(No Model.)

J. W. COFFIN & J. MALONEY.

LOCK FOR FIRE ARMS.

No. 302,893. Patented Aug. 5, 1884.

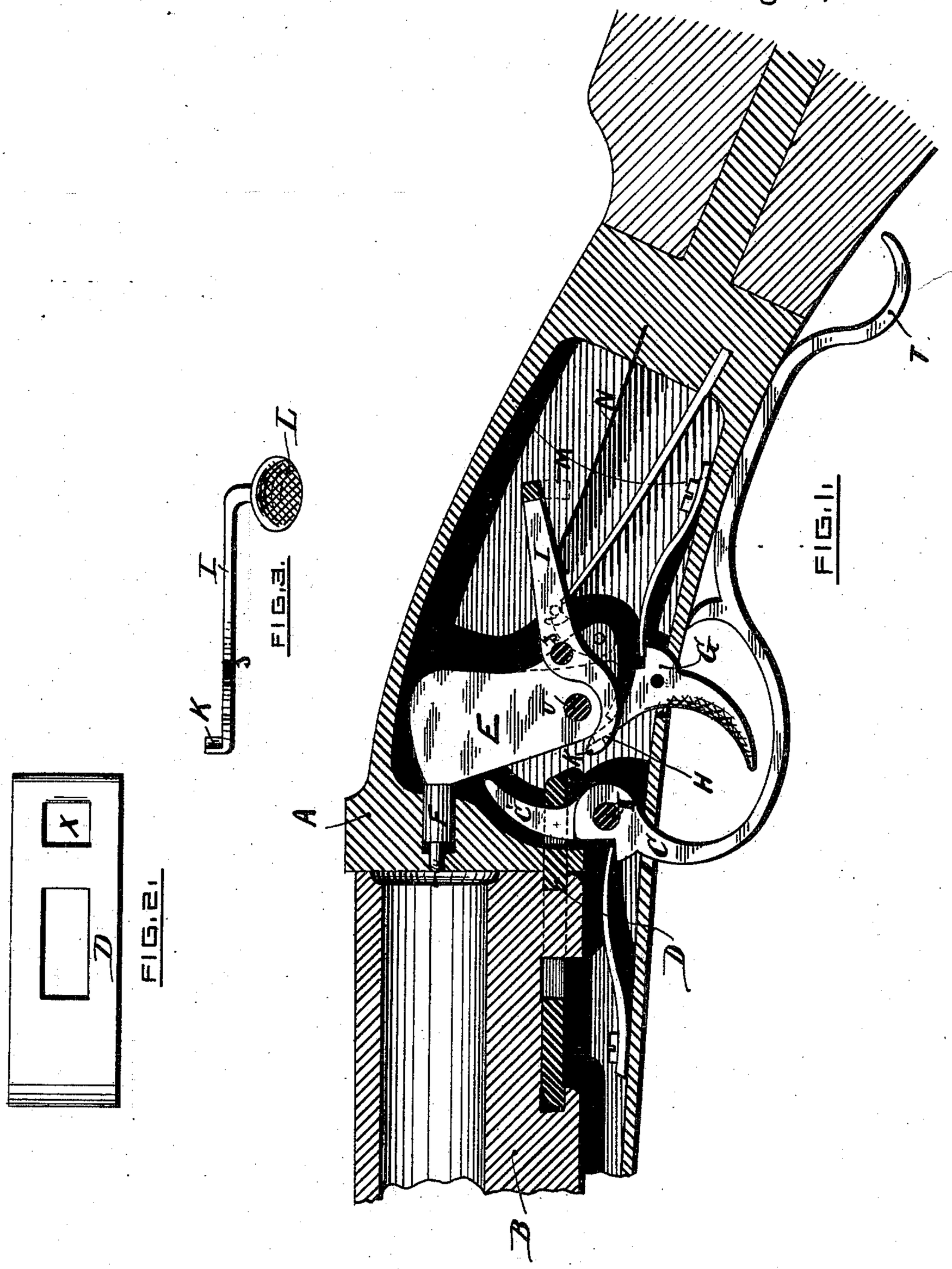

FIG. 1.

