

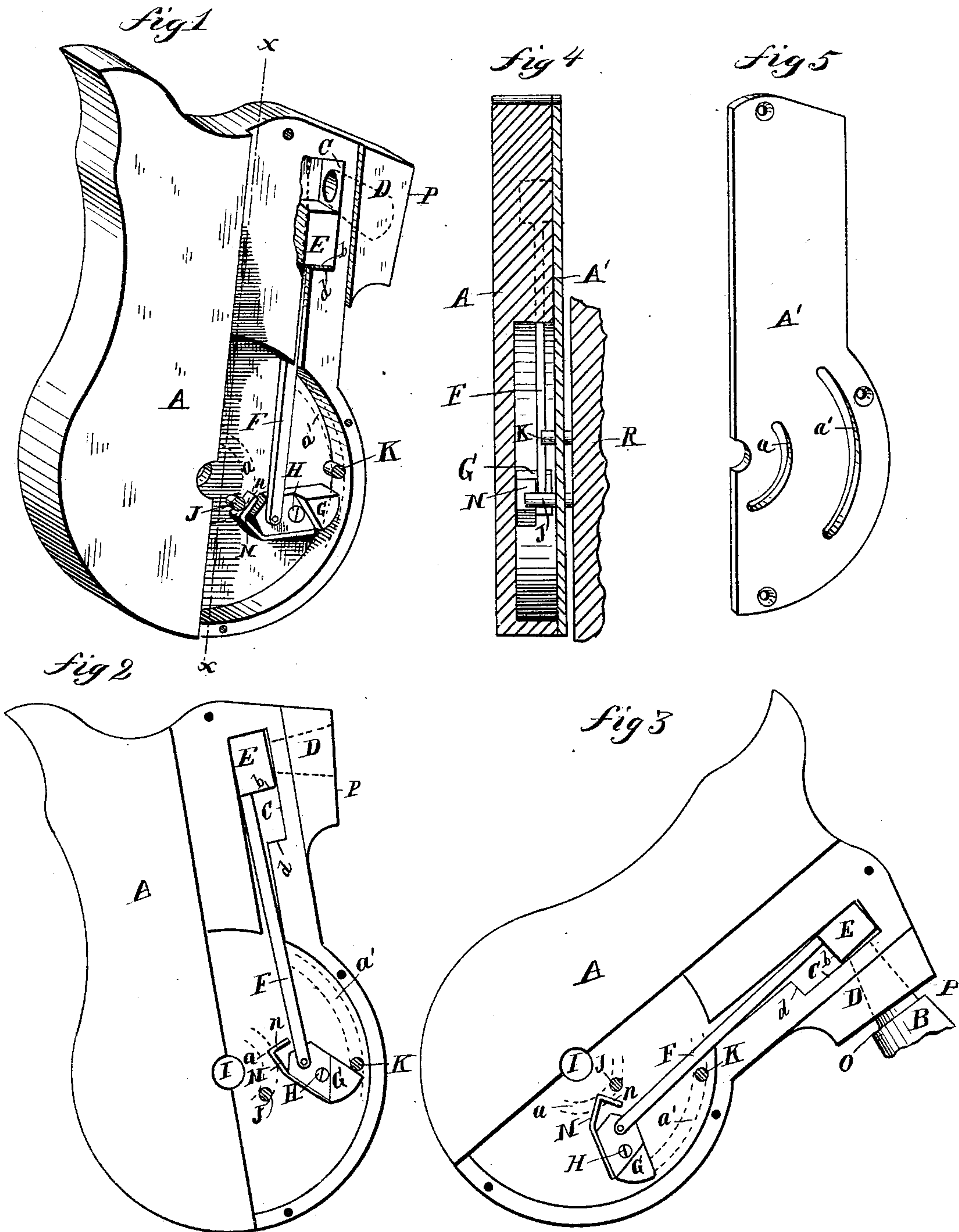
(No Model.)

A. D. HART.

SAFETY HAMMER FOR FIRE ARMS.

No. 273,070.

Patented Feb. 27, 1883.



WITNESSES:

*J. D. Garfield*  
*C. Sedgwick*

INVENTOR:

*A. D. Hart*

BY

*Mum. & Co.*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

ANDREW D. HART, OF NORTH GARDEN, VIRGINIA.

## SAFETY-HAMMER FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 273,070, dated February 27, 1883.

Application filed April 19, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW D. HART, of North Garden, in the county of Albemarle and State of Virginia, have invented a new and Improved Safety Gun-Lock Hammer, of which the following is a full, clear, and exact description.

This invention consists of a shifting bottom to the cavity in the hammer for the cap-tube, and contrivances for automatically shifting it during the first part of the rise of the hammer off from the cap-tube, so that in case the hammer accidentally falls from any position short of full-cock the lower surface of the hammer will fall on a shoulder of the cap-tube without exploding the cap, the arrangement being such that at full-cock the said bottom is shifted back into the position for firing the cap when it falls from that position, thus avoiding accidental discharge in all cases when the hammer falls from less than full-cock, and at the same time requiring no care or adjustment by the operator, all as hereinafter described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the hammer as partly raised, the safety device being shifted so as to prevent the exploding of the cap should the hammer fall. Fig. 2 is a side elevation of the hammer on full-cock. Fig. 3 is a side elevation of the hammer down on the cap-tube. Fig. 4 is a sectional elevation of the hammer on line *x x*, Fig. 1, with cover applied; and Fig. 5 is a perspective view of the slotted cover as removed from the hammer in Fig. 1.

