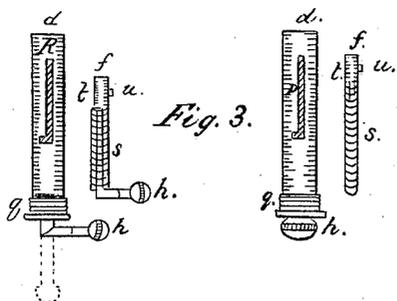
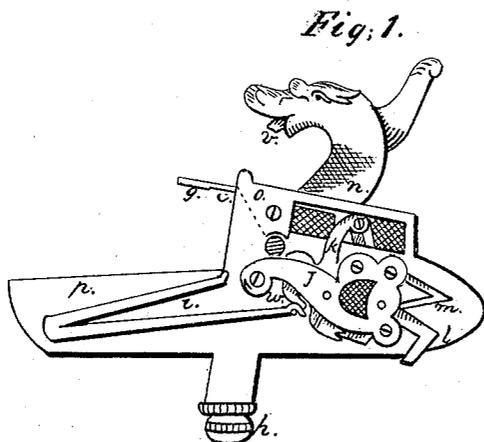
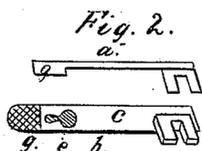


BUTTERFIELD & MARSHALL.

Gun-Lock.

No. 24,372.

Patented June 14, 1859.



Witnesses.
J. B. Butterfield
Harry A. Fordney

Inventor.
J. B. Butterfield

UNITED STATES PATENT OFFICE.

J. S. BUTTERFIELD AND SIMEON MARSHALL, OF PHILADELPHIA, PA.

IMPROVEMENT IN SELF-PRIMING GUN-LOCKS.

Specification forming part of Letters Patent No. 24,272, dated June 14, 1859.

To all whom it may concern:

Be it known that we, JESSE S. BUTTERFIELD and SIMEON MARSHALL, of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Self-Priming Locks for Fire-Arms; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

a is a side view of carrier; *b*, bottom view of carrier; *c*, carrier as represented; *d d*, view of charger complete; *e*, receiver in the carrier; *f f*, plunger; *g*, scraper on the extension of carrier; *h h*, center projection of charger; *i*, mainspring; *j*, bridle; *k*, tumbler; *l*, sear; *m*, sear-spring; *n*, hammer; *o*, cover protecting carrier *c*; *p*, lock-plate; *q q*, thumb-screw on charger *d*; *r r*, slot in charger; *s s*, spiral spring; *t t*, shield of charger; *u u*, pin in plunger; *v*, nipple in hammer; *w*, swivel of lock.

Figure 1 is an inside view of lock; Fig. 2, side and bottom views of carrier; Fig. 3, view of charger and parts thereof.

We are aware of there being (in part) a similarly-constructed lock patented by the aforesaid Jesse S. Butterfield, December 11, 1855. We therefore claim the following as an improvement on the aforesaid lock, as follows: We extend the carrier or conductor (marked *c*) beyond the receiver (marked *e*) sufficient to cover the cone of the gun when the hammer is raised for firing. This extension (marked *g*) is for the double purpose of, first, covering the vent when the hammer is raised for firing, thus protecting the vent from rain-drops when used in stormy weather; second, to admit of a lip or scraper being placed on the under side of the carrier for the purpose of removing any refuse matter that may remain on the cone from the exploded primer. We slot the carrier in front of the receiver *e* and into the extension, for the purpose of preventing refuse matter from the exploded primer being caught in the receiver *e*, preventing its return, as desired; also admitting of the cone being examined, on raising the hammer, in case it should become stopped up. This slot will also give more vent to the return fire from the cone when the gun is discharged. We form the receiver *e* in the carrier *c* in such a man-

ner as to receive and conduct the primer from the roll that it may be loose therefrom at the time the gun is fired, thus relieving the mainspring from the task of breaking the primer loose after being on its mission of exploding the primer, as would be the operation of the aforesaid lock patented December 11, 1855, it being the intention of the aforesaid Jesse S. Butterfield to use in this aforesaid lock the wafer-primers in a disconnected or loose form; but we, having experienced the inconvenience of using them in that form, have them cemented together with a water-proof cement, (as per sample attached to those papers,) making them at once secure from dampness and more conveniently used. The primers being used in this form, it becomes necessary to have each broken loose from the roll, and without depending upon the mainspring, as some require much power to relieve them, which would leave the mainspring insufficient to the task. We therefore place the receiver *e* in such a position as to receive the primer before the hammer reaches its full or second bent. Thus the primer is broken loose by the cocking of the arm, and moved back or into the lock as the hammer passes into full bent.

We construct the charger *d d* with a loose nut or thumb-screw secured on the same at *q q* or near its lower end for the purpose of making it conveniently applied to or taken from the lock, and making a positive connection of the charger to the chamber. The stroke of the hammer and recoil of the arm when discharged requires some positive form of securing the charger to the lock. We therefore construct the charger with a thumb-screw for securing it in its position. The center portion of the charger, projecting through and outside of thumb-screw *q q*, as shown at *h h* in Fig. 3, is for the purpose of unlocking the spiral spring *s s* after the charger has been secured in its position.

As we do not desire to confine ourselves to the form or construction of charger, we represent two, which vary slightly in their construction, but secured and operated in the same manner.

The operation of priming is as follows: The gun being held in the left hand, the charger, being charged, is placed into the chamber with the pin *u u* inserted in the slot of the cham-

ber, the charger being pushed in up to the thumb-screw. The thumb-screw, being turned, secures the charger in its place. The extension *h h*, being now turned, discharges the spiral spring *s s*, allowing the spring to operate upon the primers and force them against the carrier *c*. The arm or gun is now ready for firing, which may be continued until the charger is exhausted; or the charger may be removed before it is exhausted by reversing the thumb-screw, the charger being now ready to receive another roll of primers, as before.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The extension *g* on the carrier *c*, in the

manner and for the purpose as hereinbefore substantially set forth.

2. Disconnecting each primer from the roll with the raising of the hammer, in the manner and for the purpose as hereinbefore substantially set forth.

3. The adjustable center projection, *h h*, and thumb-screw *q q*, arranged and operated in the manner and for the purpose as hereinbefore substantially set forth.

J. S. BUTTERFIELD.
SIMEON MARSHALL.

Witnesses:

J. B. BUTTERFIELD,
HARRY A. FORDNEY.