(No Model.) 2 Sheets—Sheet 1.

J. P. PIERI.

BREECH LOADING FIRE ARM.

No. 340,002. Patented Apr. 13, 1886.

Fig. 1.

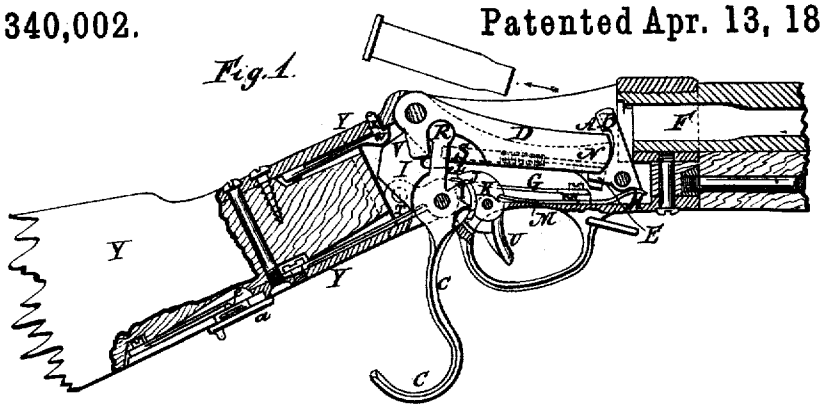


Fig. 2.

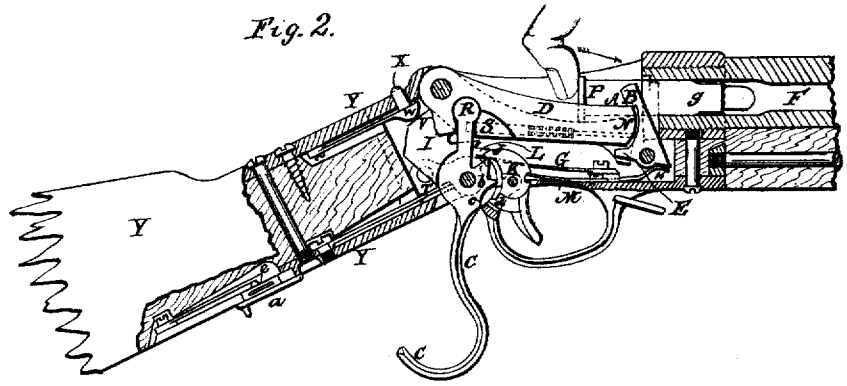
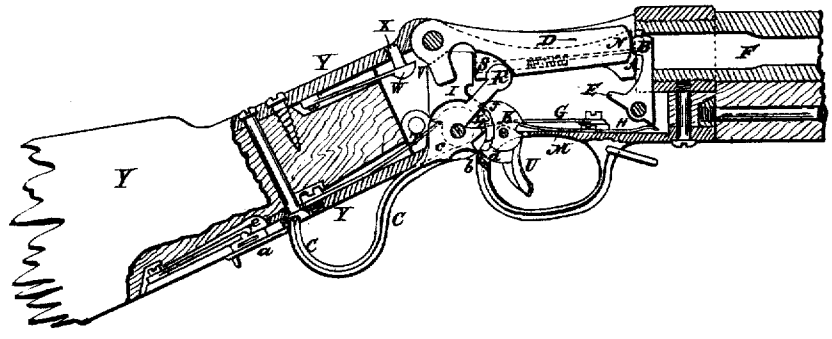


Fig. 3.



Witnesses.
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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4