A represents the hammer of a gun; and B, Fig. 3, the cap-tube.

C is a slot cut into or through the hammer in a line at about right angles to the cap-socket D, (dotted,) the lower side of said slot C being the bottom of the cap-socket D, which opens into said slot. E is a block fitted in slot C to slide to and fro therein to cover and uncover the cap-socket. This block is connected by rod F with the shifting block G, which is pivoted at H to the side of the hub of the hammer in a position ranging from the bottom of said hub, when the hammer is down,

toward the pivot I of the hammer, or thereabout, the rod F being pivoted to the said block G.

As shown in the drawings, the hammer A is suitably recessed from the inner face to receive the rod F and block G, and also the cover A', (shown detached in Fig. 5,) the applied cover serving to exclude dust and dirt and to protect the working parts, and when secured to the hammer the cover lies in a rabbet or groove of the hammer, and is flush with the face thereof. The cover is grooved circularly, as at *a a'*, to work over pins fixed in the lock-plate, as next described.

J and K represent two stud-pins projecting from the lock-plate R of the fire-arm, (partly shown in Fig. 4,) behind the hammer, through slots *a* and *a'*, respectively cut through the cover A' to allow the hammer to swing without obstruction by the pins. The said pins J K project beyond the inner face of the hammer sufficiently to shift the block G, and thereby shift the tube-socket cover E. The lower end of block G extends across slot *a'* enough to have contact with pin K, just before the hammer arrives at full-cock, to shift block E forward into the position for firing the cap, as shown in Fig. 2. The upper end of the block G terminates short of slot *a*, and has a spring-extension, N, of A shape, to be acted on by the pin J to shift block E back, as shown in Fig. 1, when the hammer rises, and to allow the pin to pass it in both directions. O represents a shoulder of the cap-tube on which the face of the hammer is to strike when it falls from any position less than full-cock—that is to say, when the block E is drawn back from the socket D, as in Fig. 1.

The operation is as follows: The parts being in the position represented in Fig. 3, with the hammer down, on raising the hammer the side *n* of the spring N will be swung by the hub of the hammer against the pin J and arrested, thereby pulling block E back until the shoulder *b* of it strikes the end *d* of slot C, as shown in Fig. 1, the part *n* of spring N then being about tangential with the lower edge of slot *a*. The pin J, having thus thrown back block E, as in Fig. 1, may now be passed by spring N to bring the hammer to full-cock; but just before the hammer reaches full-cock the lower



end of block G strikes the pin K of the lock-plate, which quickly returns the block E to forward firing position, directly over cap-socket D of the hammer, the latter action being represented in Fig. 2 of the drawings. It will thus be seen, on partially raising the hammer, after firing, to remove the cap-shell and place a new cap on the tube B, that the block E will be moved back by pin J to uncover socket D, so that upon lowering the hammer, either intentionally or accidentally, the cap will project into slot C, clear of the firing-block E, until the face of the hammer at P rests on the shoulder O, and by reason of the part n of spring N assuming a position tangential with slot a and free from pin J the hammer may be raised farther than need be for adjustment of the cap without causing spring N to act on pin J to throw the block E forward into firing position, thus affording a wide range of movement of the hammer, when adjusting the cap, with safety against the discharge of the gun, the block E remaining in backward position to uncover the cap-socket, except just before the hammer is brought to full-cock, when the block is projected by pin K of the lock-plate into firing position, as before described.

It will be understood that the positions of the slots a a' and pins J K are indicated in Figs. 1, 2, and 3 only to better illustrate the action of the parts, the pins having no connection with the hammer-body A, but being fixed to the lock-plate R to project through slots a a' of cover A', as before set forth.

It will be noticed that in case the hammer A should accidentally fall from any position short of full-cock it would not explode a cap on the tube B, thus affording safety in all

cases of that kind, which is the source of most of the accidental discharges that occur. When the hammer falls the spring N passes pin J, moving back to the original position, ready for again sliding back the block E when the hammer rises. The attachment is very simple and needs no attention from the operator, being entirely automatic in its action.

My improved hammer is adapted for use on breech-loading guns, in which application the hammer will fall on the shouldered head of the sliding firing-pin, as will be readily understood.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a gun-hammer provided with a cap-socket, and a slot or chamber at the bottom of said cap-socket, of a firing-block sliding in the slot or chamber in the hammer, and means for opening the cap-socket by withdrawing the firing block by the rise of the hammer until at full-cock, when the cap-socket is closed by the firing-block, substantially as described, and for the purpose set forth.

2. The combination, with the cap-tube and pins J K, projecting from the lock-plate R, of the hammer A, provided with the cap-socket D, having the slot C at its bottom, shifting block G, pivoted radially to the hub of the hammer and provided with the bent spring N, and firing-block E, substantially as described, and for the purpose set forth.

ANDREW D. HART.

Witnesses:

WM. J. C. WALLER,  
ELIZABETH DE J. HART.