J. C. RICHARDS.

BREECH-LOADING FIRE-ARMS.

No. 179,609. Patented July 4, 1876.

Fig. 1.

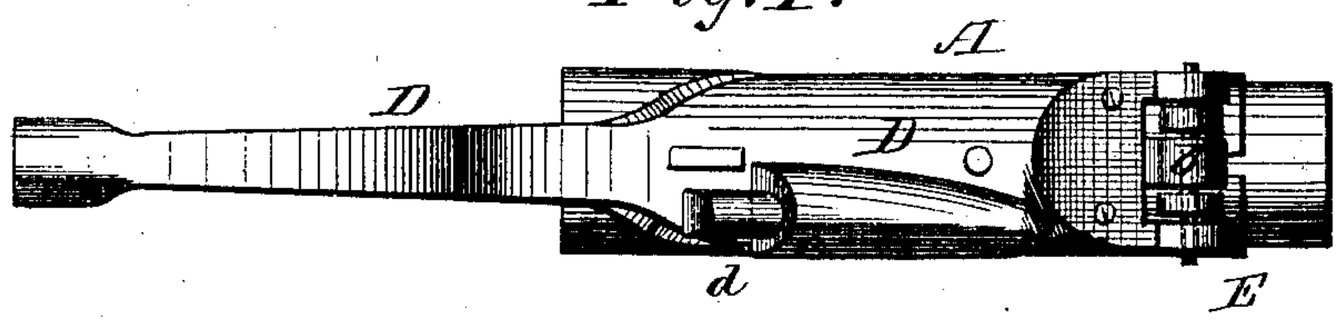

Fig. 2.

