

(No Model.)

W. B. FRANKLIN.
MAGAZINE FIRE ARM.

No. 326,491.

Patented Sept. 15, 1885.

Fig. 1

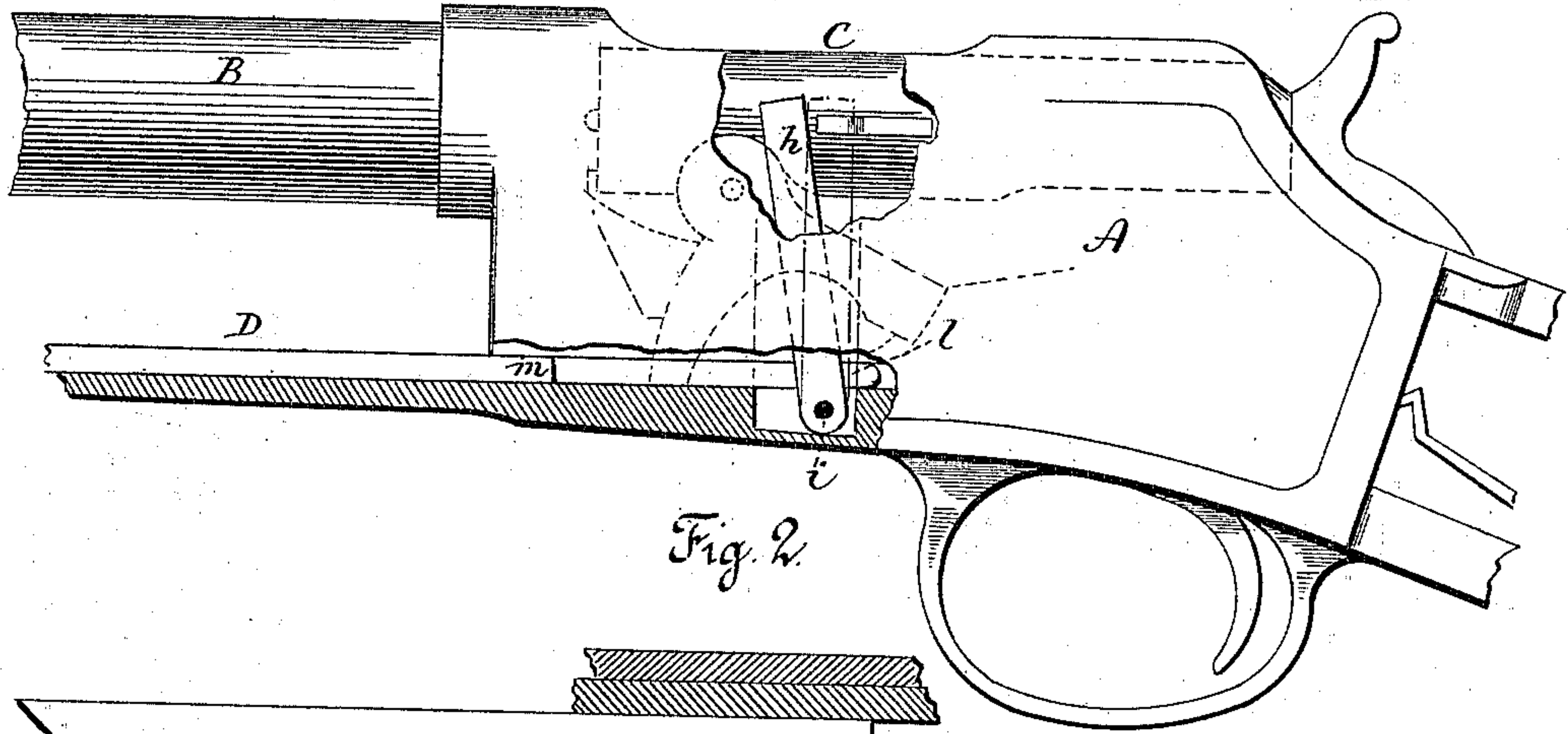


Fig. 2

