B. BURTON.
Breech-Loader.

No. 92,013. Patented June 29, 1869. Witnesses. Stefnuther Of Theaken By Co Theaker.

UNITED STATES PATENT OFFICE.

BETHEL BURTON, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BREECH-LOADERS.

Specification forming part of Letters Patent No. 92,013, dated June 29, 1869.

To all whom it may concern:

Be it known that I, BETHEL BURTON, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Breech-Loading Fire-Arms; 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 part of this specification, in which-

Figure 1 represents a longitudinal section of the breech and magazine portion of the gun, loaded and ready for firing. Fig. 2 is a top view of the gun with the breech-pin drawn back, showing the cartridge in the chamber of the breech. Fig. 3 is a cross-section of the gun, taken at x x. Fig. 4 is a cross-section of the rear end of the breech at z. Fig. 5 is a perspective view of the breech-pin and its lever, showing the rib in the slot of the breechpin, hereinafter described. Fig. 6 represents the sliding cover, recoil-block, and steady-pin. Fig. 7 represents the hammer and spiral spring. Fig. 8 is a perspective view of the cartridge. extractor.

I extend the barrel A by screwing thereon the breech B, as described in my previous patent granted me in the United States and another similar patent granted me by Great Britain.

I form a longitudinal slot or opening in the under side of the breech B and down into the stock, below the magazine, and in this opening the carrier T is made to fit, which effectually closes said opening against access of sand or dirt.

The opening in the stock is made to allow the carrier to move freely up and down.

The trigger K is extended, by means of the arm k, to and connected with said carrier by means of the slot in the end of the arm k, working on the pin e, in the under side of the carrier T.

The end of the spring J, which is screwed upon the guard-plate, rests upon the heel of the trigger K.

When the trigger K is pulled back, the arm

k draws down with it the carrier T below the magazine D, and receives a cartridge on top of the carrier.

ries with it the empty shell out of the chamber of the barrel.

The pressure of the spiral spring M against the hammer L l, acting against the base of the cartridge-case, while the extractor G engages it on top, tilts it up and out of the chamber of the breech.

When the breech-pin is drawn entirely back, the carrier is compelled to rise by the pressure of the spring J upon the trigger K, carrying with it the cartridge D', upon a line with the bore of the barrel, ready to be shoved therein by the forward motion of the breech-pin, as seen in Fig. 2, and the breech-pin secured against the base of the cartridge, in the manner described in my former patents.

My next improvement consists in a longitudinal rib, N N', formed in the breech-pin slot R R', working in conjunction with the lateral rib N' n, as seen in Figs. 3 and 5.

Upon the arm k of the trigger K the finger H is pivoted, as described in previous patents, and upon the upper side of the finger H a lateral hook, h, is formed.

When the breech-pin is shoved forward to insert the cartridge in the barrel, the hook h on the finger H passes over the rib N N', and when said breech-pin is revolved or turned the front hook passes over the lateral rib N'n, as is also described in previous patent, which entirely prevents the arm from being discharged until the breech-pin is securely in place.

The rib N N' may be placed on the opposite side of the slot R R', and the hook h placed on the opposite side of the finger H, if preferred.

My next improvement consists in fluting the parts subject to motion, as seen in Figs. 5, 6, and 7. It will readily be seen that the fluted parts, working upon a smooth surface, serve the purpose of removing rust or gum that may have collected thereon, reduce the amount of friction, and enable the parts to move freely.

The hammer L l is formed with a beveled shoulder, corresponding with a shoulder on the inside of the steady-pin I, which receives the shock of the hammer when the gun is snapped without a cartridge in the barrel. The beveled form of the shoulder renders it When the breech-pin is withdrawn, it car- less liable to be worn away by frequent concussion than would be the case with a rectangular shoulder.

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. Constructing the trigger K with an arm, k, to operate the carrier, substantially as shown and described.

2. The spring J, in combination with the trigger K, arm k, and carrier T, substantially

as shown and described.

3. The longitudinal rib N N', or its equivalent, constructed and operating substantially as shown and described, for the purpose specified.

4. Fluting the breech-pin F, hammer L, and steady-pin I, or the under side of the strap C, substantially as shown and described, for the purpose specified.

5. The lateral hook h on the finger H, and its combination with the rib N N' in the slot of the breech-pin F, substantially as shown

and described.

BETHEL BURTON.

Witnesses:

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