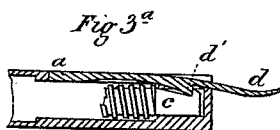
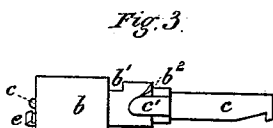
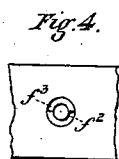
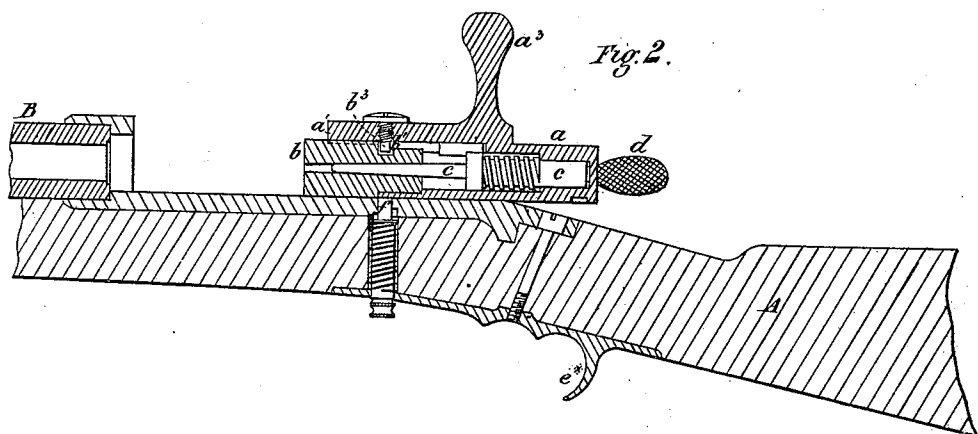
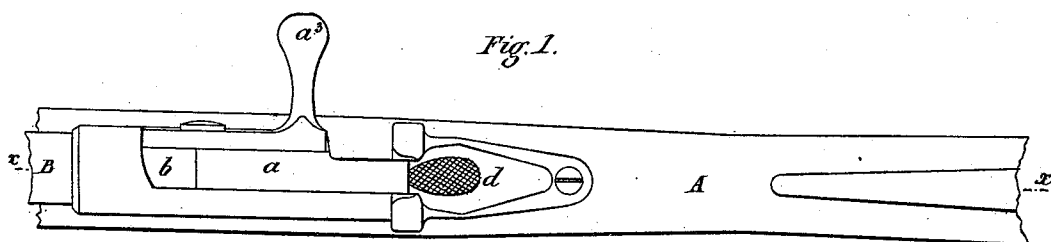


J. P. PIERI.
Breech-Loading Fire-Arms.

No. 166,138.

Patented July 27, 1875.



Witnesses:
Charles Thurman.
R. C. Dyer

Inventor.
Jacques Philippe Pieri,
by Geo. W. Dyer
att'y.

UNITED STATES PATENT OFFICE.

JACQUES P. PIERI, OF GHISONI, CORSICA, ASSIGNOR TO WILLIAM SMITH,
OF LONDON, ENGLAND.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **166,138**, dated July 27, 1875; application filed
April 30, 1875.

To all whom it may concern:

Be it known that I, JACQUES PHILIPPE PIERI, of Ghisoni, Corsica, a resident of London, England, have invented Improvements in Breech-Loading Fire-Arms, of which the following is a specification:

My said invention relates to breech-loading fire-arms which have at the rear of the barrel a chamber, wherein is fitted a sliding barrel or bolt carrying the firing mechanism, including the trigger, which lies in a groove in the said bolt, and projects from the rear of the same. A firing-pin is fitted inside the said bolt, and is released by depressing the said trigger, and driven forward by a spiral spring. The said bolt has at its forward end a head, which is so attached to the said bolt that it moves endwise therewith, but allows the said bolt to turn without turning the head, and this head is provided with a device for extracting the empty cartridge-shells. The breech-bolt is moved in its chamber to open and close the breech by a handle projecting at the side of the said bolt.

