

(No Model.)

D. L. TOWER.

SAFETY LOCK FOR FIRE ARMS.

No. 305,866.

Patented Sept. 30, 1884.

Fig. 1.

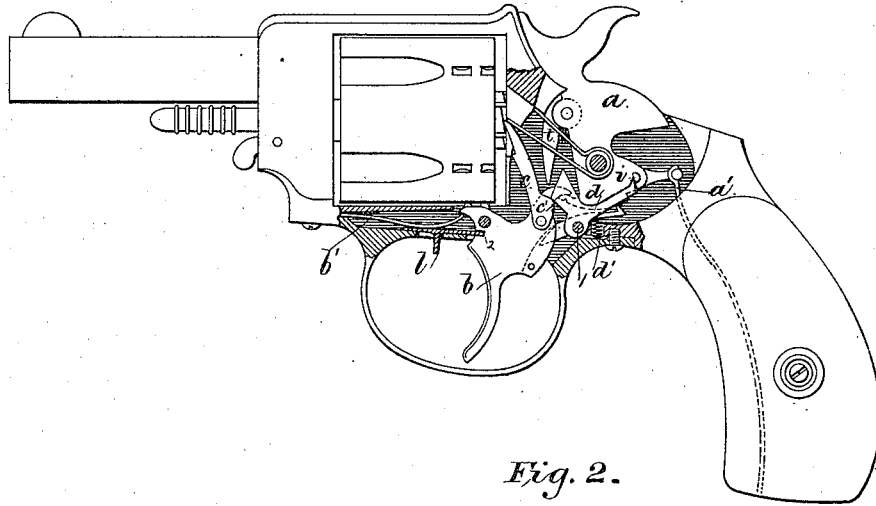


Fig. 2.

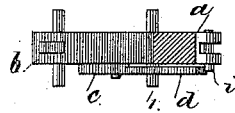


Fig. 3.

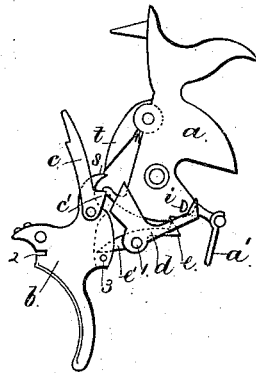
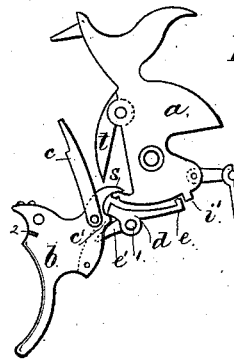


Fig. 4.



WITNESSES

*Chas. Smith*  
*J. Strick*

INVENTOR

*Daniel L. Tower,*  
By his Attorney *Lemuel W. Serrell*

# UNITED STATES PATENT OFFICE.

DANIEL L. TOWER, OF BROOKLYN, NEW YORK.

## SAFETY-LOCK FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 305,866, dated September 30, 1884.

Application filed January 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, DANIEL L. TOWER, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Safety-Locks for Fire-Arms; and the following is declared to be a description of the same.

The object of this invention is to combine with the hammer and trigger a safety-catch that acts to prevent the hammer being raised until the trigger is moved and prevents the hammer descending, except after the trigger has been pulled and the safety-catch moved away from the stop or notch. I accomplish these by the mechanism hereinafter described.

My improved fire-arm is constructed with a safety-catch pivoted upon a pin in the stock of the arm. One portion of the safety-catch engages a pin upon the hammer, when the said hammer is down "home" in the position immediately after firing a cartridge, and prevents the hammer being pulled back either accidentally or from other cause. Another portion of the safety-catch is so constructed that the operation of the trigger in cocking the arm first moves the safety-catch, disengaging that portion of it that is in contact with the pin upon the hammer. The further movement of the trigger cocks the hammer preparatory to firing. The safety-catch is also constructed with a sear that will engage a notch in the hammer, and retain said hammer in the position of "half-cock," when desired.

My invention further relates to a safety-slide under the trigger-spring that can be operated by hand to engage a notch in the trigger and lock the same, preventing it being accidentally moved. This safety-slide is used to lock the trigger when in its normal condition.

In the drawings, Figure 1 is an elevation of the arm and operating parts, a portion of the metal shell being removed. Fig. 2 is a plan of the hammer tumbler-trigger and safety-catch. Fig. 3 is an elevation of the operating parts in the position of half-cock. Fig. 4 illustrates a modification.

The hammer *a*, its operating-spring *a'*, the trigger *b*, its spring *b'*, and the dog *c*, for revolving the cylinder of cartridge-chambers, together with the stock and barrel of the fire-

arm, are of the usual construction employed in self-cocking revolvers.

The safety-catch *d* is of the shape shown in Figs. 1 and 3, and it is made as one piece, with the sear *e* and tail-piece *e'*, and is pivoted upon a screw or a stud, 1, in the housing of the lock.

In the position shown in Fig. 1 the safety-catch *d* at one end engages the pin *i* upon the tumbler portion of the hammer *a*, and any attempt to move the hammer back by grasping the top of said hammer is prevented by the pin *i*. The other end of the safety-catch *d* in this position rests upon the inclined projection *c'* upon the dog *c*.

The trigger *b* can be locked by the safety-slide *l*, being pushed by hand into the notch into the trigger at 2. The trigger-spring *b'* applies a friction or pressure to hold the slide *l* in any position to which it may be moved. The trigger must be liberated by pushing back the slide *l* before the arm can be fired. When the trigger *b* is moved, its dog *c* trips the safety-catch *d*, removing its end from contact with the pin *i* upon the hammer, and thus liberating the hammer. The further movement of the trigger causes the finger *S* to act upon the hammer-tail *t* and move it to the position of half-cock, (shown in Fig. 3,) where, if desired, the sear *e* will engage a notch upon the hammer-tumbler and hold it. The further movement of the trigger to fire the arm throws the hammer back still farther, and at the same time a pin, 3, in the trigger *b* tilts the tail-piece *e'* and sear *e* and the safety-catch *d* and holds them away from the hammer while said hammer is descending to fire the arm. When the hammer reaches its normal position and the trigger is released, the spring *d'* returns the safety-catch *d* to the position shown in Fig. 1, locking the hammer as before.

In the modification shown in Fig. 4 a projection, *i'*, on the hammer-tumbler takes the place of the pin *i* the sear *e* is made of a modified shape, and the safety-catch *d* is formed of one even piece of metal composed of the sear *e*, tail-piece *e'*, and end acted upon by the inclined portion *c'*. In this case the inclined portion *c'* is upon the trigger *b* instead of upon the dog *c*. The sear *e* in this case is tilted

when the trigger is pulled and frees the projection *v'*; and at half-cock, the sear catching behind it, the operations of the parts are the same as heretofore described.

5 I do not wish to be understood as limiting my invention to revolving fire-arms or self-cocking revolvers, as the devices heretofore described might be applied to any character of pistol or gun.

10 I claim as my invention—

The combination, with the hammer and trigger, of a safety-catch intervening between the hammer and the trigger, and being moved

by said trigger, and stops upon the hammer, against which the safety-catch operates, substantially as specified, whereby the hammer cannot be cocked until the trigger has been moved, and the safety-catch also prevents the hammer descending until the trigger is moved, as set forth. 15 20

Signed by me this 31st day of December, A. D. 1884.

DANL. L. TOWER.

Witnesses:

WILLIAM G. MOTT,  
HAROLD SERRELL.