

J. LEE.
Breech-Loading Fire-Arm.

Patented July 22, 1862.

No. 35,941.

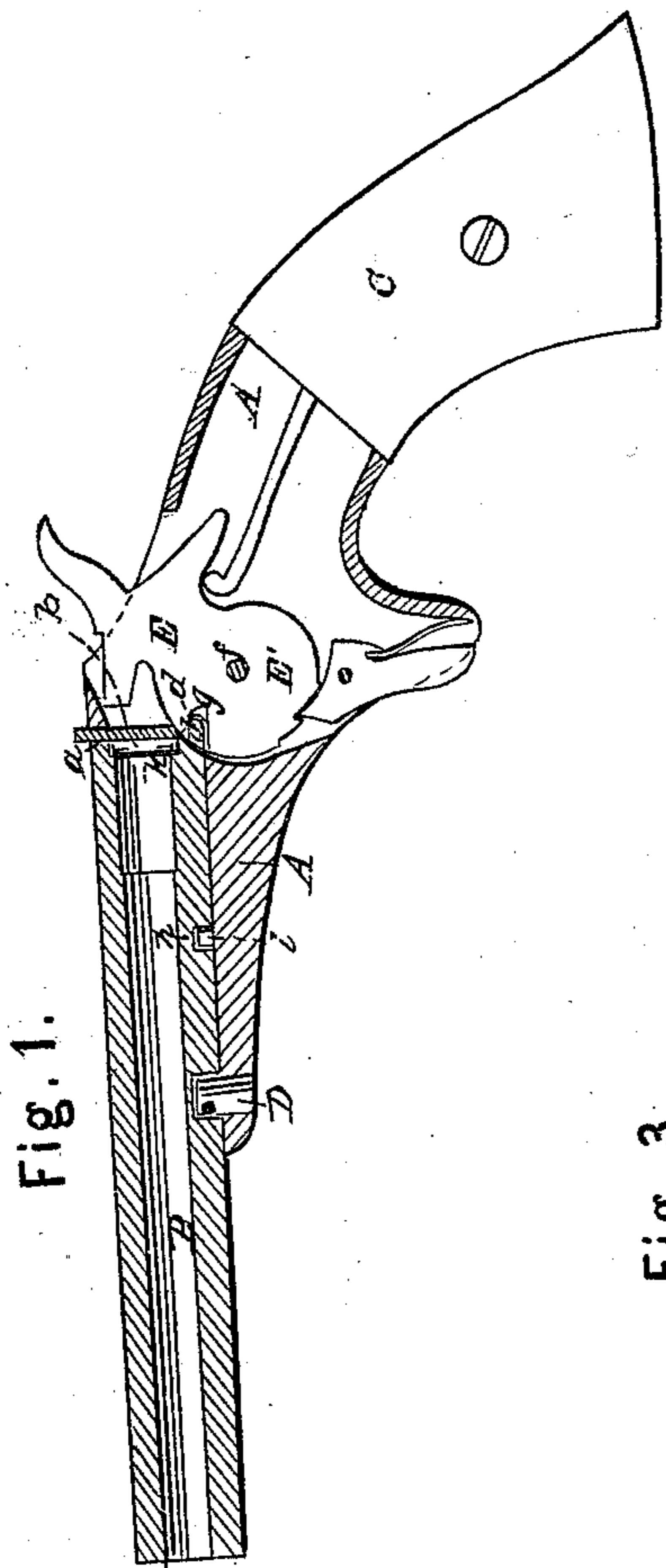


Fig. 1.

Fig. 3.

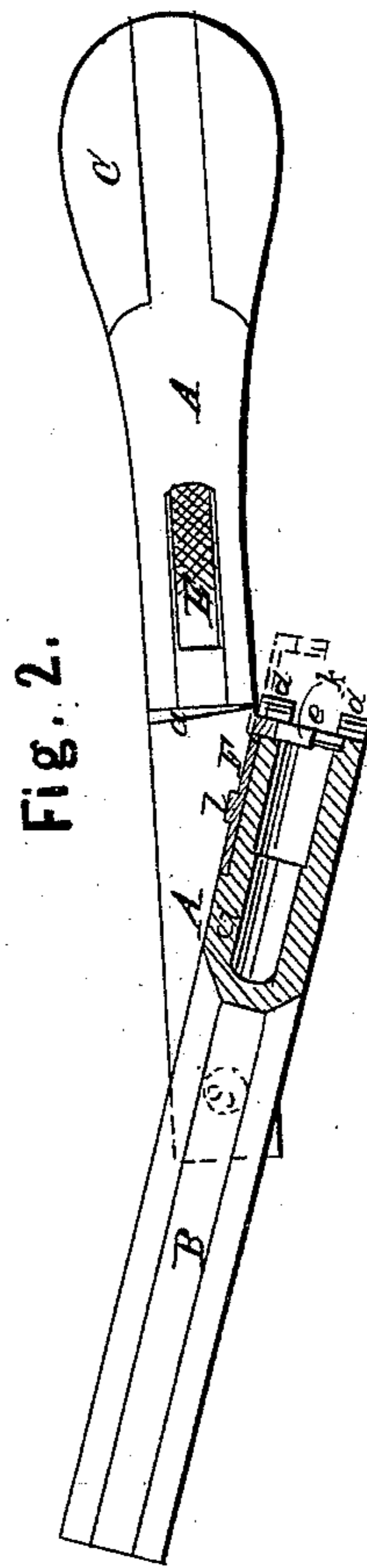
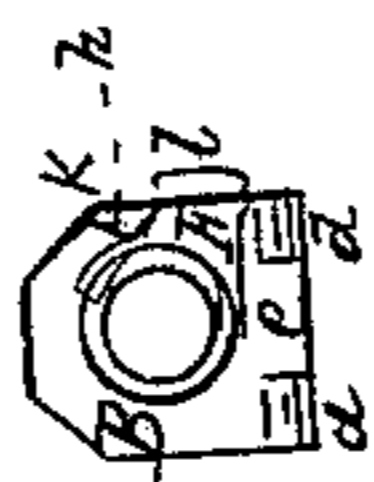


Fig. 2.

