

(No Model.)

J. CONNER.
GUN LOCK.

No. 464,215.

Patented Dec. 1, 1891.

FIG. 1

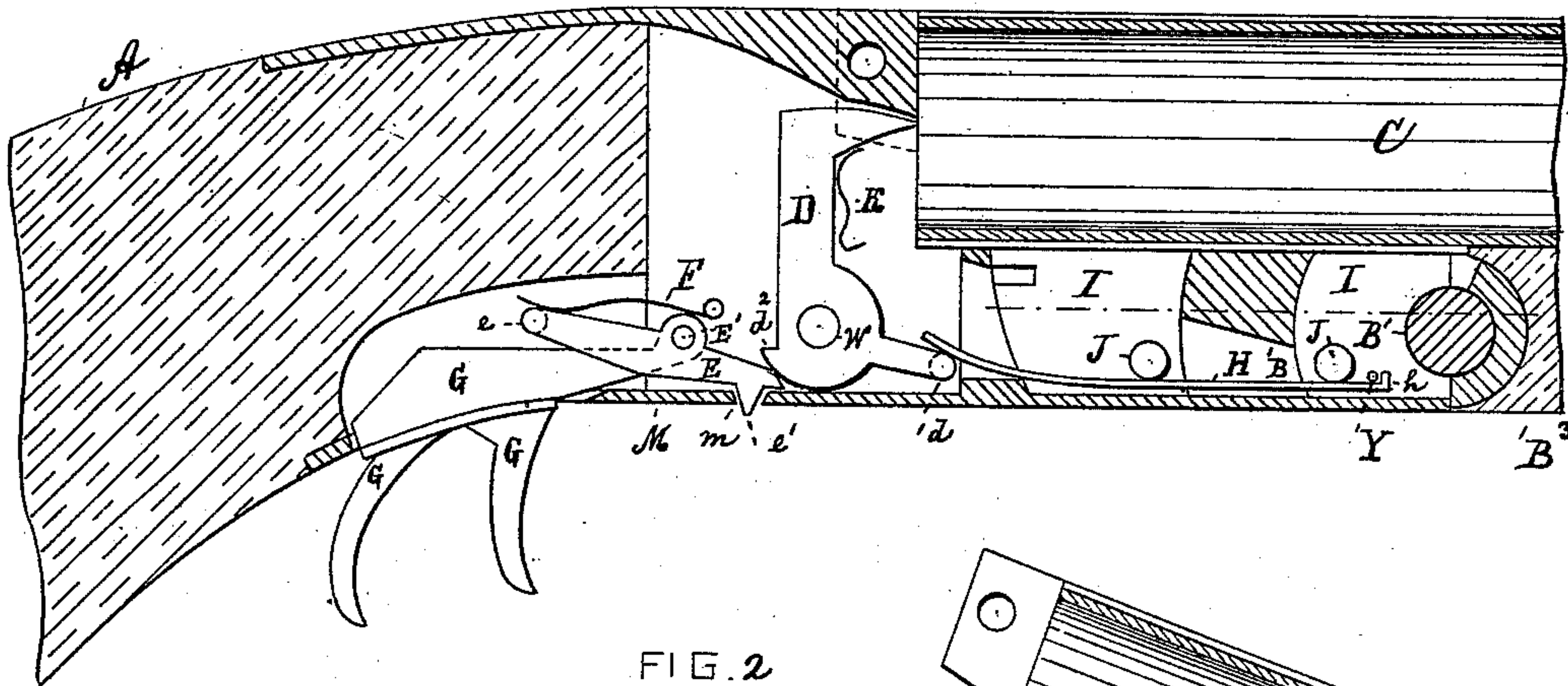


FIG. 2

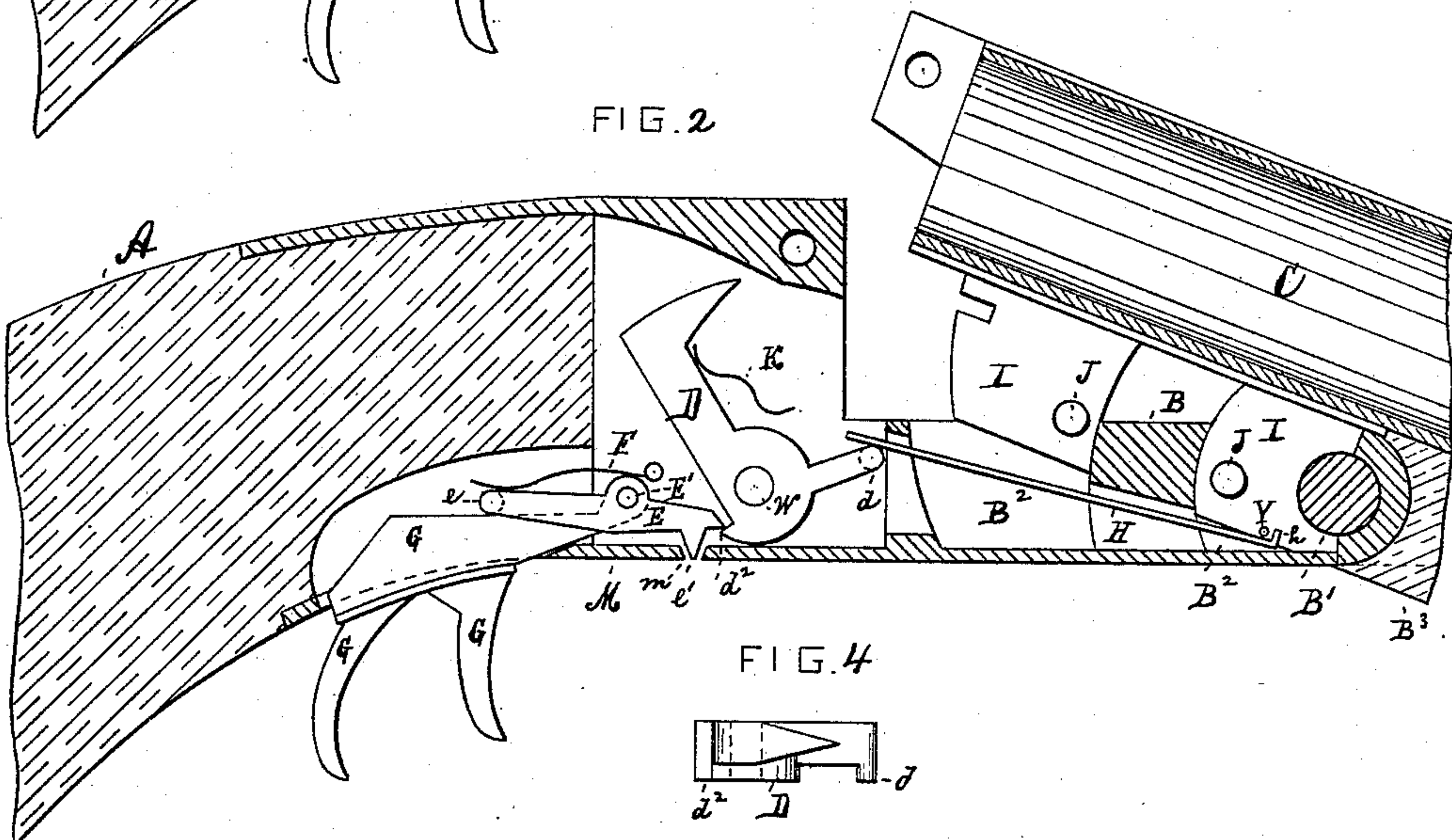


