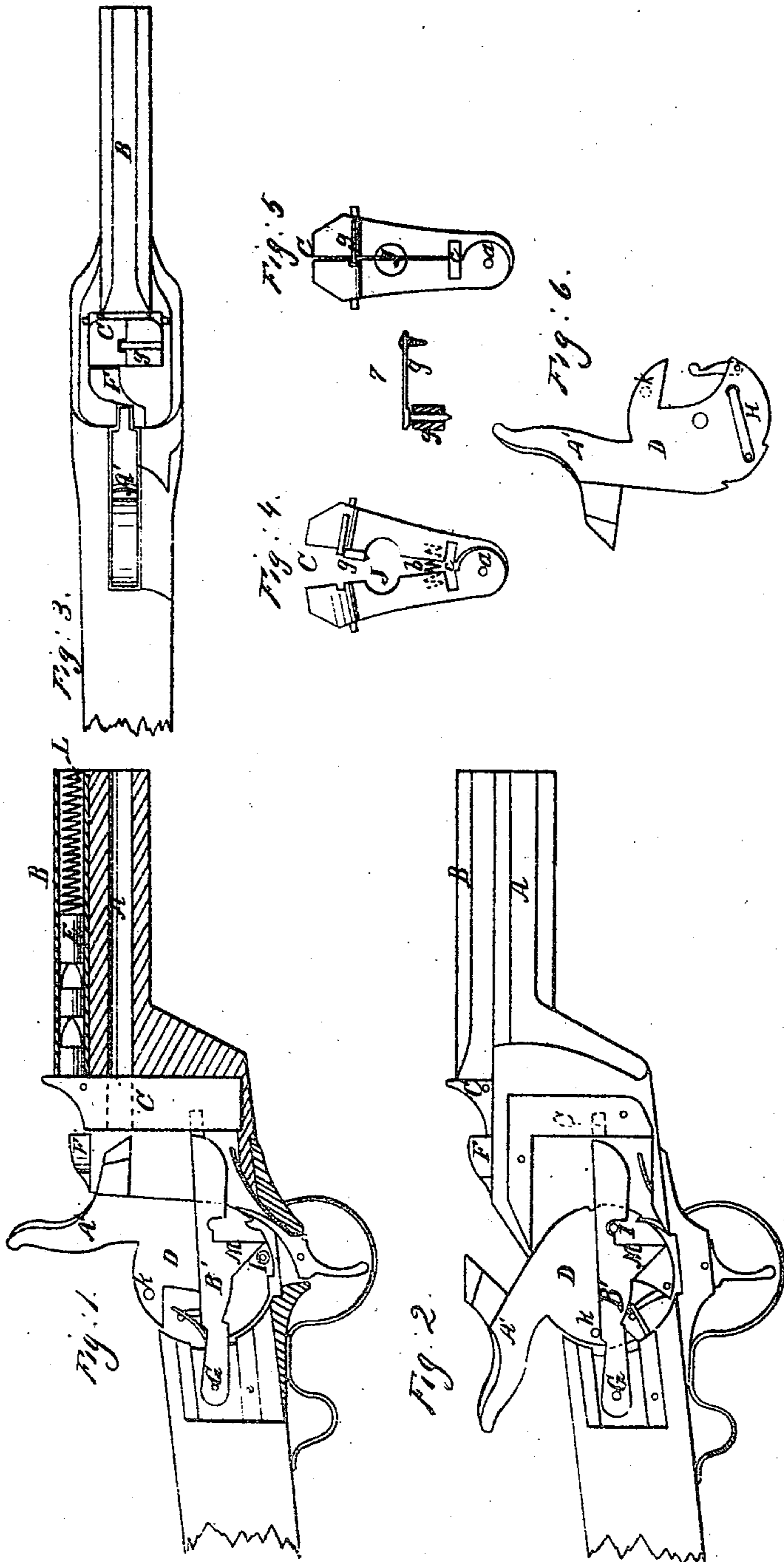


*Belden & Crabtree,
Breech Loader.*

No 85268

Patented Dec 29 1868



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SALMON BELDEN AND JOHN FRANKLING CRABTREE, OF VISALIA, CALIFORNIA.

Letters Patent No. 85,268, dated December 29, 1868.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, SALMON BELDEN and JOHN FRANKLING CRABTREE, of Visalia, county of Tulare, State of California, have invented an Improved Breech-Loading and Repeating Fire-Arm; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains, to make and use our said invention or improvements without further invention or experiment.

