W. FRANK.

Lock for Fire-Arms.

No. { 2,241. / 33,245. }

Patented Sept. 10, 1861.

Fig. 2.

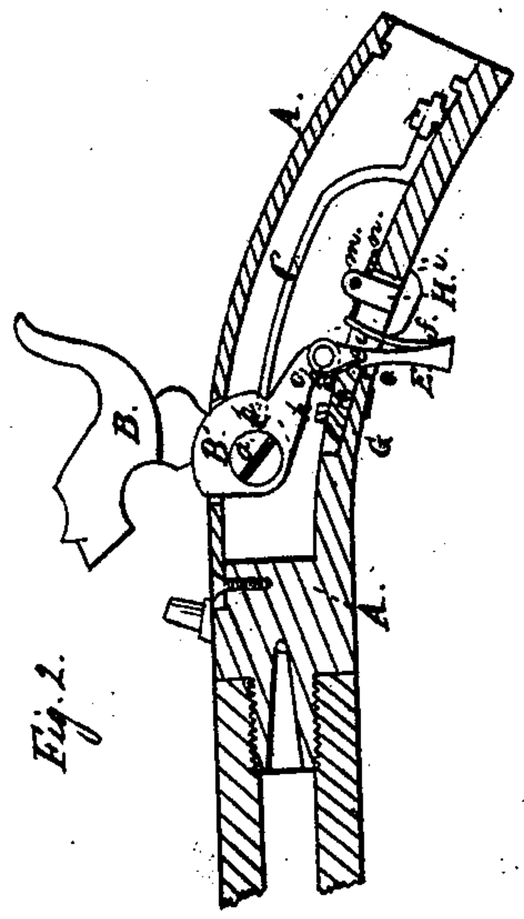

Fig. 6.

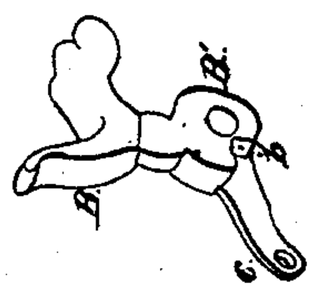

Fig. 3.

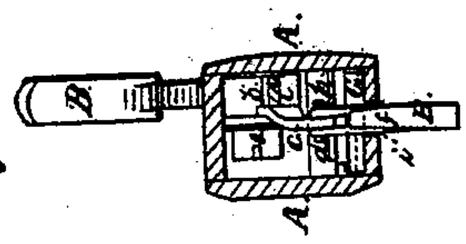

Fig. 5.

Fig. 4.

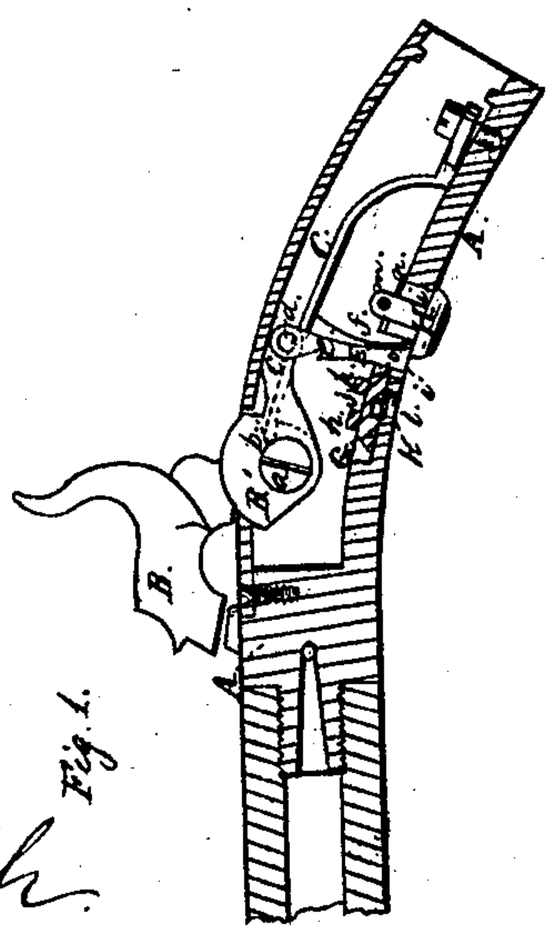

Fig. 1.

Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM FRANK, OF MOUNT STERLING, ILLINOIS.

IMPROVEMENT IN THE LOCKS OF FIRE-ARMS.

Specification forming part of Letters Patent No. **33,245**, dated September 10, 1861.

To all whom it may concern:

Be it known that I, WILLIAM FRANK, of Mount Sterling, in the county of Brown and State of Illinois, have invented a new and useful Improvement in the Locks of Fire-Arms; 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, forming part of this specification, in which—

Figures 1 and 2 are longitudinal sections of a lock constructed according to my invention, representing it in two different conditions. Fig. 3 is a transverse section of the same. Fig. 4 is a perspective view of the trigger-regulator. Fig. 5 is an under side view of the piece which holds the trigger to cock the lock. Fig. 6 is a persective view of the hammer and tumbler.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in a certain mode of applying the trigger, to constitute what is known as a "secret trigger." It also consists in certain devices, applied in combination with the so-applied trigger, to make it also constitute a hair-trigger; and it further consists in a certain mode of applying a protection in combination with the so-applied trigger, to prevent the accidental cocking of the lock.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the lock-frame, having one side and the top part movable, for the insertion, examination, and removal of the working parts.

B is the hammer, made in the same piece with its tumbler, B′, and applied to work on a pin, *a*, in the usual manner.

C is the mainspring, arranged in the usual position, and having its extremity entering a notch, *b*, in the tumbler B′ of the hammer in such a manner as to effect its operation without perceptible friction. The tumbler B′ is provided with an arm, *c*, projecting rearward from one side of it, and to this arm the trigger E is attached by a pin, *d*, in such manner as to be permitted to work through a slot, *i*, in the bottom of the lock-frame. This trigger has a notch, *e*, in front, and has a spring, *f*, secured to its back; and it is of such length that its end is drawn within or at least flush with the bottom of the lock-frame when the hammer is down, as shown in Fig. 1, and it projects through the lock-frame far enough to be operated upon by the forefinger when the hammer is cocked, as shown in Fig. 2. The cocking is effected in the common way.

G is the piece under which the notch *e* in the trigger catches to cock the hammer, consisting of a plate or block of steel fitted to the bottom of a recess in the bottom of the interior of the lock-frame, and confined in place by two fixed bars, *h h*, extending across the frame. This piece G has its back edge, *o*, projecting over the front of the slot *i*, through which the trigger works, and the trigger is pressed forward toward this end of the said slot by the spring *f*. The said piece G has a straight groove, *j*, extending across its under side for the reception of an eccentric pin, *k*, attached to a stud, *l*, which I call the "regulator," which is fitted to turn in a bearing in the bottom of the frame A, and which can be turned by a screw-driver inserted in a notch in its lower end. By turning this stud, the piece G is moved back and forth, and can be adjusted so that its edge *o* projects more or less over the front end of the slot *i*, and that a greater or less movement of the trigger will be required to effect its liberation from the said plate; and the adjustment may be made so delicate that the slightest touch of the trigger will be sufficient.

H is the trigger-protector, consisting of a sliding T-shaped piece of steel, having its shank fitted into the back part of the slot *i*, and its head fitting under the bottom of the lock-frame A. This piece is secured in place by means of a pin, *m*, inserted transversely through its shank within the lock-frame, and a plate, *n*, fitted to the shank under the said pin. When it is not desired to use the arm, the hammer is let down to draw the trigger into the lock-frame, and the piece H is slid forward to bring its head under the trigger, and by that means the trigger is prevented from coming out, and consequently the hammer is prevented from being cocked. By drawing back the piece H, the trigger is left free to come through the slot *i*, and consequently the cocking of the hammer is permitted.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The notched trigger E, attached to the

tumbler, and operating through a slot, *i*, in connection with a stationary edge, *o*, substantially as herein described.

2. The adjustable piece G and the regulator *l*, applied in combination with each other and with the notched trigger, substantially as herein described.

3. The protector H, constructed, applied, and operating in combination with the trigger E, substantially as herein specified.

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Witnesses:

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