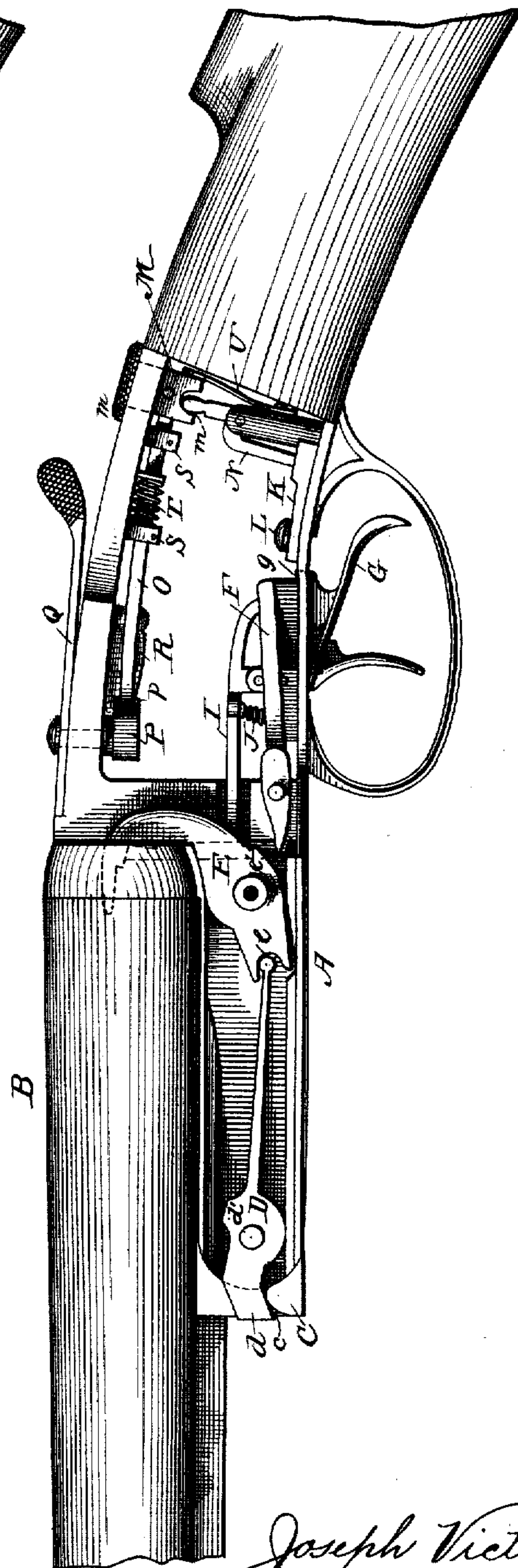


2 Sheets—Sheet 1.

LOCK FOR FIRE ARMS.

Patented June 17, 1884.



F. L. Curran
J. B. Hayes.

by

J. R. Little
Attorney.

(No Model.)

2 Sheets—Sheet 2.

J. VICTOR.

LOCK FOR FIRE ARMS.

No. 300,743.

Patented June 17, 1884.

