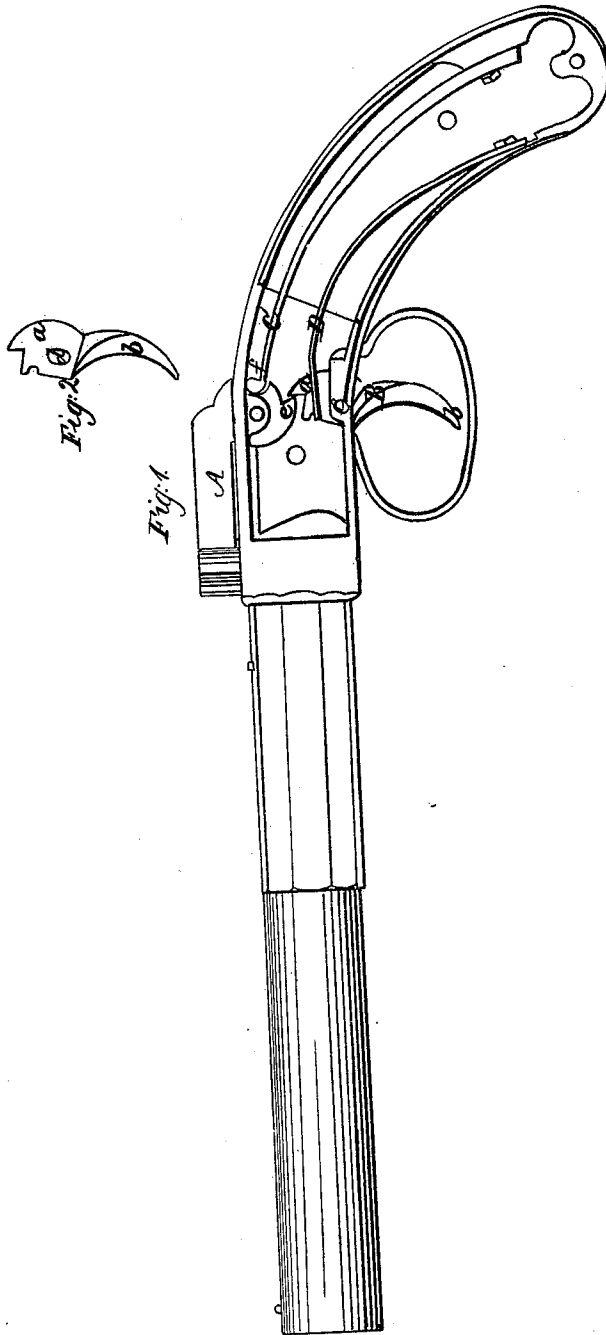


W. W. MARSTON.

Pistol-Lock.

Patented June 5, 1849.

No. 6,514



# UNITED STATES PATENT OFFICE.

WILLIAM W. MARSTON, OF NEW YORK, N. Y.

## IMPROVED GUN-LOCK.

Specification forming part of Letters Patent No. 6,514, dated June 5, 1849.

*To all whom it may concern:*

Be it known that I, WILLIAM W. MARSTON, of the city, county, and State of New York, have invented a new and useful Improvement on a Gun-Lock; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, of which—

Figure 1 is a side view of the pistol, to which kind of fire-arms my invention is more particularly adapted, showing the internal position of all the members of the lock, the plate inclosing the side of the pistol being left vacant; and Fig. 2, a side view of the trigger of the lock, shown apart and detached therefrom, to expose a part of the same to view not seen in the principal drawing, Fig. 1. These views are drawn the full size of an ordinary pocket-pistol, and are too simple to be misunderstood.

The nature of my invention consists in giving to the fulcrum of the trigger an adjustable facility, by which the sear of the same may retract or return to its position back of the arm answering to the tumbler, after having been operated independent of and without the use of the ordinary intervening trigger-catch or dog common to most of gun-locks. The mechanical means by which I prefer to accomplish this result is the forming at the center and fulcrum of the trigger a slot in the same, elongated sufficiently to accommodate and compensate the length or amount of lap which the sear of the trigger may require to properly engage with and take hold of the arm of the hammer, and to continue in contact the distance necessary to give appropriate tension to the mainspring of the lock, instead of forming the hole for the center and fulcrum of the trigger a true circle, as in the ordinary way.

Without further preliminary remark, I proceed to describe the construction and operation, in which the explanation of the letters of reference are as follows:

A is the hammer; B, the trigger; C, the mainspring; D, the trigger-spring; *a*, the sear of the trigger; *b*, the finger end of the same; *c*, the fulcrum of the trigger; *d*, the adjustable slot at the fulcrum of the trigger; *e*, the arm of the hammer answerable to the tumbler of an ordinary lock, being the trigger end, and *f* is

the arm of the hammer in connection with the mainspring of the lock.

The spring D, in connection with and giving motion to the retractile movements of the trigger, is so placed and put into the frame of the handle of the pistol as to give action to the sear of the same upward and back of the arm of the hammer *e*, when the latter is at rest upon the nipple or percussion-stand of the pistol, and the spring C is attached to such frame in the usual way, with usual tension applied to and against the arm *f* of the hammer, or connected therewith by a stirrup for that purpose in common use.

Operation: The relative position of the center of motion of the hammer and the motion of the trigger (each performing a sweep the segment of a circle) is such that when the trigger is pulled back in the ordinary way of pulling a trigger to effect a discharge, the parts (the sear *a* and arm *e*) disengage and leave each other by an arbitrary necessity corresponding with the retracting arc which the two points describe in such sweep, and the length of hold with which they embrace each other at commencement of operation, and thus liberating the strained spring C to expend its energy upon the hammer in execution of its object, and effecting an escapement of the sear of the trigger from contact with the arm *e* of the hammer in a new way, whereupon at the instant of the withdrawal of the finger of the operator from the trigger, or the force operating the same, the action of the spring D is exerted to bring the sear *a* to its position back of the arm *e* of the hammer repared for another operation, in which the trigger B, by the scope of the slot *d*, is permitted to sink or slide down on the fulcrum-pin *c* so much as to admit the free passing of the sear *a* under the arm *e* of the hammer on its return.

What I claim as new, and desire to secure in Letters Patent, is—

The adjustable slot *d* in the center hole and fulcrum of the trigger B acting in direct combination with the spring D, and also in combination with the arm *e* of the hammer A, and the mainspring C, substantially as described.

WM. W. MARSTON.

Witnesses:

ZEBULON SPRAGUE,

WILLIAM NICHOLSON.