

I. M. EARLE
BREECH-LOADING FIRE-ARMS.

No. 178,363.

Patented June 6, 1876.

Fig. 1

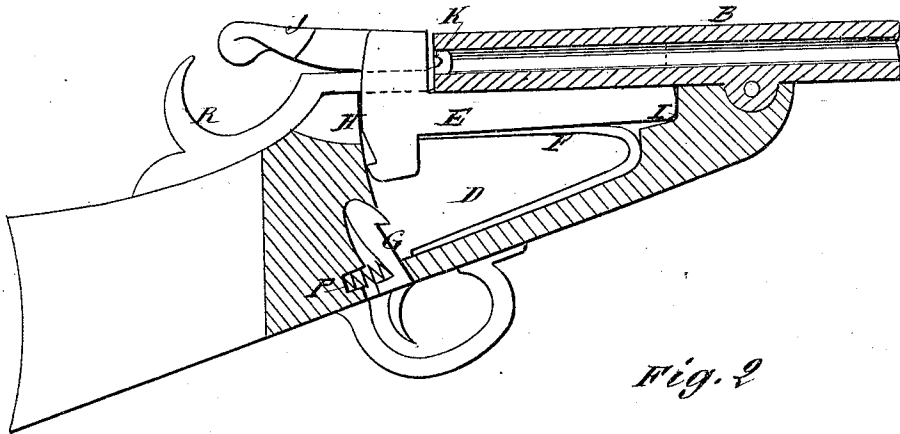


Fig. 2

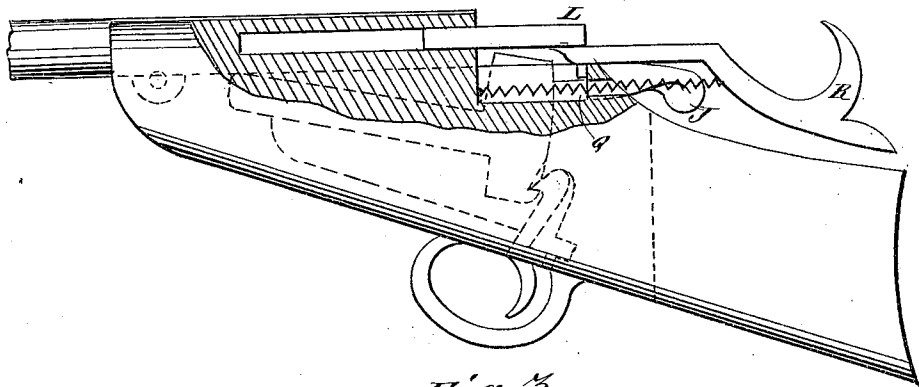
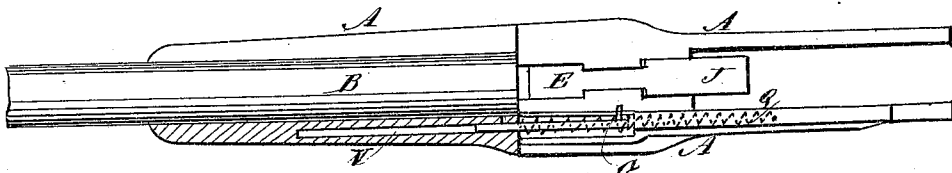


Fig. 3



WITNESSES:

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IRA M. EARLE, OF GUILFORD CENTRE, VERMONT.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 178,363, dated June 6, 1876; application filed April 10, 1876.

To all whom it may concern:

Be it known that I, IRA M. EARLE, of Guilford Centre, county of Windham, and State of Vermont, have invented a new and Improved Breech-Loading Fire-Arm, of which the following is a specification:

My invention consists of the hammer, contrived to explode the cartridge and close the breech at the same instant, the said hammer moving as the radius of a circle, and forming, with the housing, arcs of concentric circles, in such manner that it bears at all times the same relative position to the solid housing, which supports it in its rear, and sustains the shock of the explosion. The hammer cannot explode the cartridge till it is in position to close the breech.

My invention also consists of the shell-extractor, so arranged that it is operated by slight extension or continuation of the thumb-pressure in the motion of cocking the piece. It returns to place automatically by a spring.

In the drawing, Figure 1 is a longitudinal sectional elevation of my improved fire-arm. Fig. 2 is another longitudinal section; and Fig. 3 is a top view, with a part in section.

Similar letters of reference indicate corresponding parts.

A represents the two metal housings, between which the barrel B is clamped, and the breech also, and which are constructed with a chamber, D, in which the hammer E, spring F, and trigger G are arranged in such manner that they have no fastenings except what are afforded by the walls of the chamber. The hammer-head is fitted to the curved shoulder H of the housings, and the other end is confined in a little recess, I, so that it swings down in the chamber to be cocked, and closes the breech when it strikes to explode the cartridge, the force of which is sustained by the

shoulders H behind the hammer. The firing-pin K, being above the pivoted point of the hammer, has an eccentric motion, which clears it from the lower side of the end of the barrel, and prevents it from exploding the cartridge until it has wholly closed the breech. J is an extension of the hammer, for pressing it down to cock it. L is the extractor, being a slide working in the chamber N, and having a little stud or hook, O, which catches the flange of the shell and withdraws it. The hook R, by which this extractor is worked, is located alongside of the hammer-stud J, so that it can be operated by a back movement of the thumb immediately after the hammer is pressed down to be cocked. The spring F lies in the bottom of chamber D under the hammer, so as to be confined between it and the sides of the chamber. P is the trigger-spring. It is set in a little socket in the housings, which confine it in position.

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

1. The hammer-stem, confined in the recess I by the barrel and walls of chamber D, and fitted at the head to the concentric shoulder H, substantially as shown and described, to sustain the force of recoil, and continually brace the hammer in every position.

2. The sliding shell-retractor L and the hammer-stem J, made independent of each other, and relatively arranged as shown and described, whereby the extractor is operated by the continuous motion of thumb in cocking the piece.

IRA M. EARLE.

Witnesses:

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