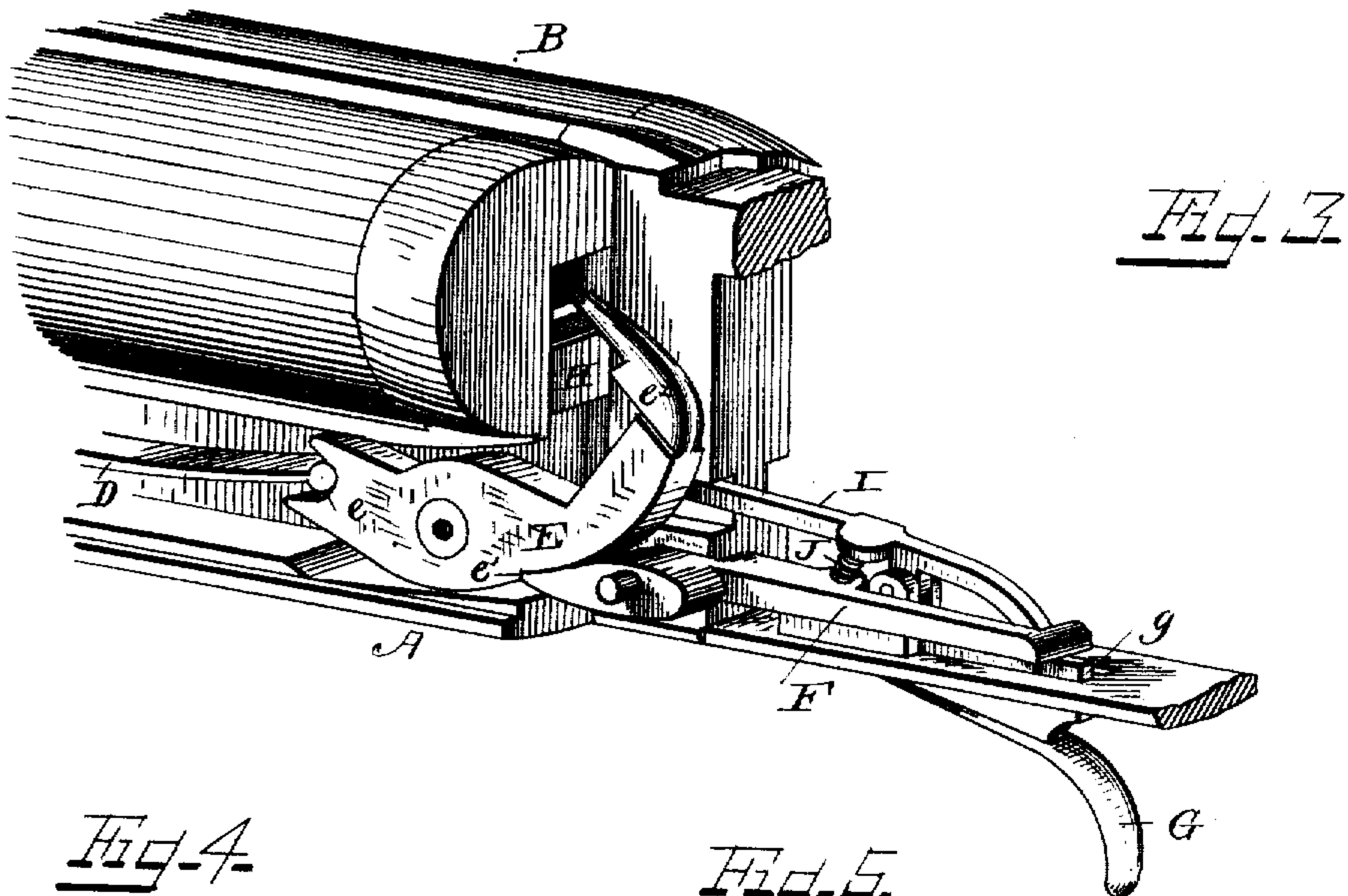


Fig. 4.

