J. E. McBETH.

Gun Lock.

No. 58,443. Patented Oct. 2, 1866.

Fig. 3

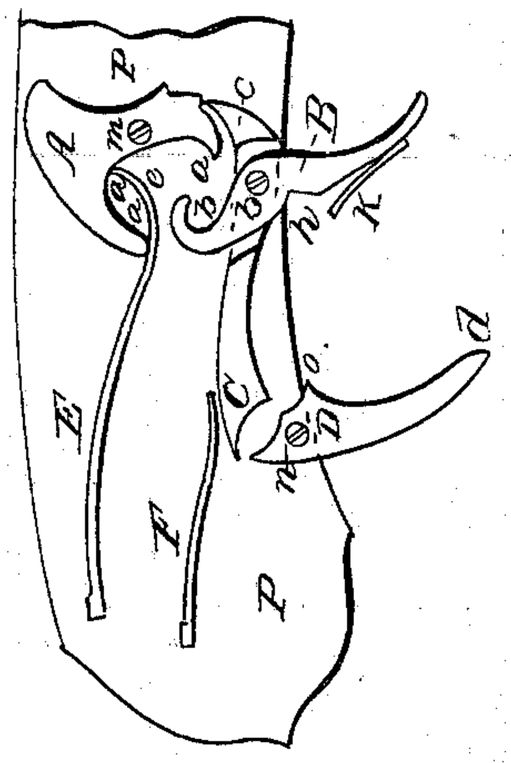


Fig. 4.

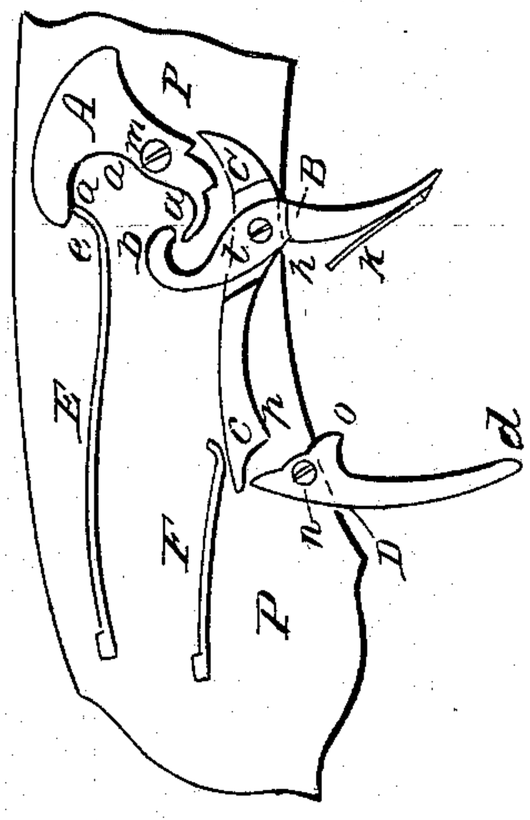


Fig. 1

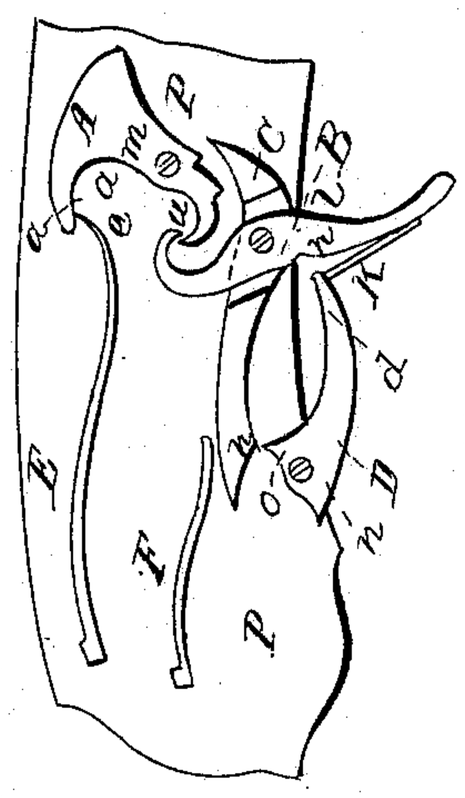
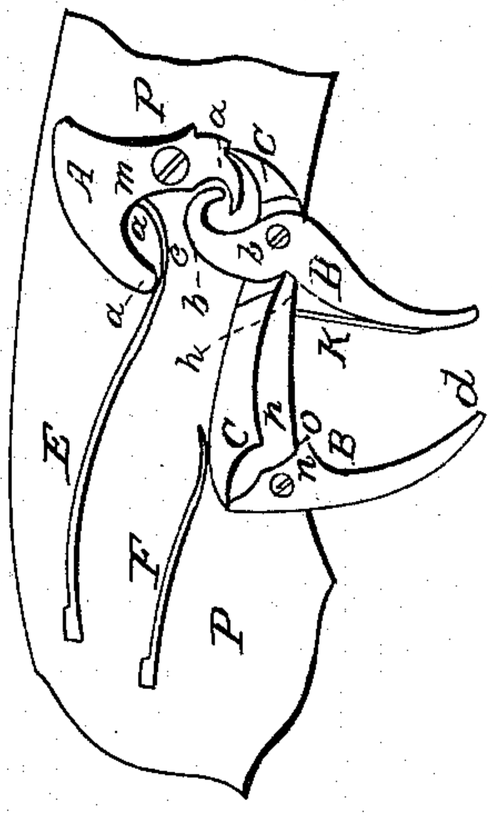


Fig. 2



Witnesses.
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UNITED STATES PATENT OFFICE.

JAMES E. McBETH, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN SAFETY GUN-LOCKS.

