

**Nipple-Guard.**

Patented Aug. 17, 1869.

Fig. 1.

Fig. 2.

A perspective view of the machine. It features a large, curved handle labeled *B* attached to a base labeled *A*. A vertical support labeled *H* is positioned to the right of the handle. A small, cylindrical component labeled *C* is mounted on the base *A* near the support *H*. The base *A* has several small circular holes on its side.

A diagram of a lever. A horizontal line represents the lever. On the left end, there is a circle with a dot in the center, representing the fulcrum. On the right end, there is a circle with a dot in the center, representing the load. In the middle of the lever, there is a point labeled 'c', representing the effort. The lever is shown in a slightly curved position, with the right end higher than the left end.

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# United States Patent Office.

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Letters Patent No. 93,733, dated August 17, 1869.

## IMPROVEMENT IN SAFETY-GUARD FOR GUN-NIPPLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, CYRUS T. MOORE, of Gilman-ton, in the county of Belknap, and State of New Hampshire, have invented a new and useful Im-provement in Percussion-Locks for Fire-Arms; and do hereby declare the same to be fully described in the following specification, and represented in the ac-companying drawings, of which—

Figure 1 is an inner-side elevation of the lock of a fire-arm, with my invention applied to such lock, such representing the hammer as down upon the guard.

Figure 2 is a front elevation, as the parts appear when the hammer is raised to "full cock."

In carrying out my invention, I apply to the lock, or the nipple thereof, a movable shield or guard, and so connect the same with the hammer by mechan-ism, which, during the elevation of the hammer from "half cock" to "full cock," shall cause by such move-ment the guard to be moved away from the nipple, so as to allow the hammer to descend thereon, or upon a percussion-cap when on such nipple, the guard, when the hammer is at half-cock, or being thrown down therefrom, so covering and protecting the nipple as to prevent the hammer from striking thereon so as to explode the cap.

The mechanism I have combined with the lock thus becomes a safety-apparatus, to prevent discharge of the priming or cap by accidental fall of the hammer from its position of "half cock."

In the drawings—

A denotes the lock-plate;

B, the hammer;

C, the percussion-nipple;

D, the main-spring;

E, the tumbler;

S, the sere; and

F, the sere-spring.

G is the cap by which the tumbler is kept in place.

The pivot of the tumbler is shown at *a*, the whole constituting a fire-arm lock, as ordinarily constructed.

The shield or guard H is a lever, whose upper arm is recessed, to enable it to span the nipple when against the same, in which case such arm projects a short distance above the top of the nipple, such distance being sufficient to prevent the hammer, when resting on the said upper end of the guard, from com-ing into contact with the top of a cap, when on the nipple.

The guard, arranged with respect to the nipple, in manner as represented, is pivoted to the lock-plate, or has its fulcrum at *b*, the shorter arm of the guard being extended below such fulcrum, and jointed to a connecting-rod, *c*, near the front end of the latter.

The said connecting-rod, (a separate side view of which is shown in fig. 3,) has a slot, *d*, formed in it, near its rear extremity, such slot being to receive a round stud, *e*, projecting from the upper part of the tumbler.

Furthermore, a spring, *f*, fixed at one end to the lock-plate, bears against the lower arm of the guard, and serves to move the guard so as to cause its upper arm to be thrown up to the nipple, or toward the same, as circumstances may require.

The slot *d* is to be so arranged in the connecting-rod that the stud may be against the rear end of the slot, when the hammer is standing at "half cock," and the guard is over or against the nipple.

From the above it will be seen, that should the hammer be accidentally discharged from "half cock," it will strike down upon the top of the guard, with-out causing an explosion of a cap, should one be on the nipple.

It will also be seen, that while the hammer is being drawn up from "half cock" to whole cock, it, through the stud and connecting-rod, will elevate the guard, or move it off the nipple, so as to cause such guard to be out of the path of the hammer while it may be descending from "full cock" to and upon the cap on the nipple, which it will do before the guard can be advanced toward the nipple, the main-spring being so much stronger, and, consequently, quicker in its movement than the little spring by which the guard is actuated.

The latter spring, however, will force the guard back upon the front of the hammer, against which it will rest until the hammer may be next raised to "half cock."

As soon as the hammer, during its elevation to "half cock," may have passed the guard, the latter will be forced by its spring up to its position of safety against the nipple.

Preparatory to placing a cap on the nipple, we have only to take hold of the guard, and move it a little away from the nipple.

After having adjusted the cap on the nipple, the guard may be suffered to be moved back to place by its spring.

I have been informed that it is not new to apply a safety-guard to the nipple of the lock of a fire-arm, and therefore, if so, I make no claim thereto; but I am not aware that any such guard, before my invention, has been connected by the hammer so as to be movable thereby, and by a spring, in manner and under circumstances substantially as hereinbefore set forth.

Therefore, what I claim as my invention, is as fol-lows:

I claim, in combination with the safety-guard H



and the hammer and tumbler of a fire-arm lock, the stud *e*, the slotted connecting-rod *c*, and the spring *f*, or their mechanical equivalents, the whole being substantially as described.

I also claim the arrangement and combination of the spring *f*, the slotted connecting-rod *c*, and the stud *e*, as applied to the lock-plate *A*, the guard *H*, and the tumbler *E* of the hammer *B*, such guard being

pivoted to the lock-plate so as to operate with the nipple and hammer, in manner substantially as explained.

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Witnesses:

R. H. EDDY,  
J. R. SNOW.