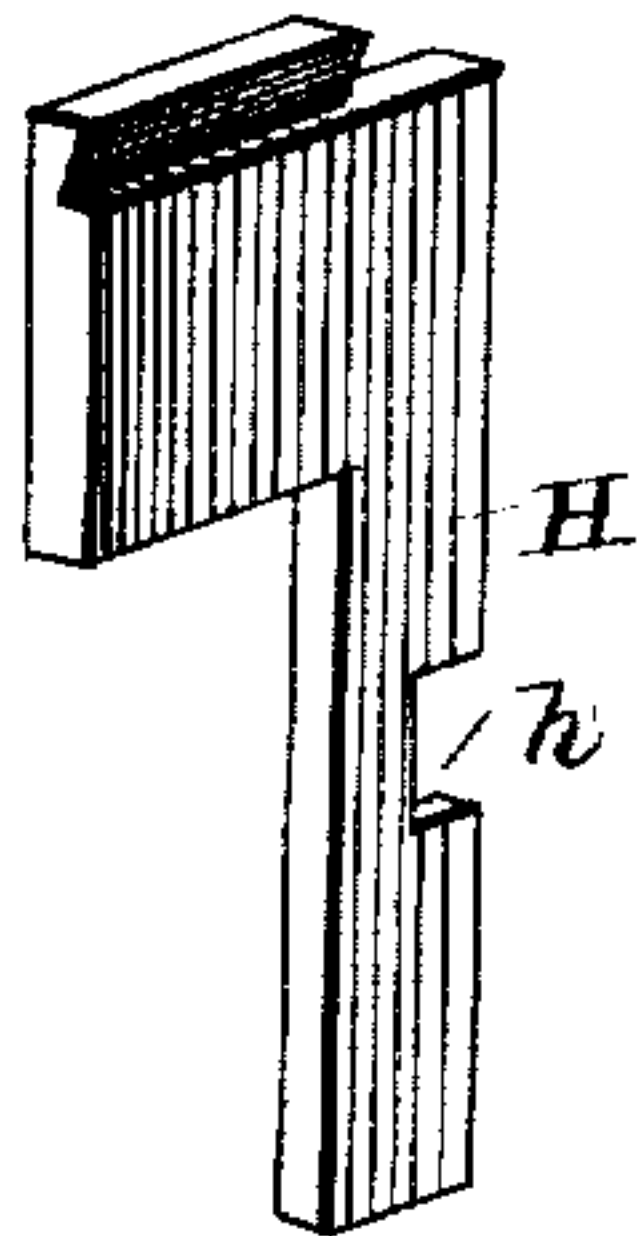


Fig. 5.



Fig. 6.

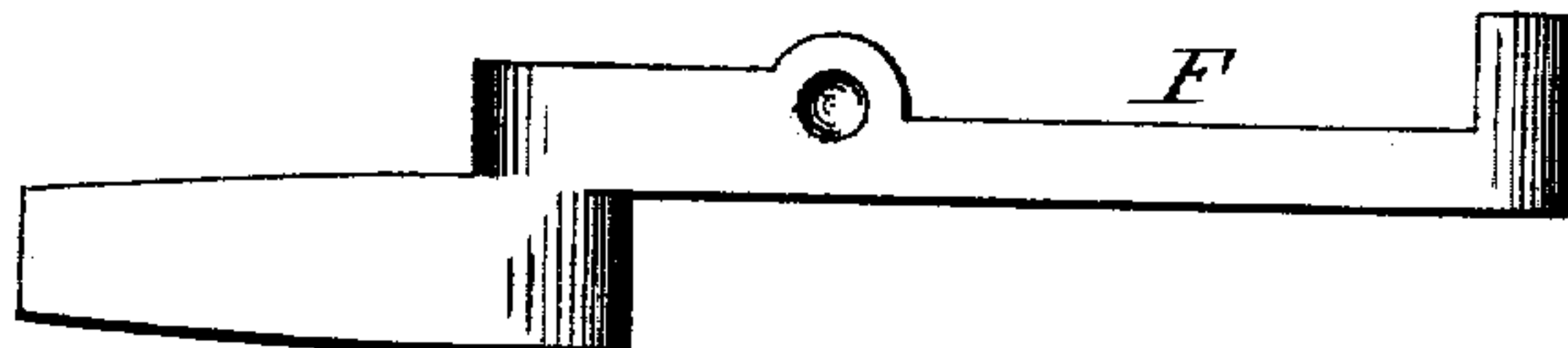


Fig. 7.

