrum *v*, one end entering the magazine R and the other extending beyond the side of the stock, as represented in Fig. 3. The design of this lever U is to operate as a stop to prevent the cartridges in the magazine from passing down whenever it is required to use the rifle as a single breech-loader instead of a repeater, thus reserving the charges in the magazine to be used at the most desirable moment, as in close action or a charge. The full lines in the drawings, Fig. 3, represent the lever U as closing the exit from the magazine. The dotted lines

represent the same turned back by the thumb or finger, so as to allow the cartridges free passage out of the magazine.

My rifle is very simple, cheap, strong, and easily kept in order. The motions of the moving parts are positive, rapid, and certain.

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

1. The combination and arrangement of the breech-pin C and sliding carrier B with the swinging arm M, the trigger-guard lever H,

and its link I, substantially as shown and described.

2. A stop or projection, U, at the end of the magazine, or entering the same, for the purpose of retaining cartridges in the magazine when it is required to use the rifle as a breech-loader, or to extract a charge.

JOSHUA GRAY.

Witnesses:

N. AMES,
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