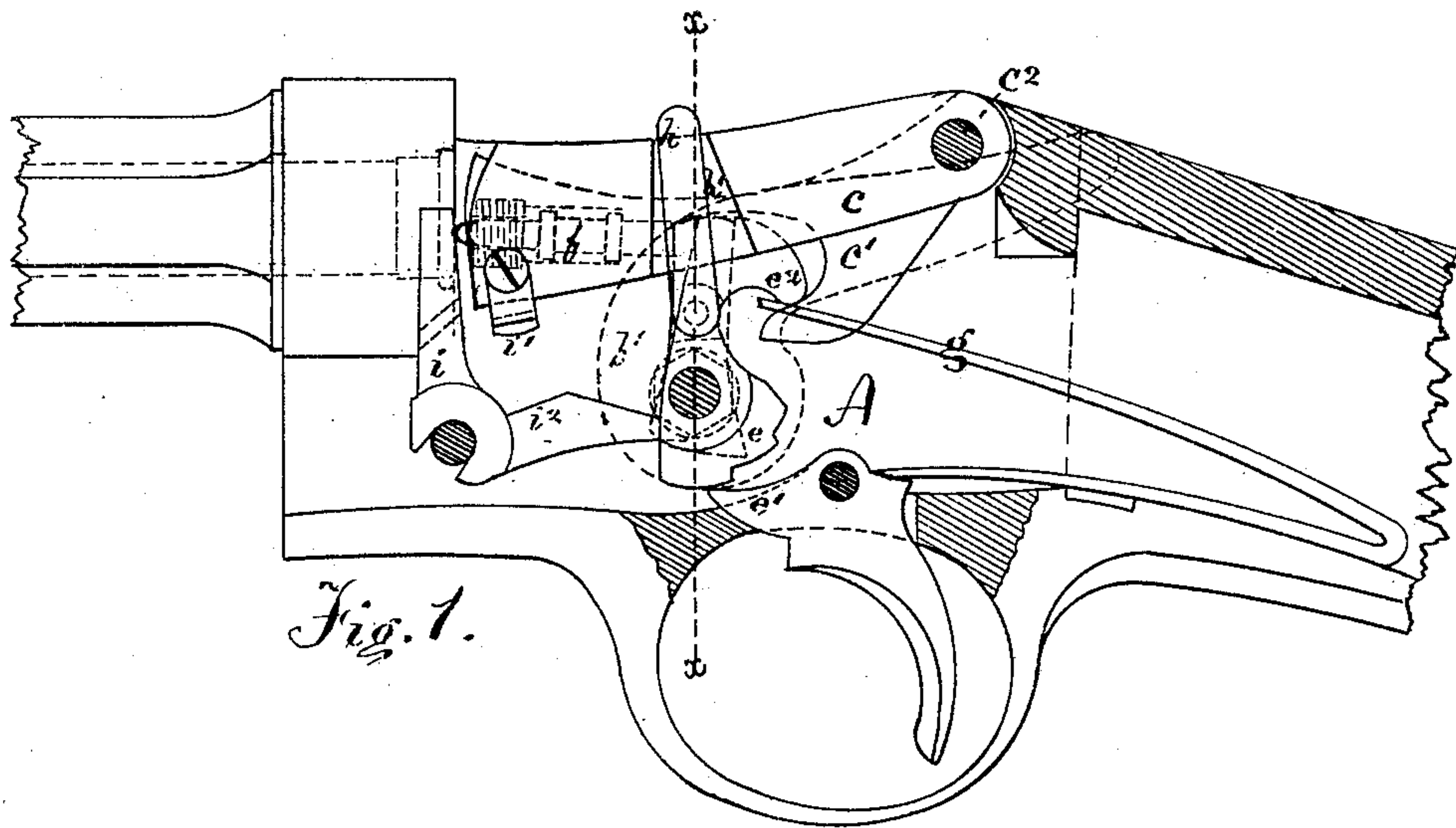
