W. R. PAPE.

BREECH-LOADING FIRE-ARM.

No. 175,297. Patented March 28, 1876.

Fig. 1.

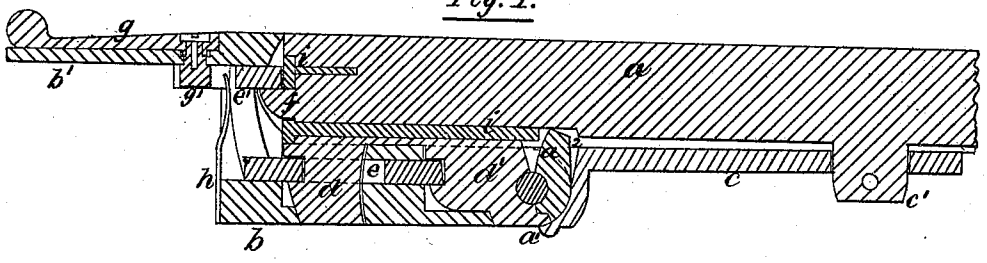


Fig. 2.

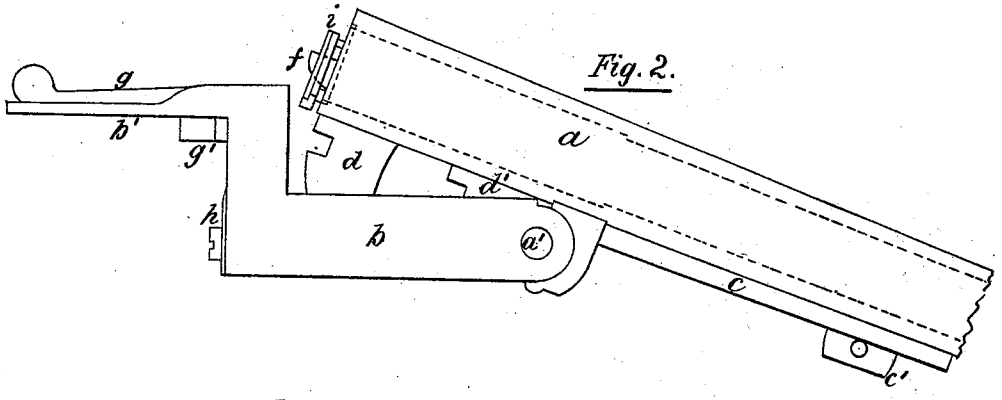


Fig. 3

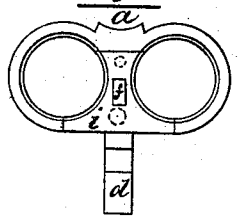
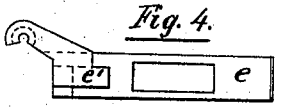


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM R. PAPE, OF NEWCASTLE-ON-TYNE, ENGLAND.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **175,297**, dated March 28, 1876; application filed September 30, 1875.

To all whom it may concern:

Be it known that I, WILLIAM R. PAPE, of Newcastle-on-Tyne, in the county of Northumberland, England, have invented a certain new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following to be a sufficiently clear and exact description thereof, that any one skilled in such matters may construct and use the same.

This invention is an improvement on that class of breech-loading fire-arms in which the barrels are pivoted to the breech-blocks and are tilted downward to open the breech, said barrels being provided with two notched lugs or projections on the under side thereof, and secured by a bolt sliding in the breech-block catching into the notches of the lugs. The slide is moved out of the notches by means of a lever pivoted to the top of the breech-block between the two hammers and is thrown back by a spring; and it consists in providing the barrels with an extra lug, placed between the two cartridge-chambers and a corresponding lug or projection on the sliding bolt forming part thereof, so arranged as to slide over the lug projecting from the ends of the barrels when the breech is closed, thus securely keeping the breech closed when the cartridge is discharged, as this lug is in the most advantageous position for this purpose. Another advantage in the position of the lug is, it passes through the extractor and thereby forms a very strong guide to control the action of the extractor when the breech is opened, thus remedying the common fault of bending the shank of the extractor when the cartridge-shells stick in the chambers, either from being too snug a fit or from other causes; but to describe my invention more particularly I will refer to the accompanying drawings, forming part of this specification, in which similar letters refer to similar parts in the different views, and in which—

Figure 1 is a longitudinal sectional view, showing the breech closed. Fig. 2 is a side view, with the breech open, showing the extra lug passing through the extractor. Fig. 3 is an end view of the barrels, and Fig. 4 is a plan of the sliding bolt detached.

The barrels *a* are pivoted to the breech-block *b* by the half-hinge joint a^1, the other half of the joint being formed by the piece *c*, which is secured to the barrels at its forward end by the ear *c'* passing through it, and a pin passing through the ear *c'*. On the under side of the barrels *a*, between the joint a^1 and the breech ends of them, are two notched lugs, *d* *d'*, which fit into mortises made vertically through the breech-block *b*, and the bolt *e* slides in a horizontal mortise in the breech-block and engages into the notches in the lugs *d* and *d'* when the breech is closed. The sliding bolt *e* is also provided with a projection, *e'*, at its upper part, which slides over the lug *f* projecting from between the ends of the barrels *a*.

The sliding bolt *e* is moved out of contact with the lugs *d*, *d'*, and *f*, by means of the lever *g* on the top of the tail-piece b^1 of the breech-block *b*, which is fastened to the crank *g'*. The shank of it passes through the tail-piece b^1, and the other end of it works into a notch or fork on the upper end of the sliding bolt *e*. The sliding bolt is thrown back by the spring *h*.

The extractor *i* is a flat piece of metal let into the ends of the barrels, and is flush with them when the breech is closed. It is recessed with the cartridge-chambers for the flange of the cartridge to fit therein. To it is fastened a pin, *i'*, which passes through a hole between the barrels, and extends forward, so as to come in contact with the lip a^2 standing up from the breech-block *b* just above the joint a^1, so that as the barrels are tilted downward the extractor is forced out beyond the ends of the barrels, as shown at Fig. 2.

The extractor is also fitted over the lug *f*, which, forming a rigid guide therefor, insures its working properly if one of the cartridge-shells should stick in the chamber while being extracted, and thus prevents it getting bent, and, consequently, rendered useless, as often happens to this kind of extractor.

(Patented in England May 9, 1874.)

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the two notched lugs *d d'*, the sliding bolt *e*, provided with the projection *e'* and the lug *f*, projecting from between the ends of the barrels *a a*, and passing through the extractor *i*, substantially as hereinbefore set forth.

2. The lug *f*, in combination with the extractor *i*, substantially as hereinbefore set forth.

WILLIAM R. PAPE.

Witnesses:
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