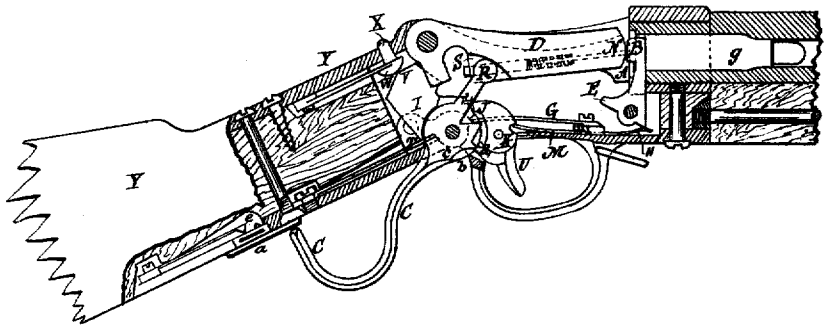


Fig. 5

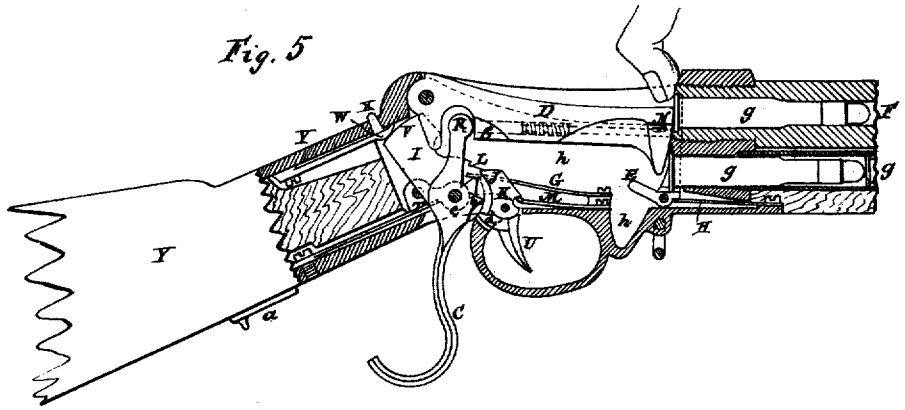
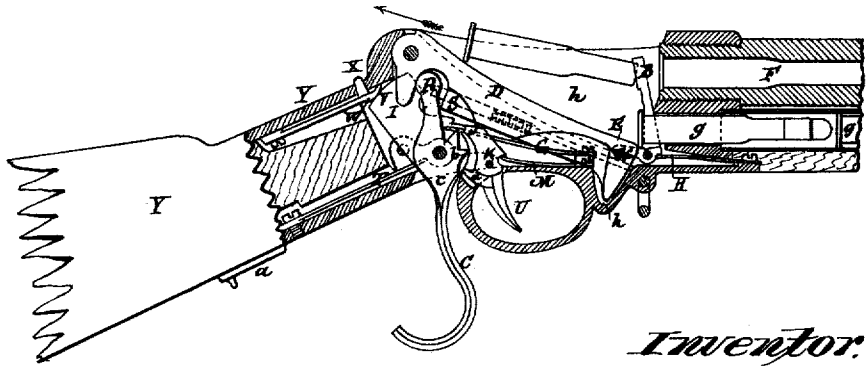


Fig. 6.



Witnesses.
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UNITED STATES PATENT OFFICE.

JACQUES PHILIPPE PIERI, OF PARIS, FRANCE.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 340,002, dated April 13, 1886.

Application filed January 27, 1886. Serial No. 189,953. (No model.) Patented in France June 12, 1884, No. 162,700; in Spain July 8, 1884, No. 4,352; in England August 14, 1884, No. 11,278, and in Belgium January 22, 1885, No. 67,613.

To all whom it may concern:

Be it known that I, JACQUES PHILIPPE PIERI, a citizen of the Republic of France, residing at Paris, France, have invented new and useful Improvements in the Actions of Drop-Block Breech-Loading Fire-Arms, (for which I have obtained patents in France No. 162,700, bearing date June 12, 1884; in Spain No. 4,352, July 8, 1884; in Great Britain No. 11,278, bearing date August 14, 1884, and in Belgium No. 67,613, bearing date January 22, 1885,) of which the following is a specification.

This invention relates to certain combinations, positions, and operations of details of the actions of drop-block breech loading fire-arms, whereby a more efficient manipulation of the opening, the extraction of the empty cartridge-cases, the loading, and the closing are effected.

The invention is intended to overcome the many inconveniences that are known to exist in the "system Martine;" and it consists in the novel construction and combination of devices hereinafter described and claimed.

My invention will be clearly understood by the annexed drawings, in which Figure 1 shows the breech portion of a small-arm with the opening-lever thrown down and the nose of the block on the tail of the extractor, which it has struck with sufficient force to withdraw and eject the empty cartridge-case. Fig. 2 shows the breech-action in the same position as at Fig. 1, but with the nose of the block caught under the shoulder formed in the neck of the extractor, to prevent the block rising until the flange of the cartridge has been pushed home, which motion pushes the extractor into its recess and releases the nose of the block, which rises simultaneously under the automatic closing action of the lever by the mainspring, the arm being then ready for firing, as shown at Fig. 3. In the sectional view, Fig. 4, a plate under the stock is pushed into the path of the opening-lever, the trigger being so locked by contact with the body of the lever as to prevent accidental discharge. Figs. 5 and 6 show the same invention slightly modified to suit a magazine-rifle, a fresh cartridge being partially drawn out of the magazine simultaneously with the extraction and ejection of the empty cartridge-case.

