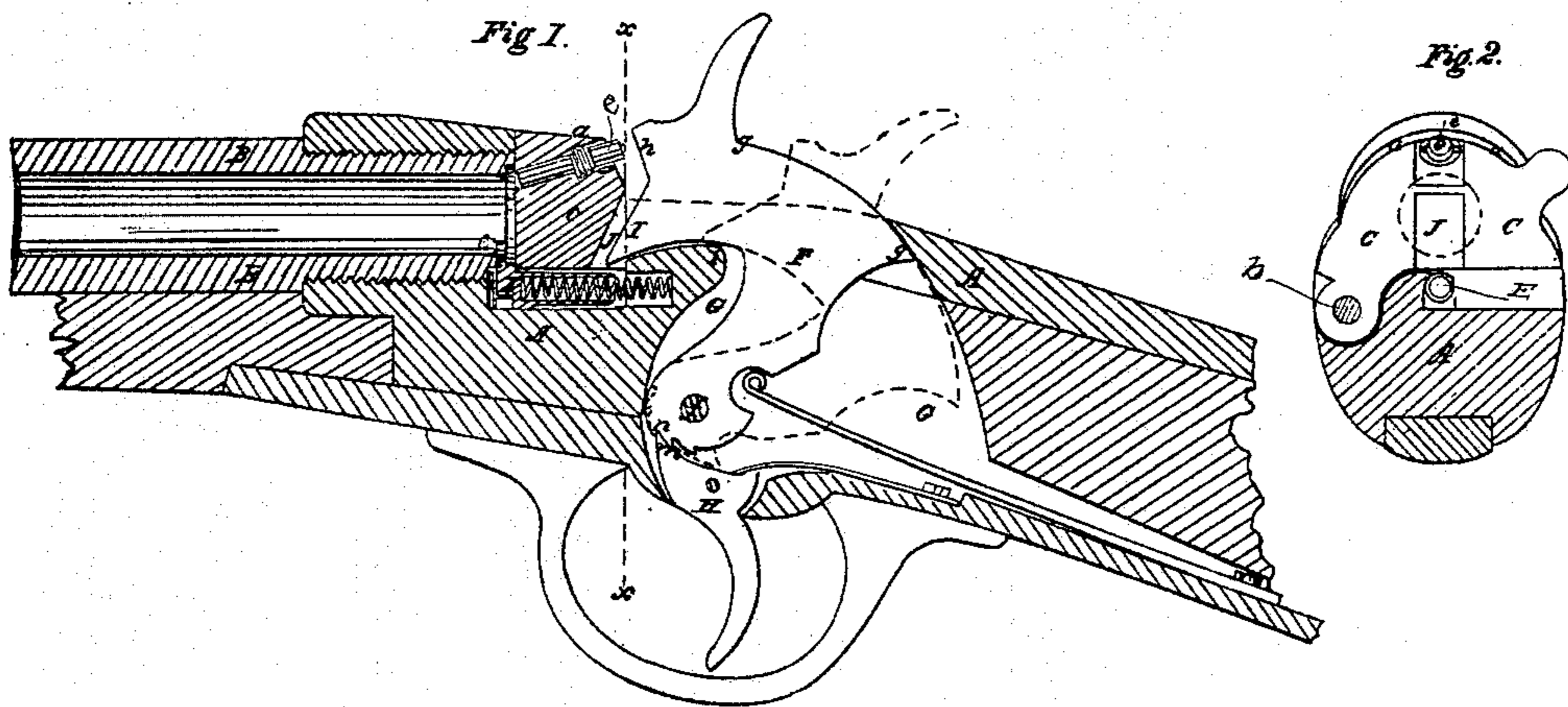


J. A. CONOVER.
Breech-loading Fire-arm.

No. 56,669.

Patented July 24, 1866.



Witnesses,

J. H. Combs
W. Leclerc

Inventor,

Jacob A. Conover

UNITED STATES PATENT OFFICE.

JACOB A. CONOVER, OF NEW YORK, N. Y., ASSIGNOR TO THE EMPIRE
BREECH LOADING FIRE ARMS COMPANY.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 56,669, dated July 24, 1866.

