

(No Model.)

J. W. REDFIELD.
BREECH LOADING FIRE ARM.

No. 356,961.

Patented Feb. 1, 1887.

Fig. 1.

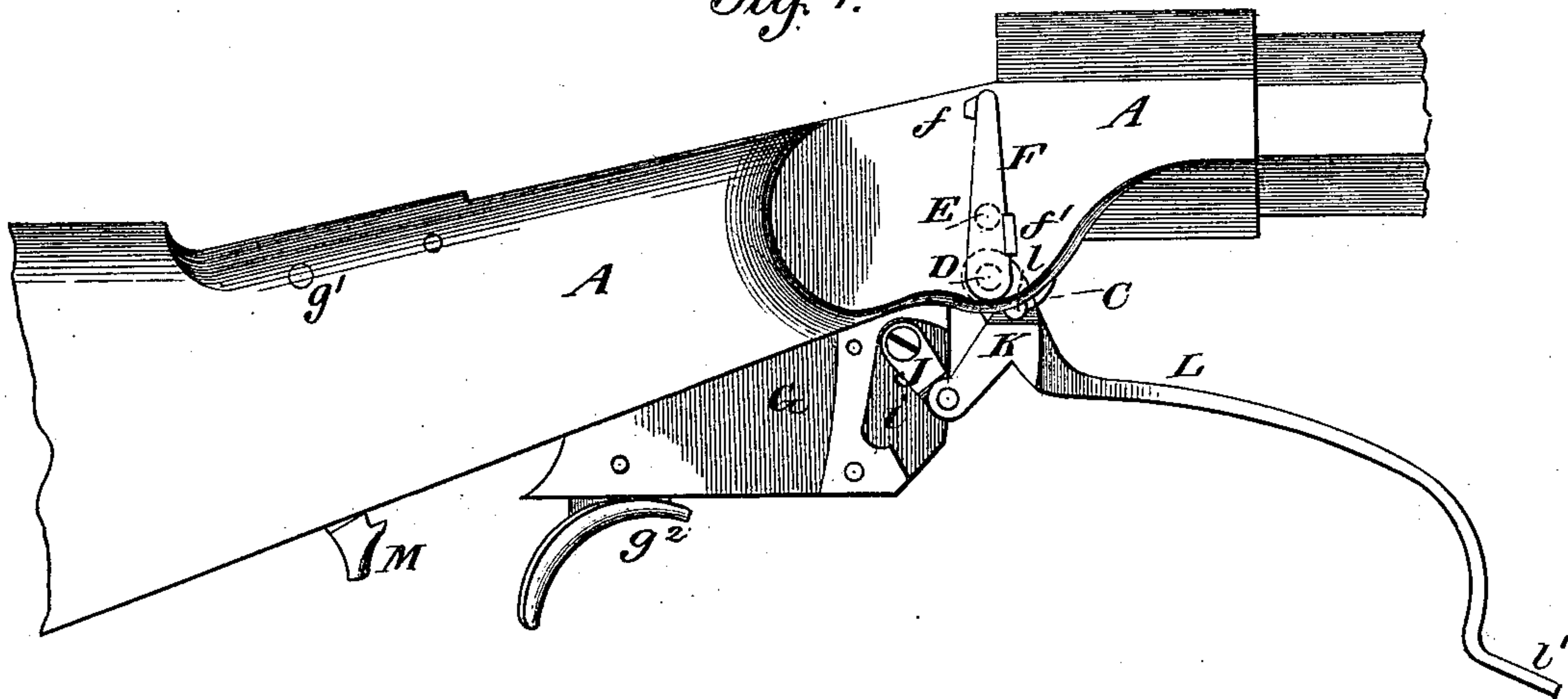


Fig. 2.