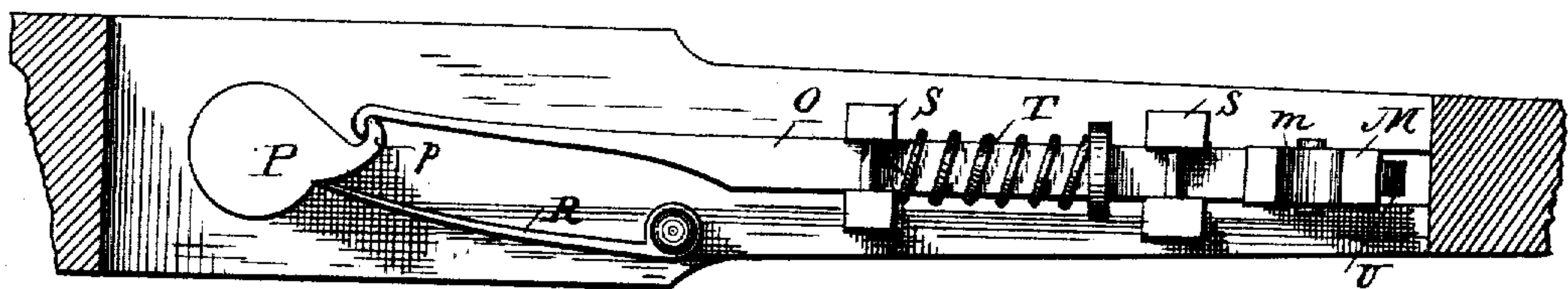


Fig. 7.

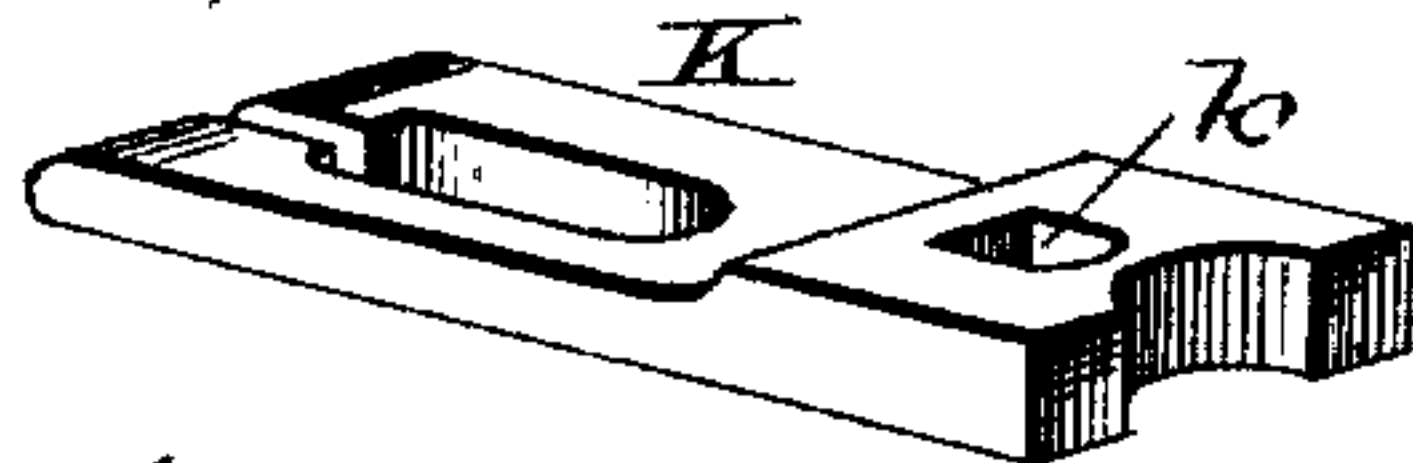
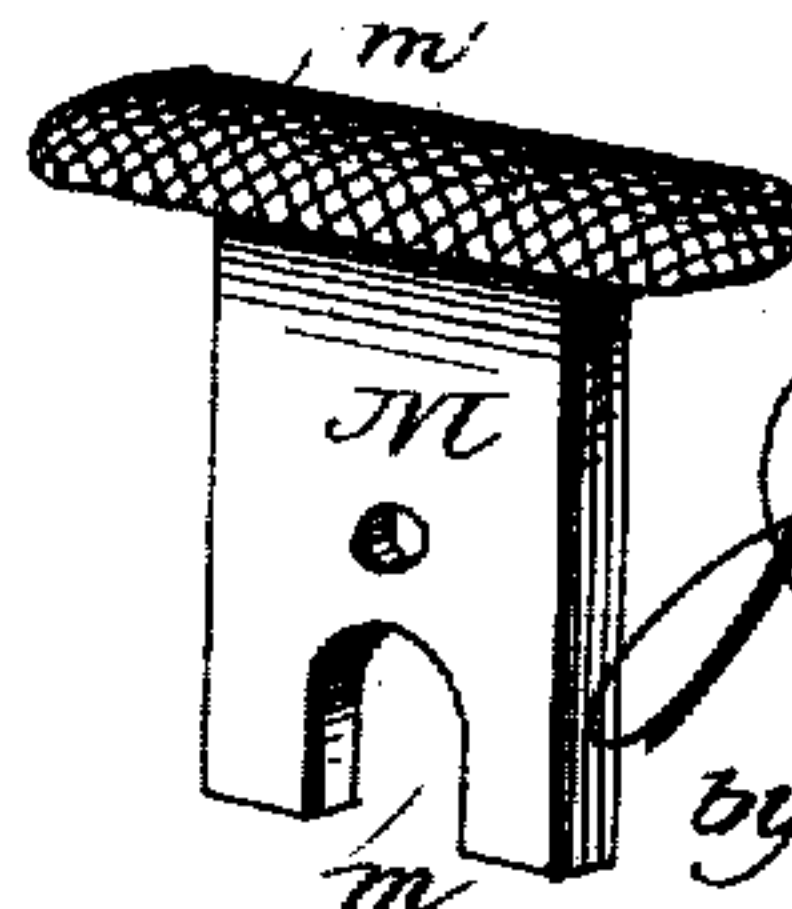