To all whom it may concern:

Be it known that I, JACOB A. CONOVER, of the city, county, and State of New York, 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 of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal section of a fire-arm furnished with my improvements. Fig. 2 is a transverse section of the same; taken in the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention may be considered as an improvement on the breech-loading fire-arm which is the subject of Isaac Smith's Letters Patent bearing date April 26, 1864; and it consists in a novel means of covering the mortise in the breech-receiver, through which the hammer works, when the hammer is at full or half cock, whereby dust and dirt are prevented from entering the said mortise and clogging the parts contained therein.

To enable others to understand the construction and operation of my invention, I will proceed to describe it with reference to the drawings.

A is the frame or breech-receiver of the arm, into which the rearmost end of the barrel B is screwed in the usual manner. In the upper part of this frame or breech-receiver A, immediately in rear of the barrel, is a transverse mortise or groove, *a*, for the reception of the movable breech-piece C, which opens and closes with a laterally-swinging movement about the axis of a horizontal pin, *b*, which is arranged parallel with the bore of the barrel in suitable bearings in the frame A and at the left-hand side of the arm, the said breech-piece being firmly secured to the said pin *b*, so that the pin turns in its bearings as the breech is open and closed.

E represents the cartridge-retractor, which has its forward end turned upward, as shown at *e*, in order to catch in front of the flange of the cartridge. This retractor works in a longitudinal groove or recess formed in the lower side or bottom of the transverse mortise *a* in the breech-receiver A, and is operated by the

laterally-swinging movement of the breech-piece C in opening and closing the breech, in substantially the same manner as set forth in the patent of Isaac Smith, hereinbefore mentioned.

F represents the hammer, which is situated in a slot or mortise, G, formed in the rearmost portion of the frame or breech-receiver A, and extending through the stock, as shown in Fig. 1, and is pivoted upon a suitable transverse pivot, *f*, in the lower portion of the said mortise, and operated by the trigger H in the usual manner.

h is the face of the hammer, which strikes the sliding pin *e* when the hammer falls and drives it forward to explode or fire the cartridge.

Formed upon the upper end of the hammer, at the front or forward side thereof, projecting forward from the same below the face *h*, is a tapering tongue, I, the under side of which is concave or formed on the arc of a circle concentric with the pivot *f* of the hammer. When the hammer is down the rearmost end of this concave surface of the said tongue rests snugly upon the rounded shoulder *i*, formed upon the breech-receiver at the forward upper corner of the mortise G; and inasmuch as the said concave under side of the tongue I is concentric with the pivot *f*, it moves closely past and over the shoulder *i* when the hammer is drawn back to half or full cock, the said tongue I projecting forward over and closely covering the space between the hammer and the shoulder *i*. When the hammer is thus drawn back it effectually prevents dust and dirt from entering the mortise G in front of the hammer.

Formed in the rearmost end of the swinging breech-block C, in the lower portion thereof, and directly in front of the tongue I of the hammer, is a vertical notch or recess, J, which is more clearly represented in Fig. 1. The tongue I projects into this recess J when the hammer is down with its face in contact with the sliding pin *e*, or when the sear *m* of the trigger is in the safety-notch *n* of the hammer, as shown in the said figure, so that the right-hand side of the said recess is pressed closely against the right-hand side of the tongue I and prevents the breech-piece C from swinging upward around its pivot *b*, and thus keeps it

from being displaced by the percussion of the charge when fired or from other accidental causes when the sear is placed in the safety-notch *n*, as just set forth.

The back *g g* of the hammer may be formed on the arc of a circle concentric with the pivot *f*, while the rearmost end of the mortise *G* describes a like arc. When the hammer is brought back in cocking or half-cocking the same the said back of the hammer will move closely in contact with the curved or concave end of the mortise, so as to prevent dust and dirt from entering the same behind the hammer.

What I claim as new, and desire to see by Letters Patent, is—

The hammer *F*, formed with a curved back and throat, said curves being concentric with the axis *f* of the hammer, in combination with the curved upper side of the projection *i* and rear upper edge of the mortise *G*, substantially as and for the purpose specified.

JACOB A. CONOVER.

Witnesses:

HENRY T. BROWN,
J. W. COOMBS.