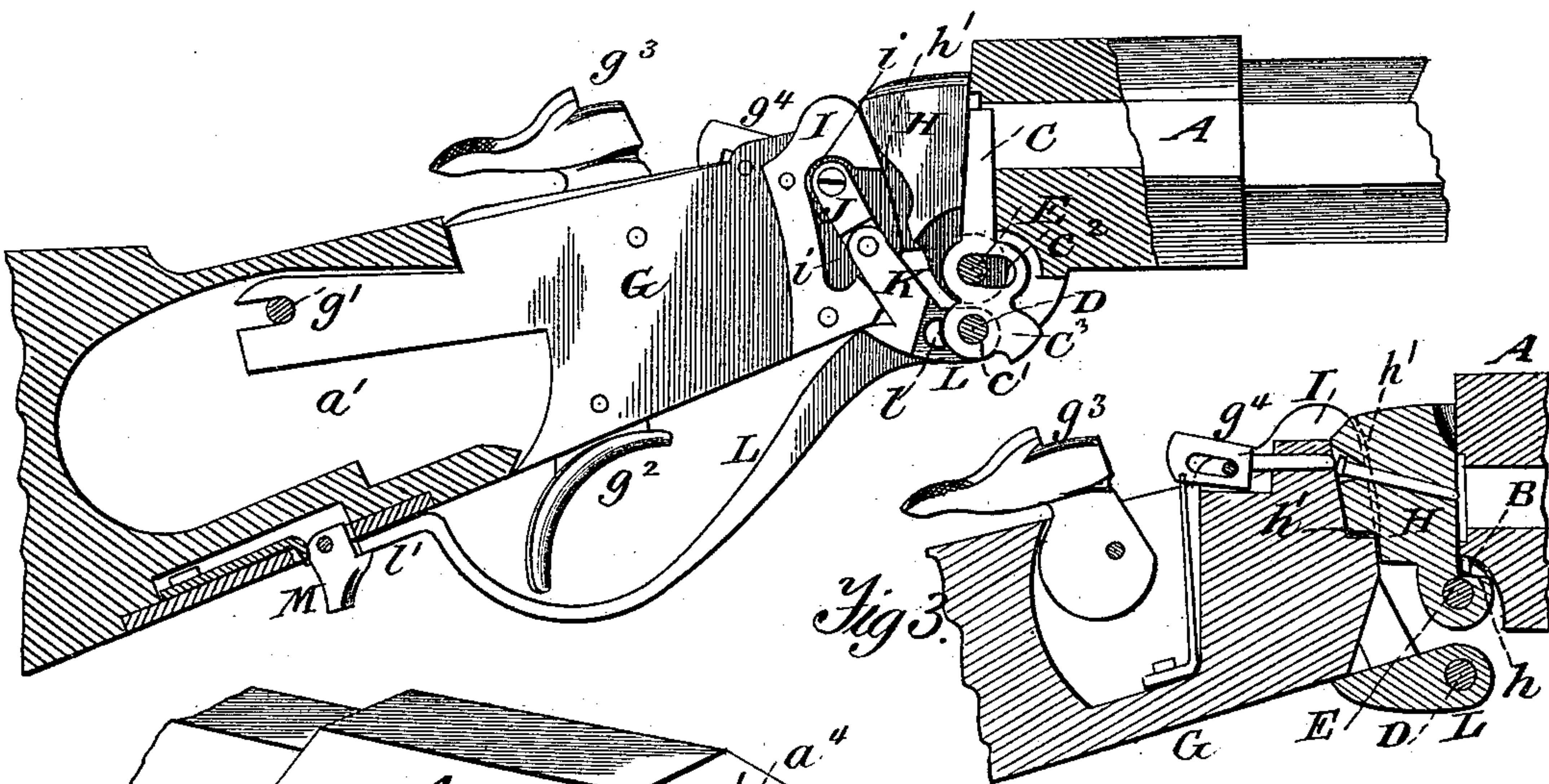