Specification forming part of Letters Patent No. **58,443**, dated October 2, 1866.

To all whom it may concern:

Be it known that I, JAMES E. McBETH, of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented certain new and useful Improvements in Gun-Locks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a view of the lock with the hammer down and the ordinary or uncocking trigger thrown forward into a horizontal position and into the notch in the back of the cocking-trigger. Fig. 2 shows the uncocking-trigger released from the said notch, and the position of the several parts of the lock immediately on the piece being full cocked. Fig. 3 is the same as Fig. 2, with the cocking-trigger thrown forward, in order to make room for the finger to be placed on the uncocking-trigger, for the purpose of springing the hammer. Fig. 4 shows the position of the several parts of the lock when the hammer is sprung.

The same letters refer to like parts in all the figures.

Numerous cases of serious accidents having come under my observation while an officer in the army during the late war, occasioned by the hammers of the pieces coming suddenly in contact with anything—muskets falling from the stacks, &c.—convinced me of the utility and merit of an arm so constructed as to effectually preclude the possibility of an accidental discharge. To accomplish this purpose, therefore, is the object of my invention.

The nature of my invention consists in, first, so forming or fastening the several parts of the lock that the hammer can be contained wholly within the stock of the piece. For this purpose the pivot-hole or center upon which the hammer turns is brought nearly to the bottom part of the lock, so as to leave sufficient room above for the upper part of the hammer to work the distance required without having to make the stock of the piece near the lock large and clumsy in order to contain it. To this end the lower part of the back side of the hammer is curved, as shown in the drawings, while the upper part of the cocking trigger or lever is also curved, as shown in the drawings, and made to fit and work into the said curve on the lower part of the hammer. By this means the pivots upon which the hammer and the cocking-trigger move can be brought as close together as may be required, and much closer than can be accomplished by any other than this curved formation, and, at the same time, the hammer, by this curved formation, can be caused to move by a slight movement of the curved cocking-trigger fully a quarter of a circle, or more, if necessary, and which, it is claimed, cannot be done by any other formation; second, by having the hammer thus concealed within the stock a clear and unobstructed sight is obtained; third, in so forming the ordinary or uncocking trigger that it can be pressed forward into a horizontal position when the hammer is down and against the back part of the cocking-trigger, and securely held in that position during pleasure, thus locking the whole piece and effectually preventing it from being cocked from a half-cock, or half-cocked when the hammer is down, and thereby dispensing with the necessity of a guard.

The operation of my invention is as follows: In the drawings, A is the hammer, B is the lever or cocking-trigger, C is the sear, D is the ordinary or second trigger, E is the main-spring, F is the sear-spring, and P is the lock-plate.

By action of the finger on pulling the lever or cocking-trigger, which is just forward of the ordinary trigger, the hammer is brought up and cocked or half-cocked, and then by pulling the ordinary or second trigger the lock is sprung.

The first or cocking trigger is simply for the purpose of raising the hammer. When this is accomplished it is of no further service, unless it is desired to let the hammer down easy, when a finger on each trigger is required.

On pressing the trigger D into a horizontal position, when the piece is uncocked or at half-cock, the end *d* is caught in the notch *h*, in B, and retained in that position by the spring *k*, on the back of B, against the downward pressure of the sear-spring F, acting on the projecting points *p* and *o*, on C and D. The notch *h* is of sufficient size, so that any pressure on the end *d* and spring *k*, other than a deliberate and intentional one, by the party holding the piece,

will cause the end *d* to recede farther up into the body of the lock from such pressure, whether sudden or otherwise. And when such pressure is withdrawn the spring *k* will have resumed its position, and prevent the end *d* from being released from the notch *h*.

As before stated, the trigger D is held in a horizontal position by the spring *k* against the downward pressure of the sear-spring F; but the instant that there is any pressure on the front part of the trigger B the end *d* slides up into the notch *h*, and said notch presses against the end *d*, and directly against the pivot *n*, on which the trigger D is hung. For this purpose the trigger B is allowed sufficient space in which to move, and no more. By pressing the spring *k* with the thumb-nail, and at the same time permitting the end *d* to pass down, the trigger D is released from the notch *h*, and is thrown into a perpendicular position by means of the downward pressure of the projecting point *p*, on the tail-end of the sear C, on the projecting point *o*, on the ordinary trigger D.

The cocking-trigger B and sear C are fitted together at the common pivot *l*, upon which they move, so that the whole thickness of each piece is preserved at all parts thereof except where they are so fitted, and by such fitting each part is a check upon the other, in not permitting any greater movement than is required.

The curve *a a*, on the hammer A, is for the purpose of allowing the curved end *e* of the mainspring E to work into it, so as to permit the end of said mainspring to work clear of the upper end of the cocking-trigger B, as shown in Figs. 2 and 3; and also, by such curved formation, *a a* and *e*, the mainspring E throws the hammer the distance required, and without having to be depressed by the hammer so much as would be required were it not for said curved formation. The main and sear springs can be combined in one spring, if desired.

What I claim as new and of my own invention, and desire to secure by Letters Patent of the United States, is—

1. The cocking-trigger B, formed with the curve *b*, in combination with the hammer A, formed with the curve *a*, substantially in the manner and for the purposes herein described.

2. The notch *h* and spring *k*, on B, with the projecting point *o*, on D, and the projecting point *p*, on C, substantially in the manner and for the purposes herein described.

3. The combination of the notch *h*, spring *k*, projecting points *o* and *p*, sear C, sear-spring F, trigger D, and trigger B, substantially in the manner and for the purposes herein described.

4. The combination of B and C, substantially in the manner and for the purposes herein described.

5. The combination of the several parts, A, B, C, and D, substantially in the manner and for the purposes herein described.

JAMES E. McBETH.

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