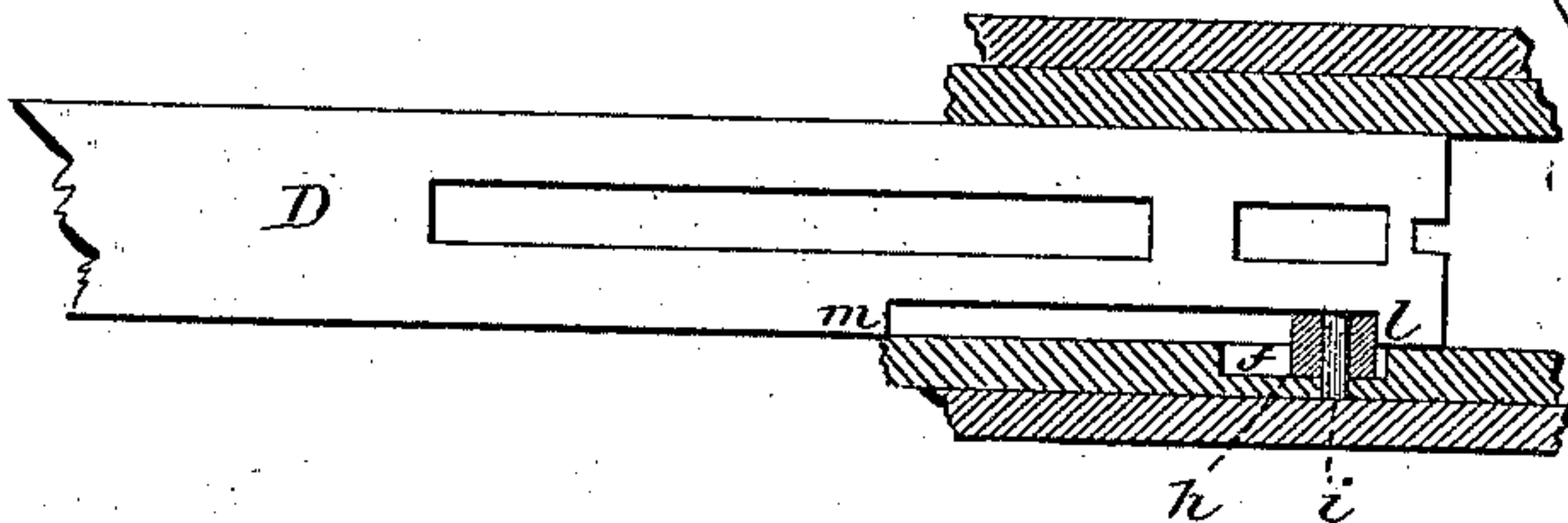


Fig. 3

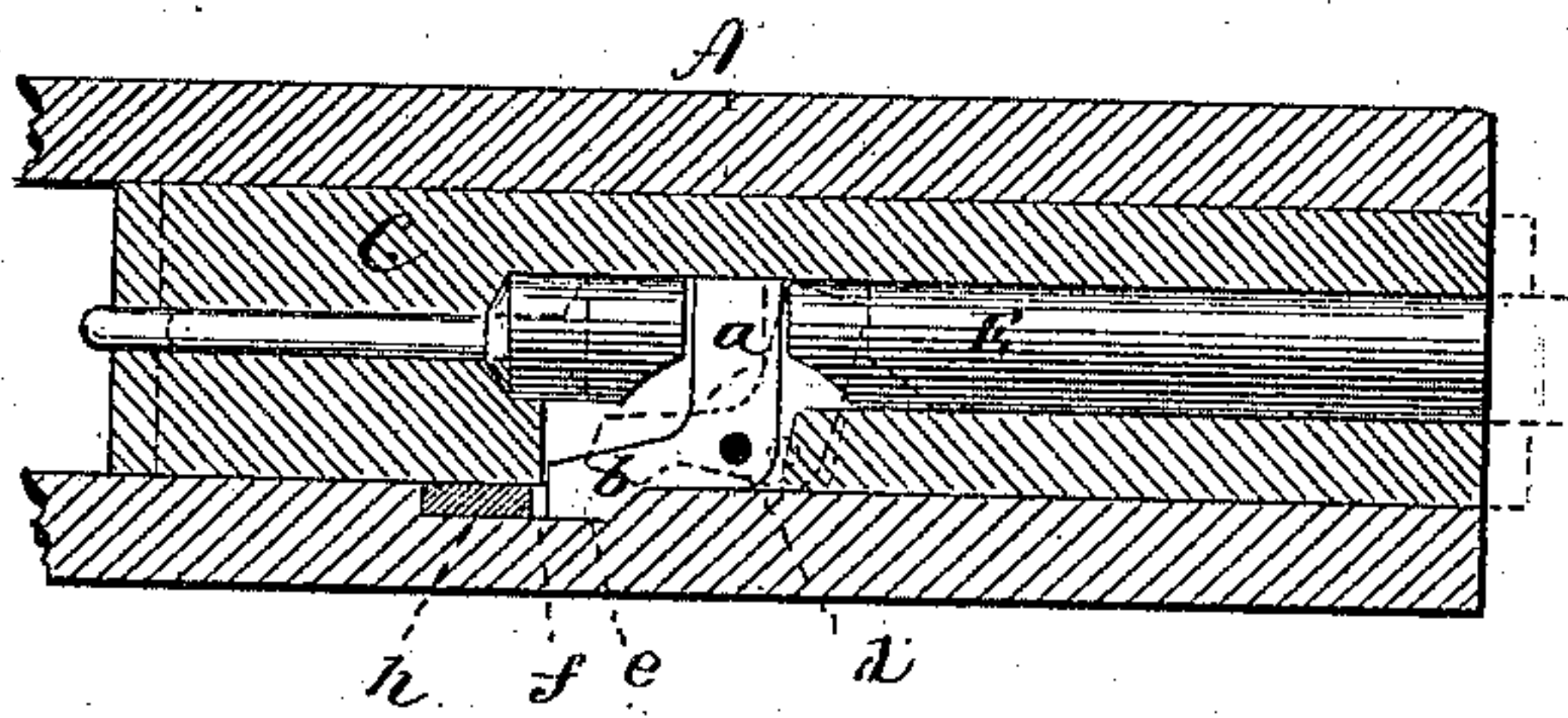


Fig. 4