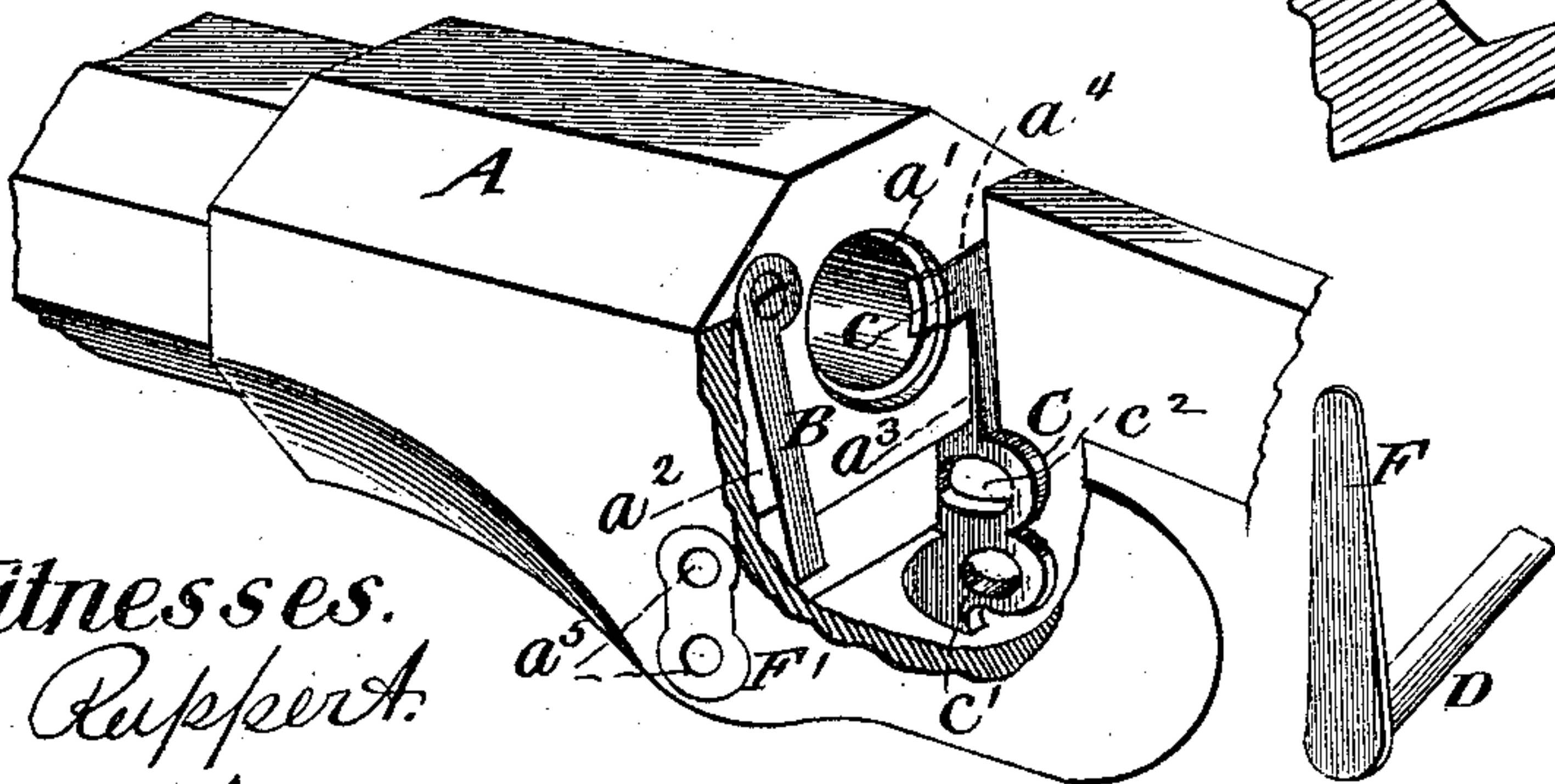