Our invention relates to that class of small-arms known as breech-loaders and repeaters, and has for its object certain improvements, more especially relating to the gun as a repeater, by which the necessary mechanism for loading and discharging is very much simplified; and the number of motions required is reduced from three or four to one.

In the construction of our gun, a barrel is employed having a receiving-chamber or magazine extending along the top of it. The breech-block consists of two pieces, hinged together so as to slide up and down by the simple motion of cocking the gun. As the breech-block rises, by half cocking the gun, the two sides gradually separate, and, by a simple device, the discharged shell is kept at one side of the chamber, so that the entrance of a new cartridge will force it out. The entering cartridge is retained by a stop on the other side until the breech-block has been returned to its place, and the two sides closed, which is done by fully cocking the gun. This brings the cartridge in a line with the barrel, in which position it is fired.

To more fully explain our invention reference is had to the accompanying drawings, forming a part of this specification, of which—

Figure 1 is a side elevation with section of barrel, the lock-plate removed, and hammer down.

Figure 2 shows the gun at full cock.

Figure 3 is a top view of the mechanism.

Figures 4, 5, 6, and 7 are detached views of breech-block and hammer.

Similar letters of reference, in each of the drawings, indicate corresponding parts.

A is the barrel of the gun, of our construction, having the magazine B extending along the top.

This magazine contains a spring, L, with its button or plate, E, for pressing the cartridges out, and supplying them as desired.

The breech-block C, which is chambered at J, so as to contain a cartridge when closed, is constructed of two blocks of steel, hinged together at *a*, so as to open, or separate laterally, as they rise.

The opening is insured by the small spring *b*, placed between the two parts, near the bottom.

The hammer A' and the tumbler D are forged in one piece.

The main-spring extends back into the small of the

stock, and operates directly on the tumbler by means of a link, as shown.

The lever B', which operates the breech-block, is pivoted at G, and has a projection which enters an opening in the breech-block at *c*, and a projecting point at M, near the centre, as shown.

The tumbler carries two pins, one fixed at K and the other at I, moving loosely through a hole in the tumbler, and kept extended beyond the surface of the tumbler by a spring, H, on the back side.

To fill the magazine, the breech-block is raised, which brings the chamber opposite the magazine. The cartridges are then introduced, each succeeding one pressing the former one forward, and being allowed to rest for the instant against the lip F.

The operation of our gun is as follows:

When the hammer A' is raised, the pin I comes in contact with the point M, and raises the end of the lever B', thus carrying the breech-block upward until the chamber is opposite the magazine. As the breech-block rises, the two parts separate. A small bent spring, *g*, is fastened to one of the sides C, and is so arranged that, as the two parts separate, it keeps the discharged shell closely to one side until the new cartridge entering, presses it out, but is itself prevented from passing out, by the lip or stop F, which projects far enough for this purpose. At the moment the breech-block reaches its highest point, the pin I slips by the point M, and the pin K, on the opposite side of the axis of the tumbler, presses against the upper side of the lever, and depresses it, carrying with it the breech-block and new cartridge, the breech-block in the mean time closing, and forming a perfectly-fitting chamber, in a line with the barrel.

When the trigger is pulled, and the hammer allowed to fall, to discharge the gun, the pin I passes the point M, the spring H allowing it to recede sufficiently for the purpose, and it is then in a position to again raise the breech-block.

If it be undesirable to fire the gun, the hammer may be lowered to the half-cock notch, and, as the pin I has not passed the point M, the hammer can be raised at any time without moving the breech-block.

The same mechanism is peculiarly adapted to repeating-pistols, and forms, at the same time, the simplest and strongest arrangement yet discovered, its strength depending on the amount of metal on each side of the breech-block.

Having thus described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. The double-sliding breech-block C, with the chamber J and the opening-spring *b*, the whole constructed and operating substantially as and for the purpose herein described.

2. The lever B', and the two operating-pins, I and

K, on the tumbler D, or an equivalent device for elevating and depressing the breech-block at one motion, substantially as described.

3. The bent spring *g*, for holding the shell to one side, substantially as herein described.

4. In combination with the barrel A and magazine B, the double-sliding breech-block C, the lever B' with its two operating pins I and K, and the shell-extracting

spring *g*, the whole operating as a repeating-arm, substantially as described.

In witness whereof, we have hereunto set our hands and seals.

SALMON BELDEN.

JOHN FRANKLING CRABTREE.

[L. S.]

[L. S.]

Witnesses:

L. REDFIELD,

JOSEPH LEWIS.