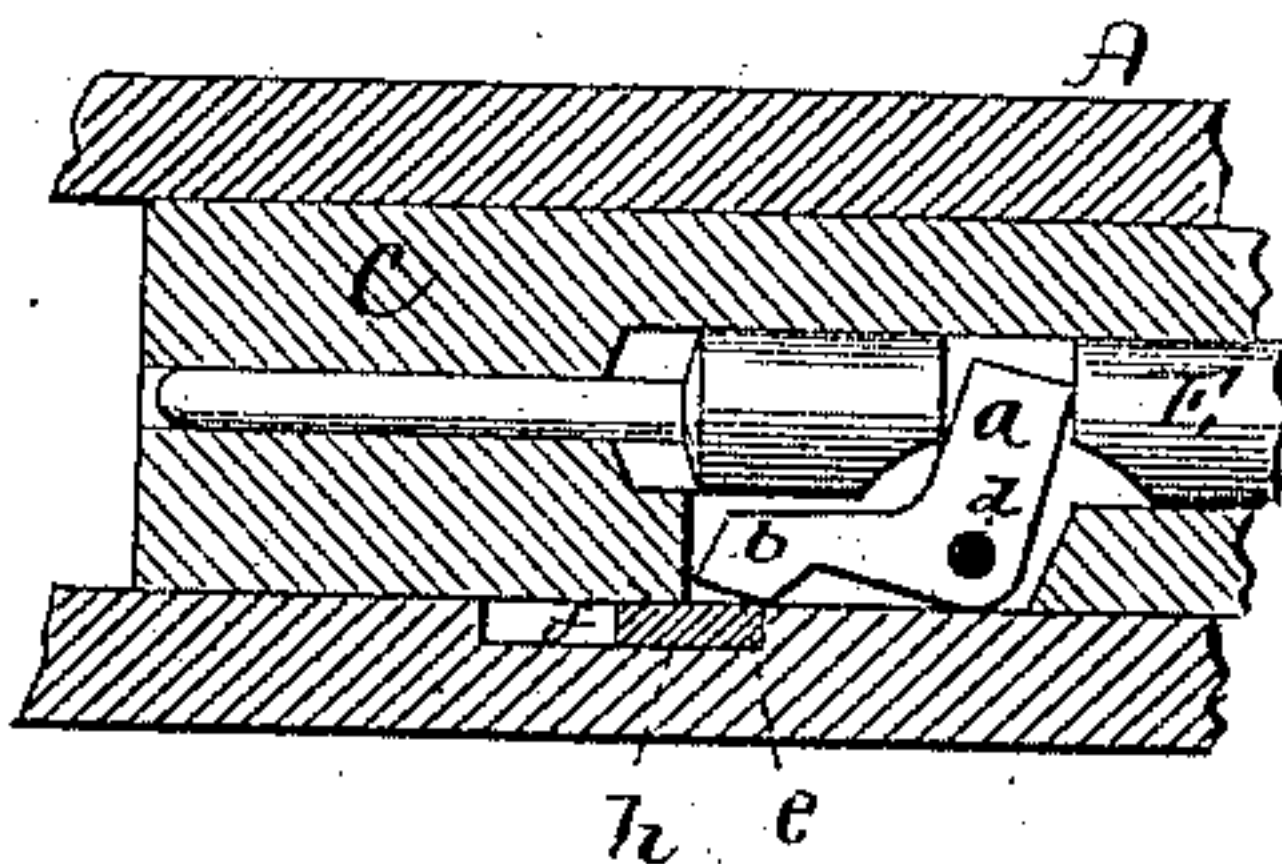
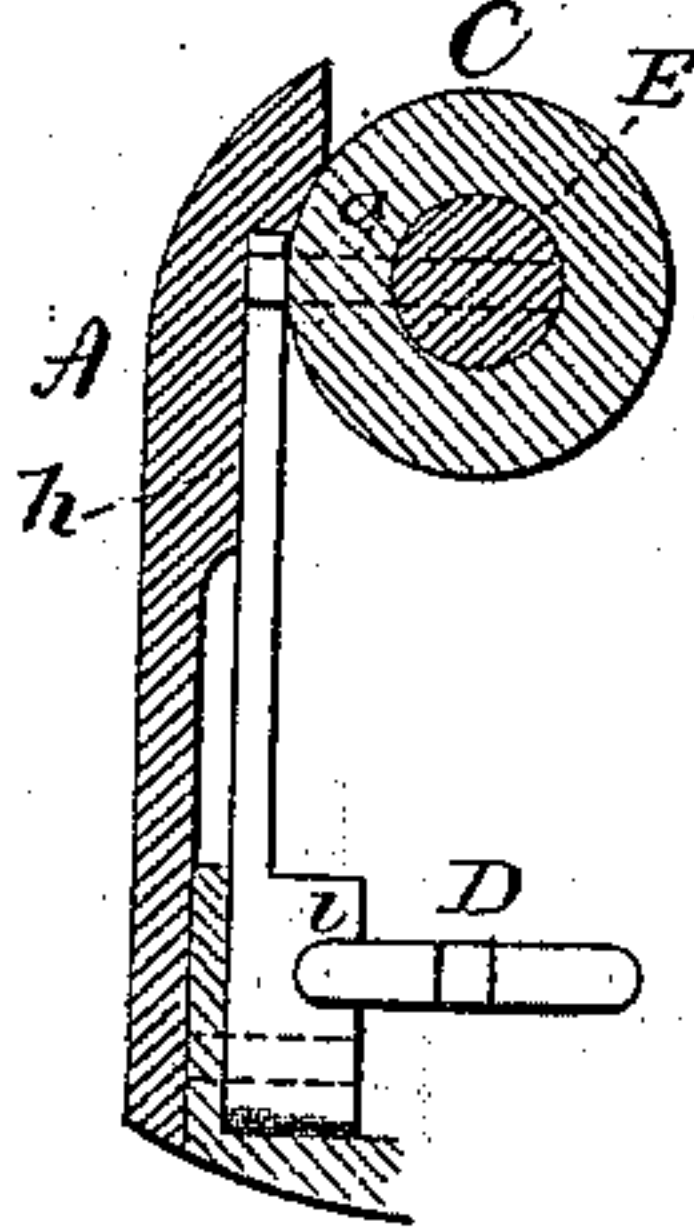