Fig. 8.



WITNESSES
F. L. Curand
J. B. Noyes.

Joseph Victor,
INVENTOR

by
J. R. Little,
Attorney.

UNITED STATES PATENT OFFICE.

JOSEPH VICTOR, OF DUQUOIN, ILLINOIS.

LOCK FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 300,743, dated June 17, 1884.

Application filed March 24, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH VICTOR, a citizen of the United States, residing at Duquoin, in the county of Perry and State of Illinois, have invented certain new and useful Improvements in Locks for Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to locks for fire-arms; and its object is to provide an improved lock possessing advantages in point of simplicity, strength, durability, and general efficiency, and which may be operated or manipulated with facility and convenience and with perfect safety.

To this end my invention consists, substantially, in arranging the mainspring and connecting it with the hammer so that it effects the cocking of the same when the rear ends of the barrels are elevated, and also serves as the barrel-check in the arrangement of a safety-block for the hammer, the block being connected with and operated by the trigger, and in an automatic trigger-lock connected with and operated by the lever which locks the barrels in their normal position, so that when this lever is operated to admit of the dropping of the barrels the trigger-lock is released and automatically engages the triggers, substantially as will be hereinafter more fully set forth, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation illustrating my improved locking mechanism in cocked position and with the rear end of the barrels elevated. Fig. 2 is a corresponding view showing the barrels and locking mechanism in their normal position. Fig. 3 is a detail perspective view showing the hammer, trigger, and safety-block mechanism. Fig. 4 is a detail perspective view of the safety-block. Fig. 5 is a detail top view of the lever for operating the safety-block. Fig. 6 is a detail top view of the sear of the lock. Fig. 7 is a detail perspective view of the trigger-lock plate. Fig. 8 is a detail perspective view of the head of the automatic trigger-lock. Fig. 9 is an inverted-plan view in detail, illustrating the relation of the spring-catch bolt of the

automatic trigger-locking mechanism with the tumbler of its operating-lever.

Corresponding parts in all the figures are denoted by the same letters of reference.

Referring to the drawings, A designates the working body, B the barrels, and C the pivoted fore part of the working body, to which the barrels are secured, these parts being in the main of any suitable construction.