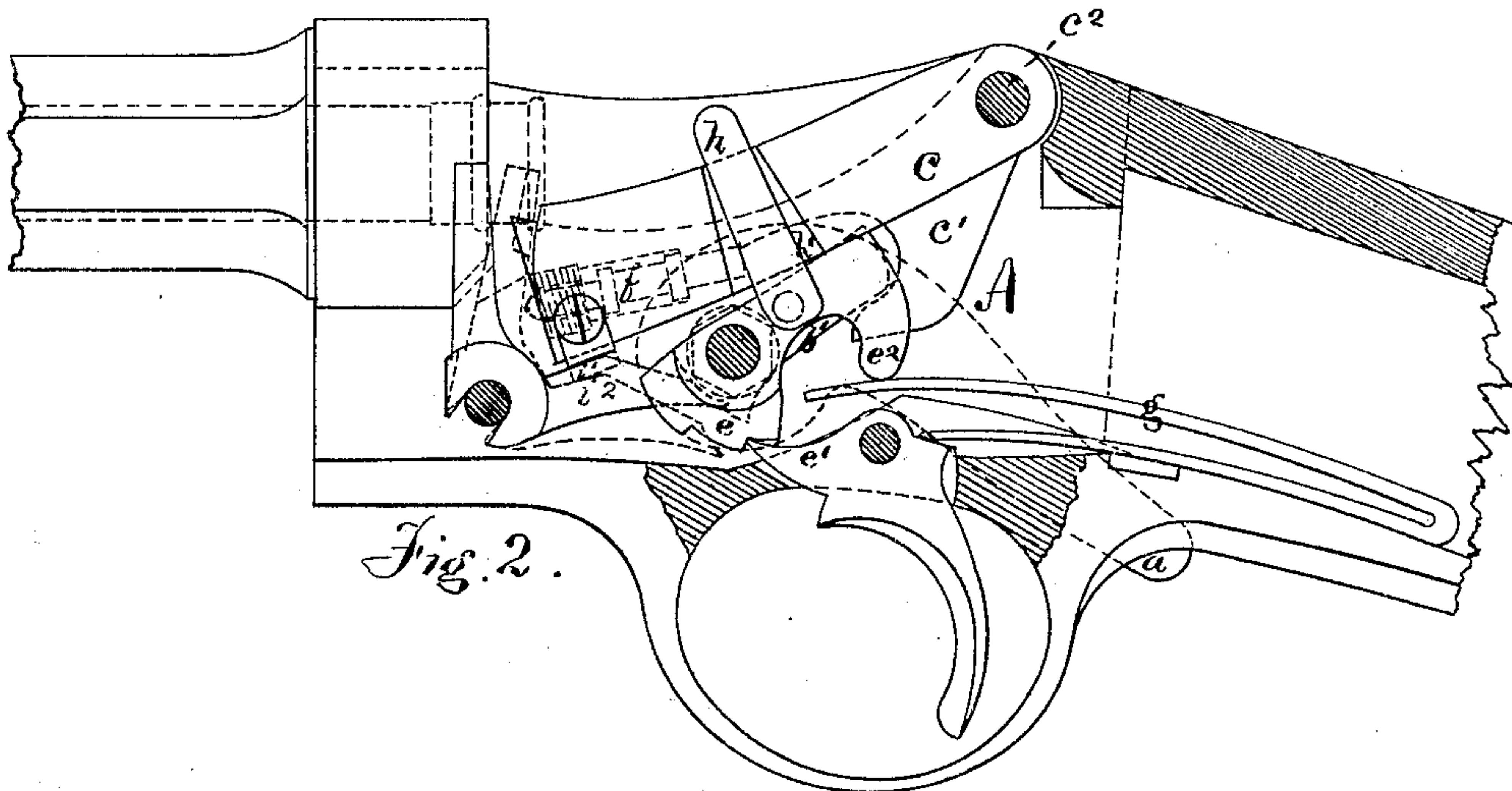