Fig. 5



Witnesses
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WILLIAM B. FRANKLIN, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE COLTS PATENT FIRE ARMS MANUFACTURING COMPANY, OF SAME PLACE.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 326,491, dated September 15, 1885.

Application filed July 20, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. FRANKLIN, of Hartford, in the county of Hartford and State of Connecticut, have invented a new Improvement in Magazine Fire-Arms; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1 a side view, portions broken away to illustrate the invention; Fig. 2, a horizontal section through the receiver, showing a top view of the connecting-bar to illustrate its engagement with the vertical lever *h*; Fig. 3, a horizontal section through the breech-piece, showing the firing-pin and its retracting-lever in the forward position; Fig. 4, the same as Fig. 3, showing the firing-pin as retracted and the vertical lever occupying the firing-pin-lever recess; Fig. 5, a vertical section in rear of the vertical lever.

This invention relates to an improvement in that class of breech-loading fire arms in which the breech-piece is arranged to move longitudinally toward and from the barrel in opening and closing, and in which the breech-piece is actuated by a handle beneath the barrel, from which an arm extends into connection with the breech-piece, so that longitudinal movement imparted to said handle will impart corresponding movement to the breech-piece.

The object of the present improvement is to provide a simple and convenient retraction for the firing-pin, and so that the firing-pin shall be moved rearward at the commencement of the rear movement of the breech-piece and its return or forward movement be prevented until the breech-piece is closed and substantially locked; and it consists in a lever hung in the breech-piece in a horizontal plane, the said lever of substantially L shape, one arm in connection with the firing-pin, the other arm extending longitudinally from the fulcrum and adapted to enter a recess in the side of the receiver when the breech-piece is in its extreme forward position, and thereby leave the firing-pin free, but be thrown out of said recess as the breech-piece commences its

rear movement, and thereby retract the firing-pin, and as more fully hereinafter described.

A represents the receiver; B, the barrel, attached to its forward end; C, the longitudinally-movable breech-piece; D, the connecting-bar, which extends from the handle beneath the barrel into the receiver and connected with the breech-piece, so that the longitudinal movement of the connection D under the movement of the handle imparts a corresponding movement to the breech-piece, a common and well-known construction, the details of which it is not necessary to describe in this specification.

E is the firing-pin, arranged longitudinally through the breech-piece in the usual manner and so as to be struck by the hammer F, also in the usual manner.

a b are the two arms of a lever hung in the breech-piece upon a pivot, *d*, and in a horizontal plane, the pivot being at one side of the firing-pin, and so that the arm *a* will extend into a notch in the firing-pin, as seen in Fig. 3, to engage the firing-pin, so that the movement of the lever may be imparted to the firing-pin. The other arm, *b*, extends forward from the pivot, and is provided with a nose or projection, *e*, adapted to enter a recess, *f*, in the receiver when the breech-piece is in its extreme forward position, and, as seen in Fig. 3, the rear side of the nose and of the recess are inclined, so as to form a cam-like surface, over which the nose may work in the movement of the breech-piece, and so that as the breech-piece commences its rear movement the nose *e* will ride out of the recess *f* in the receiver, thereby turning the lever, and so as to retract the firing-pin, as indicated in broken lines, Fig. 3. After such retraction the nose of the lever follows the inner surface of the receiver until the breech-piece reaches its extreme rear movement and returns, thus holding the firing-pin from possible forward movement until the breech-piece is fully closed, so that the nose *e* may enter the recess in the receiver and leave the firing-pin free to be forced against the cartridge in the barrel.