D is the mainspring, which is pivoted in a suitable recess in the side of the body A, and has its front end, *d*, projecting into a recess, *e*, provided in the fore part, C. The rear end of this spring-lever engages with a suitable notch, *e*, in the hammer E, so that when the barrels are dropped to elevate their rear ends the fore part, C, carries the front end of the said spring-lever in its downward movement, thus causing an upward movement of the rear end of the spring-lever, and thereby effecting the cocking of the hammer by causing it to engage with its sear. The barrels may then be closed down to their normal position against the tension of this lever-spring D. The front end, *d*, of the mainspring D is preferably turned downwardly, as shown, so that it approximates a hook shape which is best adapted to the movement of the said end, as it is carried by the fore part, C, and the bottom of the recess *e*, which receives the end *d*, is preferably curved or rounded. The mainspring is pivoted or fulcrumed just in rear of its end *d*, to effect a greater leverage upon the hammer, and it is provided with a projecting portion, *d'*, above its fulcrum, which is adapted to engage with the top of the recesses in which the lever is fulcrumed, and thereby serves as a check to limit the dropping of the barrels. From this arrangement it will be seen that the spring-lever D performs the functions of a mainspring, a barrel-check, and automatically effects the cocking of the hammer.

The sear F of the lock is pivoted upon the body A, and its front end is adapted to engage the notch *e'* of the hammer, to retain the same in locked position. Thus, when the rear end of the sear is elevated by the trigger G, its front end releases the hammer and the discharge is effected by the tension of the lever-spring D.

To guard against discharge by the acci-

dental release of the hammer, either before or after the barrels are completely returned to their normal position, a safety-block, H, is arranged to slide vertically in front of the hammer and in a suitable guide-groove formed in the body A. This safety-block is normally under the nose e' of the hammer, as illustrated in dotted lines, Fig. 2 of the drawings, and when the hammer is cocked to the position shown in Fig. 1 the block automatically moves up in front of the nose, so that if premature release of the hammer occurs from any cause its nose will engage the safety-block and there will be no discharge of the load. The safety-block is operated by a lever, I, having its front end engaging a notch, h , in the block, and adapted to have its rear end elevated by the trigger. Thus when the trigger is operated, the lever I will force the safety-block downward simultaneously with the disengagement of the sear from the hammer, and the gun will be discharged. A coiled spring, J, is interposed between the sear and this lever I, to return the parts to their normal position, the said spring being arranged in front of the fulcrum of the lever I in rear of the fulcrum of the sear.

K designates the trigger-locking plate, which is adapted to slide longitudinally upon a guide-pin, L, and engage shoulders g in the rear edge of the triggers. This plate is connected with a sliding head-piece, M, by means of a lever, N, having its ends engaging suitable notches, k m , provided, respectively, in the locking-plate and head-piece. The head-piece works through the top of body A, and is provided with a milled head, m' , by which it may be operated to force a longitudinally-sliding spring-bolt, O, forward, so that the end of the same will engage a shoulder, p , formed upon a tumbler, P, secured to the pivot of the locking-lever Q. A spring, R, is arranged to act upon this tumbler to retain the lever in its normal position for locking the barrels in position. The bolt O slides in suitable brackets, S S, upon the body A, and a coiled spring, T, is arranged to force the bolt rearwardly. A spring, U, may also be arranged in rear of the head M, to prevent the same from accidentally slipping rearwardly and locking the triggers. By this arrangement, when the bolt O is engaged with the tumbler P, the locking-plate K will be out of engagement with the triggers. Then when the lever Q is turned to permit the barrels to drop and the hammers are cocked by this movement, the bolt will be released from the tumbler and the trigger-locking mechanism will automatically move into engagement with the triggers and lock the same. When it is desired to discharge the gun, the head-piece M is moved forward with the thumb to force the bolt into engagement with the tumbler P, and to thereby draw the locking-plate from its engagement with the trigger.

It will be understood that in the case of double-barreled fire-arms, as herein shown, each hammer is provided with a spring-cock-

ing lever and sear, and with an independent safety-block mechanism operated by independent triggers; but both hammers are cocked by the one movement of dropping the barrels, and the single trigger-locking mechanism effects the locking of both triggers.