FIG. 4

FIG. 3

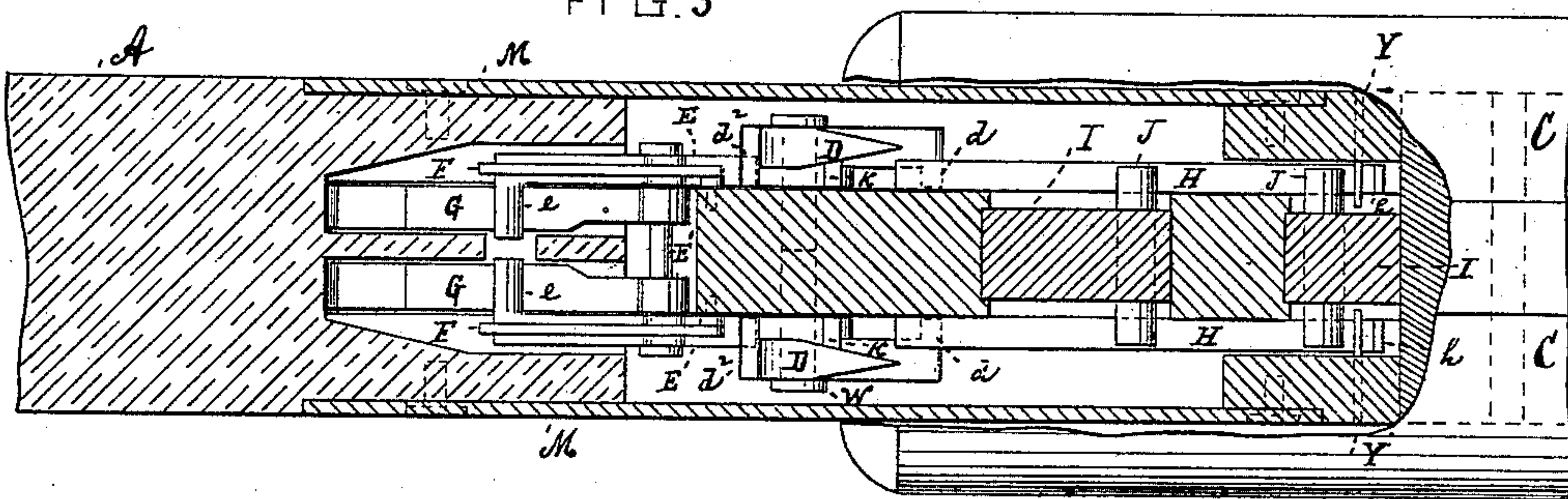


FIG. 5

WITNESSES
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JOSEPH CONNER, OF NEW YORK, N. Y.