For the purpose of my invention I form a step or shoulder, A, on the neck B of the extractor, so that when the lever C is thrown down in a forward direction the breech-block D is pulled down. This allows the spring H to throw the head B of the extractor outward, which motion removes the empty cartridge-case partially from the barrel F. The end of the block then forcibly strikes against the tail-piece E of the extractor and rapidly ejects the empty cartridge-case clear of the gun. The spring G is put into tension by this movement and the hammer I cocked, the nose J of the sear K engaging in the notch L under the action of its spring M, as shown at Fig. 1 of the annexed drawings. On the release of the lever C, the spring G causes the lever to partially return and the front end, N, of the block D to rise until it abuts against the shoulder or step A of the extractor, by which the block is held, as seen at Fig. 2 of the drawings. A fresh cartridge is then slid along the breech-block D, and as it enters the barrel F the flange P presses against the extractor B, and the force exerted to insert the cartridge into the barrel F pushes the extractor home. This releases the block D from the notch A, and the spring G compels the lever C to return to its normal position and the block D at the same instant to be closed by the head B of the lever C riding against the curve S by the rebound of the spring G. The movements thus effected have no influence on the hammer I or sear K, the springs T and M still keeping them in the firing position, ready for the trigger U to be pulled back for discharging the gun, as shown at Fig. 3 of the drawings.

When the hammer I is forced up to full-cock, its head V rubs against a spring, W, and causes a button, X, to be exposed above the level of the stock Y, to indicate that the hammer is cocked.

To enable the gun to be set at "safety," I fit a sliding bolt, *a*, to the under side of the stock Y, so that when the bolt is pushed forward, as at Fig. 4, it prevents the lever C going close to the stock. This action causes a projection, *b*, on the cheek *c* of the lever C to come opposite a nose piece or wing, *d*, formed at the back of the trigger U, as at Fig. 4.

The sliding bolt *a* is governed by a spring,

e, which holds the bolt *a* at the forward or at the backward position.

Figs. 5 and 6 represent a repeater or magazine-gun furnished with my before-mentioned improvements, and with a supply of cartridges in a lower barrel or tube, *f*, from which, by the extractor B, the cartridges *g* in succession are withdrawn at each opening of the breech block D, said block D having a greater travel downward within the box *h*, so that the extractor not only withdraws and ejects an empty cartridge-case, but removes a full cartridge from the magazine *f* sufficiently far to enable it to be caught hold of and withdrawn by the thumb of the person using the gun, and be then lifted and inserted into the barrel F, as before explained, the spring G at this instant returning the block D and lever C to the first position.

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

1. The combination of block D, lever C, engaged with said block, hammer I, spring G, beneath block D, engaged with the lower front portion of said hammer and bearing against the front of lever C, trigger U, and the sear K, formed with nose J, to engage with the hammer, spring M, engaging with the sear, pivoted extractor B, formed with shoulder A and tail E, for the block D to engage with, and spring H under extractor B, substantially as described.

2. The combination of the trigger U, having the nose-piece *d* at its rear, and the pivoted lever C, connected with the breech-block to move it downward when the lever is swung away from the gun-stock, said lever having its cheek-piece *c* provided with the projection *b*, and the sliding bolt *a* on the stock to slide between the stock and the free end of the lever and prevent said free end of the lever coming against the stock, thereby bringing the nose-piece and projection in engagement to set the gun at safety, substantially as described.

3. The combination of the extractor B, formed with shoulder A and tail E, block D, to strike against tail E and engage with shoulder A, lever C, engaged with block to move the same, and provided with nose *b*, trigger U, provided with projection *d*, to engage with nose *b*, hammer I, and springs G, H, and M, substantially as described.

4. The combination of pivoted block D, lever C, engaging with said block, hammer I, spring G, forward of said lever and hammer and bearing against both of said parts, trigger U and its sear K, to engage with the hammer, and the spring *w*, provided with button *x*, and located at the top of the stock, back of the hammer, and engaging, as described, with the hammer to be projected by the latter, substantially as and for the purposes described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JACQUES PHILIPPE PIERI.

Witnesses:

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RICHARD CORE GARDNER,

Both of 166 *Fleet Street, London, England.*