A. E. WHITMORE.
Lock for Fire-Arms.

No. 211,818. Patented Jan. 28, 1879.

Fig 1

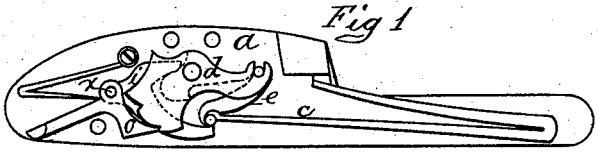

Fig 2

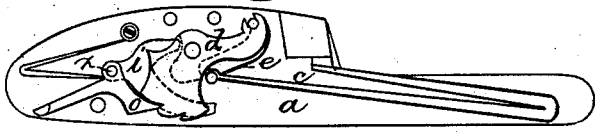

Fig 3

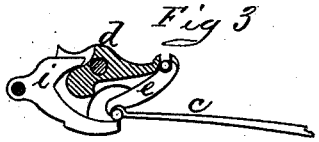

Fig 4

Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW E. WHITMORE, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN LOCKS FOR FIRE-ARMS.

Specification forming part of Letters Patent No. **211,818**, dated January 28, 1879; application filed December 20, 1878.

To all whom it may concern:

Be it known that I, ANDREW E. WHITMORE, of Springfield, county of Hampden and State of Massachusetts, have invented new and useful Improvements in Gun-Locks, which improvements are fully set forth in the annexed specification and in the accompanying drawings.

My invention relates to that class of gun-locks called "rebounding locks;" and consists of a two-armed lever pivoted on the lock-plate opposite to the stirrup end of the tumbler, and which is so constructed and located that the long arm of the mainspring in its downward movement, which produces the blow of the hammer, encounters one arm of said lever and drives it down, causing its second arm to bear on the tumbler at one side of its axis, and lift the hammer off from the cap after it shall have been exploded, and leaving the sear in the half-cock notch of the tumbler, as hereinafter set forth.

Figure 1 is a side elevation of the lock with a portion removed, to more clearly show the improved parts in their position after firing. Fig. 2 is a side view, also showing the position of the parts with the hammer cocked. Fig. 3 is a view of the two-armed lever, tumbler, stirrup, and a portion of the mainspring detached from the other parts of the lock. Fig. 4 shows the position of the tumbler before rebounding to half-cock.

The object of my invention is to make a gun-lock with a hammer that has a positive rebound from the cap after striking it, and of such construction as to permit of its application to any gun as a substitute for an ordinary lock, and to so construct and apply the parts which cause the rebound of the hammer that they will be inexpensive and easy of application to an ordinary lock to change it to a rebounder.

In the drawings, *a* is the lock-plate. *c* is the mainspring. *e* is the stirrup. *d* is the tumbler. *i* is the two-armed lever. *o* is the sear. *x* is the sear-pivot.

To apply my rebounding device to a gun-lock, I mill a slot in the tumbler, between its two flat sides, from its edge next to the sear *o* toward its axis, leaving a solid portion surrounding the latter, substantially such as is represented by the section-lined portion of tumbler *d* in Fig. 3.

Lever *i* is made in the form shown in Fig. 3, of such thickness as will permit its two arms to be introduced between the sides of tumbler *d* into the milled slot above described.

A pivot-hole is drilled in the end of lever *i* opposite the ends of its two arms, as shown, and it may be pivoted on the sear-pivot or on an independent one; but I prefer to pivot it on the former, as shown herein, the part of the sear surrounding its axis being either slotted or half its thickness milled off, to allow of hanging both lever and sear on the same length of screw as would be required for the sear alone.

By reference to the drawing it will be readily understood how lever *i* is assembled with the other operating parts of the lock, and its operation therewith to cause the positive rebound of the hammer is as follows, viz: In Fig. 2 the parts of the lock are shown in their relative positions when the hammer of the lock is brought to full-cock, in which case lever *i* is quite free on its pivot.

When the trigger is pulled the tumbler *d* is rotated by spring *c*, giving to the hammer such an impetus that it swings the stirrup end of the tumbler beyond the bearing of the stirrup therein, the end of spring *c* having meanwhile brought up on the end of lever *i*, as shown in Fig. 4.

Just prior to the completion of the stroke of the hammer, and at about the time when the mainspring and the lower arm of lever *i* comes in contact, the upper arm is engaged by the tumbler, and the lever is oscillated on its pivot, by which the lower arm is raised and the mainspring slightly compressed. After the completion of the stroke of the hammer, the mainspring, pressing upon the lower arm, causes the upper arm of lever *i* to press upon the tumbler and return it to the half-cock position.

What I claim as my invention is—

The two-armed lever *i*, pivoted to the lock-plate opposite to the stirrup side of the tumbler, and arranged to operate in combination with the tumbler and the mainspring, substantially as set forth.

ANDREW E. WHITMORE.

In presence of—

H. A. CHAPIN,

WM. H. CHAPIN.