GUN-LOCK.

SPECIFICATION forming part of Letters Patent No. 464,215, dated December 1, 1891.

Application filed January 16, 1891. Serial No. 377,951. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CONNER, of New York city, New York, have invented an Improved Gun-Lock, of which the following is a specification.

This invention relates to a gun-lock for breech-loading fire-arms, and more particularly to that class of fire-arms known as "hammerless" breech-loading guns, commonly made with two barrels united.

The object of my invention is to improve upon certain objectionable mechanical features in guns and to overcome much of the danger attending the handling of the same and the danger and inconvenience in taking them apart and putting them together when to be cleaned and repaired. To this effect I so construct the lock that the mainspring does not exert any pressure upon the striker, excepting when the gun is closed, and thus the charge will not be improperly exploded.

The invention also relates to an improved indicator, and to several other features of construction more fully pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of my improved gun-lock with the gun in section and showing the same closed. Fig. 2 is a similar view with the gun open. Fig. 3 is a top view, partly in section, of the gun-lock; Fig. 4, a top view of the striker, and Fig. 5 a top view of the sear.

The letter A represents the stock of a gun, and B³ is the fore-arm, having bolt B', around which the barrels C revolve, as usual.

D is the striker that explodes the charge and that turns on bolt W. This striker is provided with the offset *d*², engaged by the sear E, that turns on pivot E', around which the triggers G also turn. The rear end of the sear has the arm or lever *e*, that is engaged by the trigger.

K is the striker-spring that has a tendency to throw the striker D backward, and F is the sear-spring that has a tendency to hold the arm *e* of the sear against the upper edge of the trigger.

The barrels C are provided with two downwardly-depending lugs I, adapted to be received by two corresponding central mortises B² of the breech-forging B when the gun is closed. To this forging there is secured a pair of flat mainsprings H, one for each bar-

rel, all the parts of the lock being, of course, double—i. e., there being two locks. The springs H are secured to the forging B by a pair of pins Y passing through the forging and engaging the bent-forward ends *h* of the mainsprings. By pushing the pins Y out the mainsprings may be readily removed. From the pin Y each mainspring H passes backward past the mortises B², and its free or near end rests and acts upon a forwardly-projecting arm *d* of the striker D. This free end of the mainspring rests upon the arm *d*, but is not engaged thereby, so that the arm will not hold the spring down when the gun is opened, but will permit it to straighten out or expand. Each of the lugs I is provided with a pin or shoulder J, projecting laterally to both sides of the lug, Fig. 3, and bearing upon the mainsprings when the gun is closed.

The operation of the lock as thus far described will be readily be understood. When the gun is opened, Fig. 2, the pins J are raised off the mainspring and the latter straightens out, being under no tension and exerting no pressure upon the striker. The spring K now holds the striker D in its cocked position, while the sear-spring properly holds the sear in engagement with the trigger. When the gun is closed, Fig. 1, the pins J bend the spring H, and thus the latter exerts a strong pressure upon the striker. The mainspring is of course stronger than the striker-spring, and would throw the striker forward were the latter not retained in its cocked position by the sear. When the trigger is pulled, the forward end of the sear is lowered to become disengaged from the offset *d*² of the striker, and the latter is thrown forward by the mainspring H to explode the charge, Fig. 1. By now opening the gun, as in Fig. 2, to reload the barrel the tension is taken from the mainspring, and the latter thus permits the striker-spring K to throw the striker D backward and the sear-spring to revolve the sear, thus bringing the striker into re-engagement with the sear. In this way the gun is again cocked.

I provide the sear E (or the trigger G in guns that have no sear) with a downwardly-extending lug *e'*, adapted to project outward through a slot *m* of the breech-frame or lock-case M. This lug permits the huntsman to ascertain at once which of his two barrels has

been shot off, thus being a means to prevent frequently-occurring accidents—that is to say, when the gun is closed and one only of the barrels has been shot off the sear pertaining to that barrel will be lowered at its forward end and its lug *e'* will protrude out of the breech-frame and may be easily felt and seen. The sear of the other barrel, however, will still be raised at its forward end, and its lug will not be accessible to touch or sight. In this way the lugs *e'* constitute positive indicators to ascertain whether both barrels or which one barrel has been discharged.

What I claim is—

1. The combination, in a gun-lock, of a

striker with a cocking-spring K, a flat main-spring adapted to bear upon the striker when the gun is closed and with the lugs I on the gun-barrel, and pins J on such lugs adapted to engage the mainspring, substantially as specified.

2. A gun-lock having a sear that is provided with an indicating-lug projecting downwardly through the gun-frame, except when the lock is in cocked position, substantially as described.

JOSEPH CONNER.

Witnesses:

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T. COAN.