The operation and advantages of my invention will be readily understood from the foregoing description and annexed drawings. By pressing the locking-lever to the right the barrels may be dropped to elevate their rear ends, which movement automatically effects the cocking of the hammers, by the action of the mainsprings. Simultaneously with the cocking of the hammers the safety-blocks slide up in front of the nose of the hammers, and the trigger-locking mechanism engages the triggers. After the shells are placed in the gun, the barrels are closed down to their normal position, and the head of the trigger-locking mechanism is moved forward to draw the locking-plate from its engagement with the triggers, when the gun may be discharged.

I am aware that a mainspring has been heretofore pivoted on the frame between the hammer and the pivoted fore end, with its rear end engaging the hammer, and its front end received by the pivoted fore end, whereby the spring is operated to cock the hammer by the dropping of the barrels. I therefore do not broadly claim such invention.

I claim as my invention—

1. The combination of the working body, the mainspring pivoted therein and provided with a projecting front end, said spring being pivoted in rear of this front end, and provided with a projection extending above the pivot and adapted to engage the body to limit the dropping of the barrels, and the pivoted fore part engaging the front end of the spring, substantially as set forth.

2. The combination of the working body, the hammer having the recess and notch, the mainspring engaging said recess and having the projecting front end, the spring being pivoted in rear of this end, and provided with the projection extending from its top, and serving as a barrel-check, the fore part engaging the said front end, the sear engaging said notch, and the trigger adapted to elevate the rear end of the sear, substantially as set forth.

3. As an improvement in safety-locks for fire-arms, the combination, with the hammer, of the vertically-sliding safety-block disposed at the side of the same and normally retained down by the nose of the hammer and under the said nose, and means for operating the block simultaneously with the movement of the hammer, substantially as set forth.

4. The combination, as an improvement in safety-locks for fire-arms, of the hammer, the sear, the vertically-sliding safety-block disposed at the side of the hammer and in rear of the fulcrum of the same, the block being normally under the nose of the hammer and retained down thereby, the lever engaging the safety-block and extending parallel with the

sear, and the trigger for simultaneously elevating the rear ends of the lever and the sear, substantially as set forth.

5 5. The combination of the hammer, the vertically-sliding safety-block projecting normally up against the nose of the hammer and retained down thereby, the sear, the lever engaging said block and extending parallel with the sear and above the same, the trigger adapted to elevate the rear ends of the sear and lever, and a coiled spring interposed between the sear and the lever in front of the fulcrum of the latter and in rear of the fulcrum of the former, substantially as and for the purpose
15 set forth.

6. The combination, with the sliding head for operating the trigger-locking mechanism, of the barrel-locking lever having the tumbler, the sliding bolt having its rear end acting
20 against said head, and provided with a spring front end adapted to engage the tumbler, and an actuating-spring upon said bolt, substantially as set forth.

7. The combination of the triggers, the sliding locking-plate, the sliding operating-head, the lever connecting the head and plate, the barrel-locking lever having its rear end acting against the head and provided with a front

spring end adapted to engage the tumbler, and the actuating-spring upon the bolt, substantially as set forth. 30

8. The combination of the triggers, the guide-pin in rear of the same, the sliding locking-plate moving upon said guide-pin, the sliding operating-head, the lever connecting the head
35 and plate, the barrel-locking lever having the tumbler, the sliding spring-bolt acting against the operating-head and adapted to engage the tumbler, the spring upon said bolt, and the spring in rear of the head, substantially as set
40 forth.

9. The combination of the lever for locking the barrels, the hammers, mechanism for cocking the hammers by the dropping of the barrels, an automatic safety-block sliding in front
45 of the hammers, the sear, the triggers for simultaneously operating the sear and safety-block, and automatic trigger-locking mechanism operated by the barrel-locking lever, substantially as and for the purpose set forth. 50

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH VICTOR.

Witnesses:

CHAS. P. RICHARDS,
J. R. LITTELL.