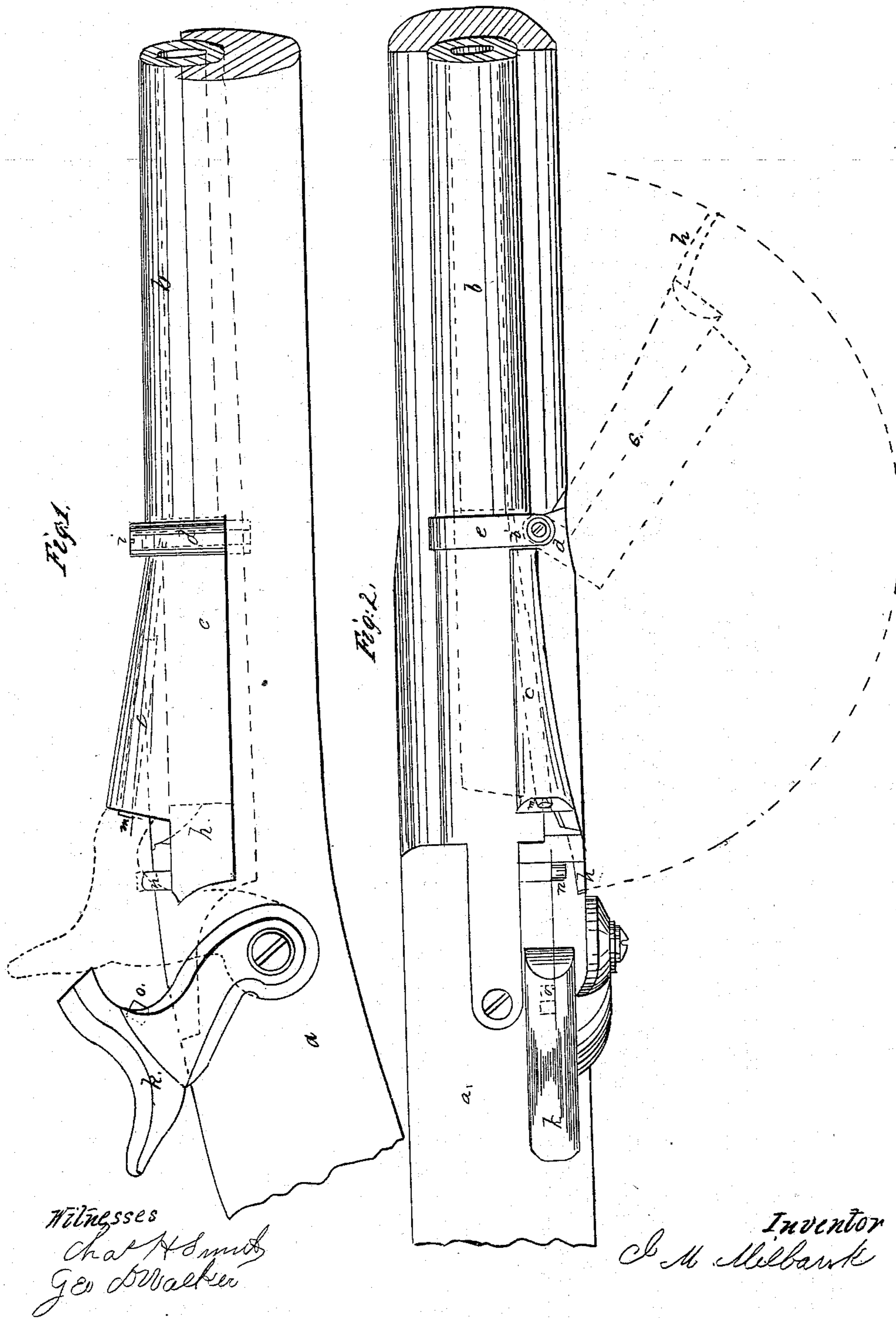


I. M. MILBANK.
Breech-Loading Fire-Arm.

No. 61,751.

Patented Feb. 5, 1867.



United States Patent Office.

ISAAC M. MILBANK, OF GREENFIELD HILL, CONNECTICUT.

Letters Patent No. 61,751, dated February 5, 1867.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ISAAC M. MILBANK, of Greenfield Hill, in the county of Fairfield, and State of Connecticut, have invented, made, and applied to use, a certain new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a side view, showing the improvement; and

Figure 2 is a plan of the same, the breech being shown open by dotted red lines.

Similar marks of reference denote the same parts.

Breech-loading fire-arms have heretofore been made with a breech swinging out horizontally, and to the right of the piece. Fire-arms have also been made with a breech that swings on an axis parallel to the hammer axis, and is blocked into place by the action of the hammer itself as it strikes against the breech. The nature of my said invention consists in a wing applied to the horizontal swinging breech-block, over which wing the hammer-shank closes before the hammer-head strikes the detonating cap or punch, thereby holding the breech securely closed against the explosion of the cartridge; and in case the breech is not properly closed, the explosion cannot take place in consequence of the hammer being arrested by coming in contact with the end of said wing.

In the drawing, *a* represents a portion of the stock, and *b* a portion of the barrel of a fire-arm, of any desired size or construction. In the side of the barrel *b* is an opening or mortise, in which is placed the breech-block *c*, attached at its forward end by the hinge *d* to the barrel *b*, and I prefer and use a metal strap, *e*, surrounding said barrel, and forming the top and bottom portions of said hinge. The opening in the breech-block *c*, for the hinge-pin *i*, is to be slightly elongated, in order that the rear end of the breech-block may be allowed to set firmly against the back end of the mortise into which the breech-block is closed; thereby the hinge itself will be relieved of any undue strain when the piece is fired. *h* is a wing extending to the rear of the breech-block *c*, and formed with or attached to the same, and this wing *h* is of such a size and shape as to pass into a recess into the stock just in front of the hammer *k* when cocked, as seen in the drawing. When the hammer is discharged, its shank passes down at the side of the wing *h*, retaining the same firmly, so that the explosion cannot throw out the rear end of the breech-block *c*. The hammer *k*, in discharging the piece, strikes on the rear end of the punch *m*, if a metallic cartridge is employed; or a nipple and cap may be used in place of the punch *m*. If the breech *c* is not entirely closed, the hammer is arrested by taking against the end of the wing *h*, and does not reach the punch or nipple; hence no injury can result from the explosion, as that is prevented.

In order to strengthen the hammer in resisting any sidewise pressure from the wing *h*, I make use of locking projections, *n* and *o*, the one, *n*, being a catch extending out laterally from the rear end of the barrel, with an end or head to the right and outer side of the recess into which the projection *o* on the under side of the hammer falls as the hammer is discharged; and thereby a support is formed for the upper end of the hammer when discharged, and during the time that the parts are under the strain of the explosion.

What I claim, and desire to secure by Letters Patent, is—

1. The wing *h*, in combination with the swinging breech-block *c*, and hammer *k*, for the purposes and substantially as set forth.
2. I claim the locking projections *n* and *o*, in combination with the hammer *k* and wing *h* of the swinging breech-block, as and for the purposes set forth.

Dated October 4, A. D. 1866.

I. M. MILBANK.

Witnesses:

GEO. D. WALKER,
CHAS. D. SMITH.