2 Sheets—Sheet 1.

H. EGENER.
BREECH-LOADING FIRE-ARM.

No. 178,749.

Patented June 13, 1876.



WITNESSES:

S. P. Hollingsworth,
Attorney

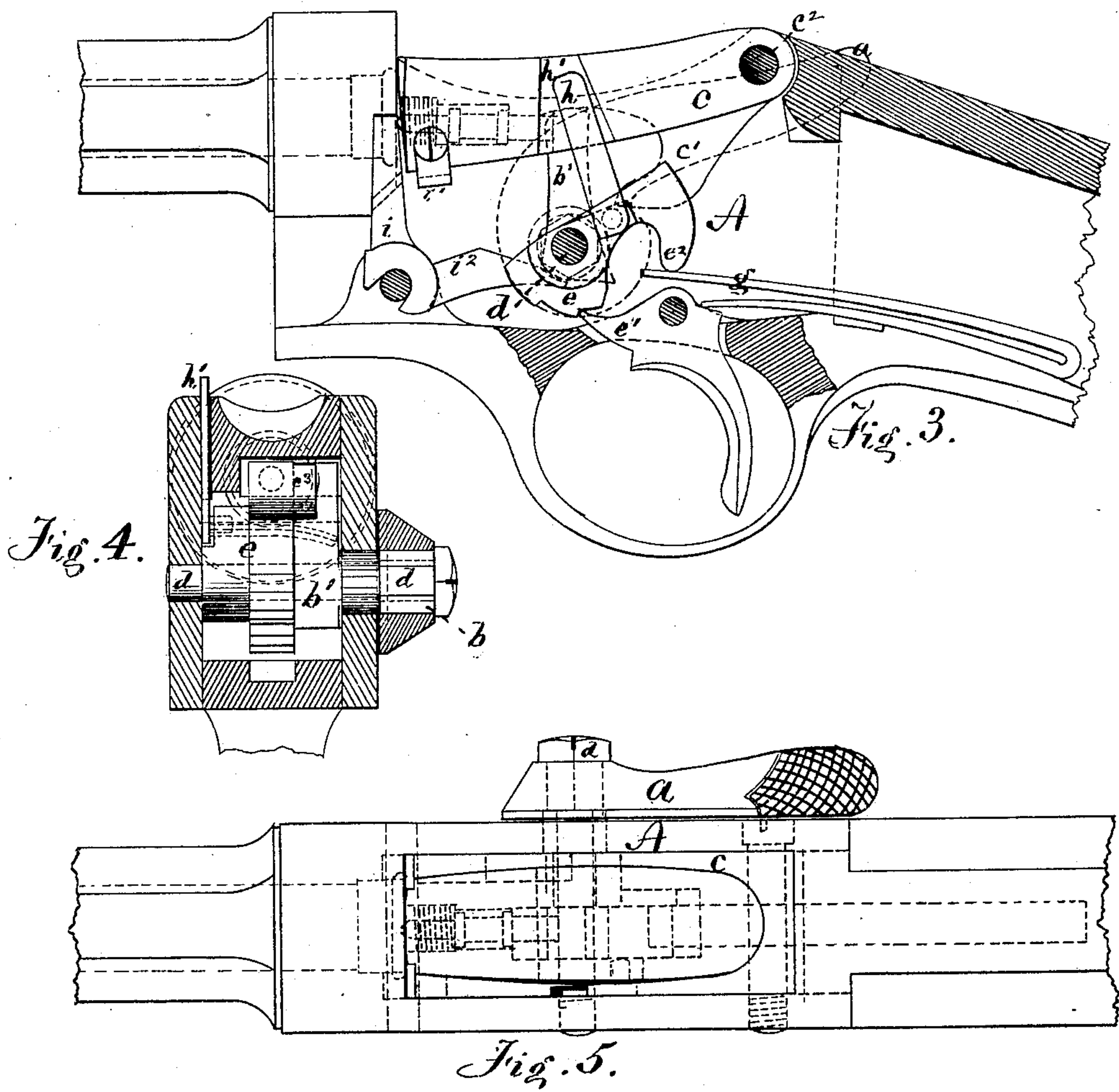
INVENTOR.

Henry Egner
Per Edw. C. Quimby,
Atty.

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WITNESSES
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UNITED STATES PATENT OFFICE.

HENRY EGNER, OF NEW YORK, N. Y.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **178,749**, dated June 13, 1876; application filed March 17, 1875.

To all whom it may concern:

Be it known that I, HENRY EGNER, of the city and State of New York, have invented certain Improvements in Breech-Loading Fire-Arms, of which the following is a specification:

My improvements relate to that class of breech-loaders in which the breech-block is hinged at the rear and swings downward, and in which the hammer is concealed in the receiving-chamber, and in which the breech-block and hammer are operated by a lever arranged on the side of the receiving-chamber, the arrangement of the parts being such that if it be desired to fire the gun without raising the breech-block, and the trigger is pulled while the breech-block is down, the mainspring first raises the breech-block, and then drives the hammer against the firing-pin; and my invention consists in pivoting the side lever so far forward of the trigger that the lever can be arranged to project backward in suitable position to be moved downward, so as to depress the breech-block, throw out the empty shell, and cock the hammer by the downward pressure of the thumb of the right hand, while that hand is clasping the stock in the position which it occupies when it is desired to pull the trigger. Another feature of my invention consists in the arrangement on the side of the hammer of an indicating-tongue, which projects through a groove in the side of the breech-block, above the upper edge of the receiving-chamber when the breech-block is elevated and the gun is not cocked, but which is depressed below the top of the receiving-chamber when the gun is cocked.