As in the more general construction of this class of arms the locking of the breech-piece occurs after the breech-piece is closed, I find

it desirable to prevent the nose of the firing-pin lever from entering the recess *f* until such locking shall have substantially taken place. To this end I arrange a lever, *h*, vertically in the receiver, hung upon a pivot, *i*, below the connecting-bar D, and in the receiver a recess is formed as a continuation or extension of the firing-pin-lever recess *f*, and on the connecting-bar D a shoulder, *l*, is formed in rear, of the lever *h*, and a second shoulder, *m*, forward of the lever, as seen in Fig. 2. The rear shoulder is in such relation to the lever *h* that in the final forward movement of the connecting-bar D it will strike the rear side of the lever *h* and turn the said lever to its extreme forward position, as seen in Figs. 1 and 3, and the shoulder *m* is in such relation to the lever *h* that in the extreme rear movement of the connecting-bar D it will strike the forward side of the lever *h* and turn the said lever rearward, as indicated in broken lines, Fig. 1. When the lever is in its extreme forward position, as seen in Fig. 3, the recess *f* is clear for the nose of the firing-pin lever to enter and rest; but when on the opening of the breech-piece in the final rear movement of the connection D the lever *h* has been turned to the rear, as seen in Fig. 4, it fills the recess provided for the nose of the firing-pin lever, so that the nose of the lever is prevented from entering the recess, and hence while the lever *h* so stands the firing-pin cannot be thrown forward; but upon the final locking movement of the connecting-bar D the lever *h* is drawn into its forward position, as seen in Fig. 3, to open the space for the entrance of the nose of the firing-pin lever, and as this movement of the lever *h* occurs after the breech-piece is closed and during the locking movement, it follows that the firing-pin cannot advance until the locking of the breech-piece is substantially complete.

In the illustration the locking-brace is in the form of a bell-crank lever hung to the breech-piece, near its forward end, one arm extending down into engagement with the connecting-bar D, and the other so as to drop forward of an abutment in the receiver when the breech-piece is in its closed position, and so that on the first part of the rear movement of the connecting-bar D the locking-arm is raised from the abutment to release the breech-piece before the rear movement of the breech-piece commences, and on the return the breech-piece is closed before the locking-brace commences its locking engagement with the abutment.

As before stated, this mechanism for locking the breech-piece is a well-known construction, and does not require particular illustration or description.

I claim—

1. In a breech-loading fire-arm in which the breech-piece is arranged to move longitudinally toward and from the barrel in closing and opening, the combination therewith of a firing-pin extending longitudinally through the breech-piece, a lever hung in the breech-piece in a horizontal plane, one arm of said lever adapted to engage the firing-pin, the other arm extending at substantially right angles to the first, and adapted to enter a recess in the side of the receiver provided for it when the breech-piece is in its closed position, substantially as described, and so that the first part of the rear movement of the breech-piece will take the said arm out of said recess, thereby turning the lever to retract the firing-pin.

2. In a fire-arm having a longitudinally-movable breech-piece, a connecting-bar beneath the breech-piece extending forward beneath the barrel, the said bar in connection with the breech-piece, and so that longitudinal movement of the said connecting-bar will impart corresponding longitudinal movement to the breech-piece, the combination therewith of an L-shaped lever hung in the breech-piece, and so as to swing in a horizontal plane, one arm of said lever in connection with the firing-pin, the other arm adapted to enter a recess formed for it in the side of the receiver, a vertical lever hung in the receiver, and adapted to work back and forth in said firing-pin-lever recess, the connecting-bar constructed with shoulders, one in rear and the other in front of said vertical lever, substantially as described, and whereby in the extreme rear movement of the said connecting-bar the said vertical lever will be thrown into the firing-pin-lever recess to prevent the entrance of the firing-pin lever into said recess, and in the extreme forward movement of said connecting-bar the said vertical lever will be thrown from said recess to permit the firing-pin lever to enter therein.

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