Fig. 3.



Witnesses.
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att'y

UNITED STATES PATENT OFFICE.

JOHN WATROUS REDFIELD, OF GLENDALE, OREGON.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 356,961, dated February 1, 1887.

Application filed September 6, 1886. Serial No. 212,825. (No model.)

To all whom it may concern:

Be it known that I, JOHN WATROUS REDFIELD, a citizen of the United States, residing at Glendale, in the county of Douglas and State of Oregon, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to overcome the difficulty of getting the cartridge in and the shell out of the cartridge-chamber after the latter has become dirty from firing. The dust and smoke soon foul them, and in battle practically render them useless.

Figure 1 of the drawings is a side elevation of a breech-loader with the parts in position for the insertion of a cartridge. Fig. 2 is a longitudinal vertical section with all the parts in place for firing, and Fig. 3 is a group of detail views.

In the drawings, A represents a rifle-stock, provided with the cartridge-chamber projecting into the stock-chamber a' , and having the vertical groove a^2 , in which works the top-fastened plate-spring B. Directly opposite the groove a^2 is a similar vertical groove, a^3 , connecting by a lateral groove, a^4 , with the cartridge-chamber, so that the extractor C, having the side lip, c , may occupy grooves a^3 a^4 in front of the end flange of the cartridge, so that the latter may be readily pulled out.

a^5 a^5 are a pair of holes on opposite sides of the stock, through which pass the bolts D E. The extractor C is pivoted at c' on the bolt D, and has a cross-slot, c^2 , through which passes the bolt E. At right angles to the outer end of bolt D is a fast plate-spring, F, which turns with the said bolt, being sprung over the stop f and against the stop f' , so as to be effectually locked in place. By this means the countersunk heads of both of the bolts are firmly held in the plate F', which carries said stops.

G is a breech-block support or brace, having a rear bifurcation, g , which straddles a cross-bolt, g' , in the rear of the stock-chamber

a' , a trigger, g^2 , hammer g^3 , and plunger g^4 , all of which are old and well-known devices.

The breech-block H is pivoted on the bolt E and thrown back by the spring B, whose lower end enters the block-hole h , the guide-grooves $h' h'$ receiving the movable pressers I I on the front end of the breech-block G. In the grooves $i i$ of these pressers, and at their upper ends, is pivoted an arm, J, while the lever L has an angle-arm, K, which is jointed to and forms a toggle with the arm J. The lever is pivoted at its front end on the bolt D, beside the extractor C, and has a stud, l , which bears against its lower end, c^3 , so as to cause it to throw or pull out the shell. As the lever is thrown back, the toggle J K acts with increasing leverage and power to force the cartridge up to its place in the cartridge-chamber, and as it is thrown forward the stud l compels the shell to come out. Both of these movements are executed in a moment and with such advantage of force that there is no possibility of failure. The lever may be held down or to the stock by a spring-latch, M, working over its end l' . As the lever is thrown up the spring B presses back the breech-block out of the way of the shell as it is pulled out by the extractor.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. In a breech-loading fire-arm, the fixed plate F', having the diagonally-opposite stops $f f'$, in combination with bolts D E and spring-plate F, the latter carrying the pivot-bolt D, and adapted to be sprung over the stop f and between the stops $f f'$ to cover the bolt E, whereby the pivot-bolts D E are securely held in the frame of the fire-arm, as described.

2. The combination, with the stock A, having the vertical groove a^2 in the forward face of the breech-chamber, of the vertical plate-spring B, pivoted at the top of said groove, and pressing outwardly at the bottom to throw back the breech-block just before the spent cartridge is withdrawn by the extractor, as set forth.

3. The combination, with the stock A, having in the forward face of the breech-chamber the right-angled groove a^3 a^4 , of the extractor

C, seated in such groove and having the lip *c*, pivot-hole *c'*, and cross-slot *c''*, the bolts D E, respectively arranged in the hole *c'* and cross-slot *c''*, and the lever L, carrying a stud, *l*, to
5 act against the lip *c*, as and for the purpose specified.

4. The combination, with a breech-block having two guide grooves, the parallel pressers I I, movable in said grooves *h' h'* and having
10 the grooves *i i*, the arm J, pivoted in said grooves, the lever L, carrying the pivoted angle-arm K, jointed to and forming a toggle-

joint with arm J, and the bolt D, on which said lever is pivoted at its front end, whereby the breech-block support G is carried forward, and 15 the breech-block made to force the fresh cartridge into the cartridge-chamber, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN WATROUS REDFIELD.

Witnesses:

WM. J. MARTIN,
H. D. MARTIN.