My invention is illustrated in the accompanying drawing, which I will now proceed to describe.

Figure 1 is a plan or top view of the breech of a rifle constructed according to my improvements. Fig. 2 is a longitudinal section on the line *xx*, Fig. 1. Fig. 3 is a plan of a portion of the breech-bolt. Fig. 3^a shows the end of the same with the trigger and firing-pin. Figs. 4 and 5 illustrate a safety device forming part of my improved mechanism.

Like letters indicate the same parts throughout the drawing.

A is the stock, and B the barrel. *a* is the breech-bolt, and *b* is the head of the same. *c* is the firing-pin. *d* is the trigger, and *e* is the extractor. This trigger is a flat spring or elastic piece, fitted in a groove in the bolt, and may be readily removed and replaced when necessary. It has a projection, *d'*, for holding the firing-pin *c*. The trigger *d*, when in position for firing, presents a flat surface above the stock, as in Fig. 1, and is pressed downward by the thumb to release the firing-

pin. The piece *e**, below the stock, supports the hand in depressing the trigger *d*. The head *b*, at the forward end of the breech-bolt, is formed with a groove, *b¹*, in which enters the point of a stop-screw, *b³*, that projects through the guide-piece *a¹* of the aforesaid bolt *a*, and the head *b* also has a helicoidal surface, *b²*, which acts on a shoulder, *c'*, of the firing-pin or rod *c*, in cocking the arm. The handle or lever *a³* of the bolt *a* and the guide-piece *a¹* are made solidly, or in one piece with the cylindrical portion of the said bolt, but the end of the said guide-piece projects beyond the forward end of the bolt, as shown. At the under side of the breech I arrange a safety device, which keeps the bolt from turning or moving endwise in its chamber when the bolt-handle is turned upward, or in the position for withdrawing the said bolt; and, when the bolt is in this position, the depression of the trigger will not actuate or release the firing-pin. This safety device consists of a small spring pin or rod, *f*, which is fitted to move up and down, and turn in a hole formed through the under side of the breech-chamber, as clearly shown in Fig. 2. The said pin has a shoulder or stud, *f¹*, which is so arranged in relation to inclines *f²* *f³* on the under side of the breech-shoe that, when the said pin is turned upon the incline *f²*, it will project up through the bottom of the breech-chamber into a hole or cavity in the bolt *a*, and hold the same immovably, but when it is desired to release the said bolt, the spring-pin *f* is turned partially around in its hole, and its shoulder *f¹* then comes upon the incline *f³*, which is not so deep as the incline *f²*, and the pin *f* is then held down below and clear of the bolt.

The extractor of this improved arm is a flat bar of steel, or other suitable metal, fitted and secured in a recess in the side of the bolt, and sliding in a longitudinal groove or channel in the bolt-chamber. The said extractor has a claw or hook, formed to take hold of the rim or flange of the cartridge-shell and draw it from the barrel, and the hook holds the shell until the bolt is fully retracted, when it comes against a shoulder in the side opening of the

breech-chamber, and the cartridge-shell is thereby expelled from the arm in a forward direction.

I claim as my invention—

1. A fire-arm with the trigger *d* at the top or upper side of the arm, attached to the breech bolt or cylinder *a*, and operating as herein specified.

2. In a breech-loading fire-arm, the trigger *d*, firing-pin *e*, and spiral spring, combined with and carried in the sliding breech bolt or cylinder *a*, and operating as herein set forth.

3. In a breech-loading fire-arm, the combination of the breech-bolt *a*, having the trigger *d* and screw *b*³, the head *b*, having groove

*b*¹ and inclined surface *b*², and the firing-pin *e*, having the shoulder *e'*, substantially as described and shown.

4. The safety device *f*, arranged and operating in combination with the bolt *a*, as herein set forth.

5. In a breech-loading fire-arm, the combination, with the breech-bolt *a* and head *b*, of the extractor *e*, constructed and arranged substantially as described and shown.

J. PIERI.

Witnesses:

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ROBT. WIZER.