FIG. 3.

FIG. 2.

WITNESSES.

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JOSEPH W. COFFIN AND JAMES MALONEY, OF PROVIDENCE, R. I.

LOCK FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 302,893, dated August 5, 1884.

Application filed January 3, 1884. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH W. COFFIN and JAMES MALONEY, citizens of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Breech-Loading Fire-Arms, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a vertical longitudinal section showing the position of the parts at the instant of explosion. Fig. 2 shows the locking-bolt. Fig. 3 shows the safety-catch.

Our invention is in the nature of an improvement upon what is known as a "hammerless" breech-loading gun; and it consists in the devices hereinafter described for locking the firing mechanism, and thereby securing the piece against accidental discharge.

In the drawings, A is the frame or receiver; B, the barrel; C, the guard-lever, having an extended arm, *c'*, which passes through the slot *x* in the locking-bolt D. E is the hammer, F the firing-pin, and G the trigger. I is a locking-lever, which swings upon a pin, J, and is held in position by a spring, N. L is a thumb-piece on head of the lever I, and projects through a slot, M, in the frame.

Commencing with the parts in the position shown in Fig. 1 and ready for the discharge of the piece, and subsequently releasing the hammer E, and permitting it through the action of the spring to strike and drive forward the firing-pin F and explode the cartridge, thus bringing the hammer E and locking-lever I into the position indicated by the dotted lines, the operation of our invention is as follows:

In order to tip the barrel up for the introduction of a new cartridge, it is necessary to draw back the locking-bolt D. For this purpose we depress the long arm of the lever C, which, working upon its pin Y, causes the short or interior arm thereof to move backward, carrying with it the locking-bolt D. At the same time that the short arm of the lever C is operating upon the locking-bolt D, the extending arm C, is operating on the hammer to carry it back to a full-cock and prepare it for the next discharge. When the hammer E reaches its full-cock, so as to be engaged and held in that position by the trigger G, an arm, K, upon the lever I, which is actuated by a spring, N, comes into position in front of the nose of the trigger G, and secures its positive engagement with the hammer and prevents the release of the latter, except as hereinafter described. To again discharge the gun it is necessary to accomplish the successive release of the trigger G and hammer E. To do this we exert with the thumb and forefinger of the hand which surrounds the small part of the stock a pressure upon the thumb-piece L and trigger G successively, the effect of which is first to free the trigger, which in turn frees the hammer, and a discharge follows. It will now be readily seen that the required simultaneous action upon the trigger and locking-lever I will furnish ample security against the accidental discharge of the piece. If after freeing the trigger by the pressure upon the thumb-piece L the trigger is not pulled to discharge the gun, the removal of such pressure will allow the locking-lever to assume its former position and prevent an accidental discharge.

The locking-lever I might be arranged to engage a pin upon the side of the hammer with the same result described; but we consider preferable the device shown.

We are aware that fire-arms have been provided with means whereby the firing mechanism is locked against accidental discharge, and do not claim such as our invention, broadly considered; but

What we claim as new in the above-described invention is—

1. The combination, with the hammer E, having the notch in the lower side thereof, and the trigger G for engaging therewith, of a locking device consisting of the single pivoted lever I, engaging at its inner end with one of the moving parts of the lock, and provided with a head for the manipulation on the outside of the lock-case, and the spring N, for forcing it automatically into engagement, as explained.

2. The combination, with the hammer E, having the notch in the lower side thereof,

and the trigger G for engaging therewith, of a locking device consisting of the single pivoted lever I, having the arm K at the inner end thereof, for engaging over the upper extremity of said trigger, and the head L at the other end, located on the outside of the lock-case, and the spring N, all constructed and arranged to operate substantially in the manner and for the purpose explained.

In testimony whereof we affix our signatures in presence of two witnesses.

JOSEPH W. COFFIN.
JAMES MALONEY.

Witnesses:
GEO. LEWIS GOWER,
STEPHEN W. NICKERSON.