Witnesses.

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JAMES LEE, OF STEVENS POINT, WISCONSIN.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 35,941, dated July 22, 1862.

To all whom it may concern:

Be it known that I, JAMES LEE, of Stevens Point, in the county of Portage and State of Wisconsin, 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 accompanying drawings, forming part of this specification, in which—

Figure 1 is a central longitudinal vertical section of a pistol with my improvements. Fig. 2 is a top view of the same partly in section. Fig. 3 is a rear end view of the barrel.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to the attachment of the barrel of a breech-loading fire-arm to its stock-frame by means of a vertical pivot, upon which it is capable of turning horizontally to expose the open rear end of the barrel on one side of the fixed breech for the reception of the cartridges; and it consists in so constructing the rear end of the barrel and the hammer, and so applying the hammer in combination with the barrel, that the barrel may be locked to the breech in a closed condition in all positions of the hammer but that of half-cock, and is unlocked in that position of the hammer.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the frame of the arm, by which the barrel B is connected with the stock C, extending forward some distance under the barrel. In rear of the barrel this frame extends upward to form the fixed breech, which is faced with a steel plate, *a*, in which there is an opening, *b*, just large enough for the point of the hammer to work through and strike the cartridges, which are to be of the kind which have the gun-powder in a metallic case and the percussion priming in a hollow flange formed round the rear end of such case. D is the vertical pivot which attaches the barrel to the front part of the frame A, said pivot having a taper head fitted to turn in a suitable hole provided for it in the said frame, and which enters a hole in the bottom of the barrel, to which it is firmly secured by a transverse pin, *e*, inserted through it and the barrel. The rear end of the barrel and the face of the breech-plate *a* are beveled to fit closely when the barrel is opposite to the said plate,

but to separate as the barrel commences to turn aside on the pivot D, to expose its rear end on one side of the breech, in the manner shown in Fig. 3. On the bottom part of the rear end of the barrel there is formed a horizontal tongue, *d*, which is fitted to slide into and out from a groove provided for it in the frame A below the breech, and this flange has cut across it vertically a notch, *e*, for the front part of the hammer-butt E' to work in. This part of the hammer-butt is made on a true circular form concentric with the axis of the transverse pin *f*, on which the hammer E works; but it has provided in it a transverse notch, *g*, just wide enough for the tongue *d* of the barrel to pass through, such notch being so arranged that it will range with the said tongue *d* when the hammer is at half-cock, as shown in Fig. 1, and the hammer being so arranged that while the barrel is opposite or in line with the breech the butt E' enters the notch *e* of the said tongue in all other positions of the hammer, except that of half-cock, and so locks the barrel opposite to the breech and in condition for firing. In the bottom part of the barrel, behind the pivot D, there is a transverse mortise, *h*, for the reception of a fixed pin, *i*, which stands up from the frame A, the length and position of the said slot being such as only to permit the movement of the barrel to and from the position directly in front of the breech for firing, and the position represented in Fig. 2 for loading. To load the arm, the hammer is brought to the position of half-cock, and the barrel taken hold of by the hand and moved to the position shown in Fig. 2; or, in the case of a rifle or piece with a long barrel, the latter will assume the aforesaid position in consequence of the greater weight of its muzzle or front part, if the piece is turned over on one side. When the cartridge has been inserted in the rear end of the barrel, the latter is moved back opposite to the breech, and on the hammer being either cocked or let gently down, the barrel will be locked, in which condition it will remain during the acts of cocking and firing, the notch *g* passing the tongue so quickly in both those acts as not to cause any danger of the barrel getting out of line with the breech. If the barrel is not in line with the breech, unless it is wide open, the hammer can neither fall or be cocked.

F is a slide fitted to a dovetail groove in

one side of the barrel, and having at its rear end a fork, *k*, to fit a recess in the rear of the barrel, in which, when the piece is loaded, the said fork remains in front of the flange of the cartridge. On the outer side of the said slide there is a knob or projection, *l*, to which one of the fingers is applied to draw back the said slide for the purpose of making the fork *k* draw out the empty cartridge-case when the breech has been opened for reloading after firing. The projection *l* also serves as a stop to prevent the slide being drawn out from the barrel farther than is necessary by its coming in contact with one edge of the breech-plate *a*, as shown in red outline in Fig. 2, the mortise

b in the barrel and the stop-pin *i* in the frame permitting the barrel to move only just far enough to permit the said projection to act in this way.

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

The hammer *E*, provided with a notch, *g*, and applied in combination with the notched tongue *d e* on the rear of the barrel, substantially as and for the purpose herein described.

JAMES LEE.

Witnesses:

JOHN B. FARRINGTON,
JOHN A. WALKER.