The accompanying drawings are as follows: Figure 1 represents the internal mechanism of the receiving-chamber in the position it assumes after the gun has been fired. Fig. 2 is a similar view, representing the breech-block swung downward and acting upon a cartridge-retractor, and the hammer at full cock. Fig. 3 is a similar view, showing the breech-block elevated, the hammer remaining at full cock. Figs. 1, 2, and 3, are alike in representing the interior of the receiving-chamber as it would appear with its side wall removed. Fig. 4 is a transverse section of the receiving-cham-

ber through the line *x x*, on Fig. 1; and Fig. 5 is a top view of the breech of the gun.

Referring to the drawings, the thumb-lever *a* appears in full on Fig. 5, and in dotted lines on Figs. 1, 2, and 3. This lever is affixed to the outer end of the hollow boss *b*, which projects through the side wall *A* of the receiving-chamber. The boss *b* is forged on the side of the arm *b'*, which in its sweep back and forth controls the position of the breech-block *c*. In Figs. 1, 3, and 4, this arm is represented as thrown upward, and bearing against the curved under surface of the breech-block. In Fig. 2 the arm is thrown downward, and has pulled the breech-block down by reason of engaging the crooked arm *c'*, which projects downward from the under surface of the breech-block *c*. By means of the thumb-lever *a* the arm *b'* may be swung freely, and the breech-block be elevated or depressed accordingly, irrespective of whether the gun is cocked or not. The hole in the boss *b* coincides with a similar hole through the arm *b'*, and admits the pin *d*, which reaches across and screws into the opposite wall of the chamber, as shown in Figs. 4 and 5. This pin furnishes the bearing for the hammer and tumbler *e*, which has the usual half and full cock notches to engage the trigger-pawl *e'*. The periphery of the hammer is curved, and closely engages the under surface of the breech-block at the instant when the hammer strikes the firing-pin *f*, as shown in Fig. 1. The hammer has a curved backward projection, *e''*, rounded on the end, for engaging the mainspring *g*, by which the hammer is thrown upward, as shown in Fig. 1, when the trigger is pulled. The hammer has a lateral projection, *e'''*, Fig. 4, which engages the arm *b'* when the latter is thrown backward, and thus the backward sweep of the arm *b'* sets the hammer at full cock, as shown in Fig. 2, and leaves it in that position, as shown in Fig. 3, when the arm *b'* is thrown upward, and the breech-block consequently elevated. If, however, the trigger is pulled, while the breech-block is down and the hammer set at full cock, the action of the mainspring *g* throws up the hammer and the arm *b'*, and thus elevates the breech-block into its proper position to sup-

port the base of the cartridge before the hammer strikes the firing-pin. The position of the hammer as to whether it is up or down—or, in other words, whether it is cocked or uncocked—is indicated by means of the tongue *h*, which is loosely pivoted to the side of the hammer, and plays freely between the wall of the receiver and the bottom of a groove, *h'*, in the side of the breech-block. When the gun is fired and the hammer is standing upright, as shown in Figs. 1 and 4, the end of the tongue projects above the upper edge of the wall of the chamber. When the hammer is cocked, and the breech-block is elevated, the tongue *h* is withdrawn below the top of the chamber and the top of the breech-block, as shown in Fig. 3.

I claim as my invention—

1. In combination with the pivoted breech-

block *c*, the thumb-lever *A*, pivoted upon the side of the receiving-chamber forward of the trigger, and projecting backward in such position that the breech-block may be swung downward and backward, the empty shell extracted, and the hammer set at full cock by a single downward movement of the thumb of the right hand, while that hand is clasp ing the stock in suitable position for the operation of pulling the trigger, substantially as described.

2. The hammer *e*, in combination with the tongue *h*, arranged and operating in the manner shown and described.

HENRY EGNER.

Witnesses:

WILLIAM WITTE,
C. B. FEDDER.