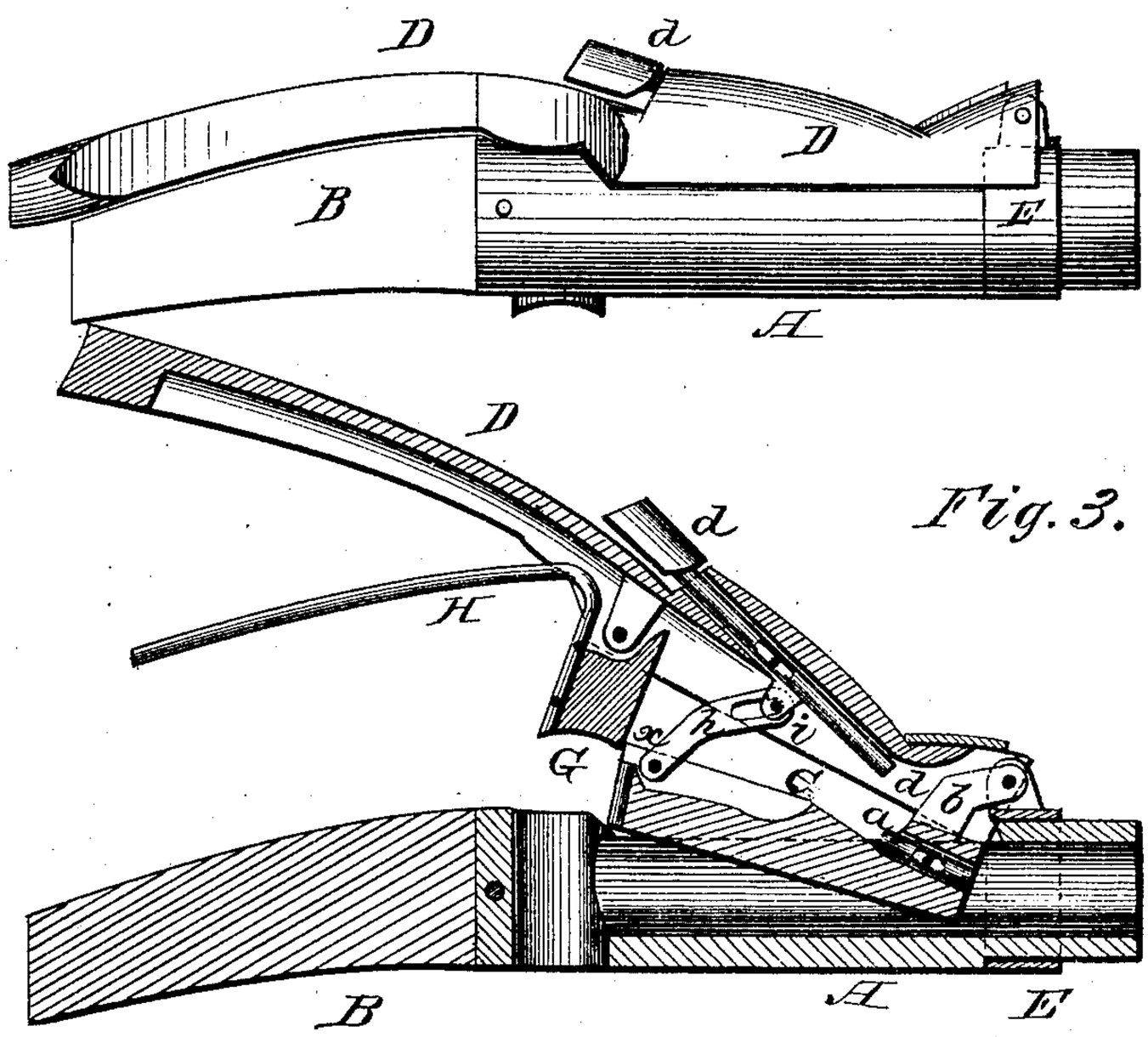

Fig. 3.

Witnesses:
P. C. Dieterich
A. H. Duffy.

Inventor:
John C. Richards

Per: G. H. Watson & Co. Attorneys.

UNITED STATES PATENT OFFICE.

JOHN C. RICHARDS, OF PHILIPSBURG, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND THOMAS B. POTTER, OF SAME PLACE.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **179,609**, dated July 4, 1876; application filed May 31, 1876.

To all whom it may concern:

Be it known that I, JOHN C. RICHARDS, of Philipsburg, in the county of Centre and State of Pennsylvania, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a mechanism for opening and closing the breech of a breech-loading fire-arm, and is more particularly designed for use in changing an ordinary muzzle-loading gun into a breech-loader.

In the annexed drawing, Figure 1 is a plan view of my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a longitudinal section thereof.

A represents a portion of the barrel, and B the breech-pin, of an ordinary muzzle-loading gun. The breech of the barrel A is open on top, and provided with a breech-block, C, which is provided at its front end with a firing-pin, *a*, passing through the same, as shown, and on top with an arm, *b*, which is bent forward and hinged to a band, E, encircling the barrel. A dovetailed block, or block secured by screws or other suitable device, may be used in place of the band. To this band, on the same axis, is also hinged the lever D, which closes the open top of the barrel. Through this lever passes the firing-pin *d*, which is to be struck by the hammer, and, in turn, strike the pin *a*, for exploding the cartridge. The breech-block C is, near its rear end, on top, provided with a hinged arm, *h*, the upper end of which is slotted, and passes over a pin, *i*, between two ears on the under side of the lever D. To another ear on the under side of said lever is hinged the breech-pin G, which is provided with an arm, H, as shown.

Upon withdrawing the breech or locking pin G by raising the lever, when the gun is held in ordinary position, all the parts drop to their proper positions. The locking-pin G drops into a recess, *x*, on the breech-block C, and presses it to its place in the slot by pressing on the lever D. By now drawing the arm H toward the lever D, without releasing the pressure on said lever, the locking-pin at once fills up the hole at the rear of the breech-block, being prevented from turning too far to the rear by coming in contact with the upper edge of the barrel.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The breech-block C, provided with the rigid bent arm *b* and the pivoted slotted arm *d*, in combination with the barrel A and lever D, substantially as herein set forth.

2. The swinging locking-pin G, in combination with the breech-block C and lever D, substantially as and for the purposes herein set forth.

3. The combination of the barrel A, breech-block C, lever D, and swinging locking-pin G, with arm H, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN C. RICHARDS.

Witnesses:

G. W. MCGAFFEY,

OWEN HANCOCK.