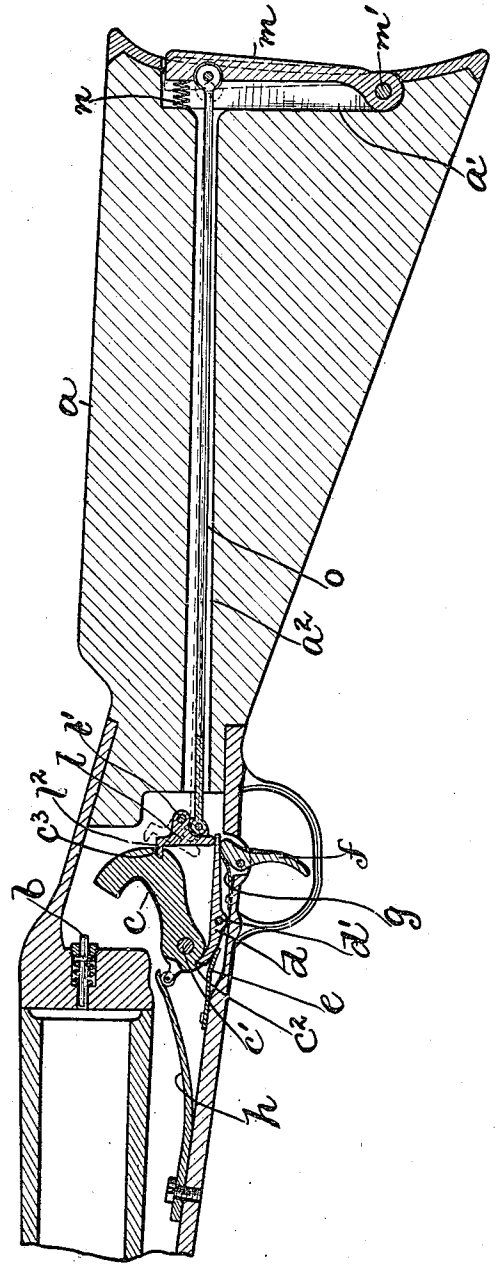
No. 660,378. Patented Oct. 23, 1900.

J. KALINA.

SAFETY DEVICE FOR TRIGGERS AND HAMMERS OF FIREARMS.

(Application filed June 30, 1900.)

(No Model.)



WITNESSES:
Daniel E. Daly.
A. H. Garratt

INVENTOR
Josef Kalina
BY
Lynch & Dorer
his ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEF KALINA, OF CLEVELAND, OHIO.

SAFETY DEVICE FOR TRIGGERS AND HAMMERS OF FIREARMS.

SPECIFICATION forming part of Letters Patent No. 660,378, dated October 23, 1900.

Application filed June 30, 1900. Serial No. 22,216. (No model.)

To all whom it may concern:

Be it known that I, JOSEF KALINA, a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Mechanism for Locking and Releasing the Trigger and Hammer of a Shotgun or Similar Firearm; 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 pertains to make and use the same.

My invention relates to improvements in rifles and shotguns, and more especially to mechanism whereby the trigger is normally locked and whereby the hammer is locked in its cocked position, which mechanism is operated to release the trigger and to free the hammer by pressure of the butt of the stock of the firearm against the body of the person about to fire.

The object of this invention is to provide the firearm with mechanism for locking the trigger in its normal position and for locking the hammer in its cocked position, means acting to retain the said mechanism in its operative position, and means for rendering the said mechanism inoperative and releasing the hammer and the trigger simultaneously.

With this object in view and to the end of realizing other advantages hereinafter appearing the invention consists in certain features of construction and combinations of parts hereinafter described, and pointed out in the claims.

The accompanying drawing is a vertical longitudinal section of a firearm embodying my invention.

Referring to the drawing, *a* designates the stock of a rifle or shotgun; *b*, the firing-pin, that is supported and operated in the usual manner; *c*, the tiltable hammer for operating the firing-pin, which hammer is pivoted at its lower end, as at *c'*, horizontally and transversely of the firearm to any relatively stationary part of the firearm in the usual manner. The hammer is shown in its cocked position, wherein the forward end of a vertically-tiltable sear *d* engages a notch c^2, formed in the lower end of the hammer. The sear is arranged longitudinally of the firearm and pivoted at any suitable point between its ends, as at *d'*, horizontally and transversely of the firearm to any relatively stationary member of the firearm. A suitably-applied spring *e* engages the lower side of the forward end of the sear and acts to retain the sear in engagement with the hammer. The trigger *f* is pivotally supported near its upper end in the usual manner and above its pivotal bearing engages the under side of the rear end of the sear. A suitably-applied spring *g* acts to retain the trigger in its normal position. A suitably-applied spring *h* acts to retain the hammer in its normal position, (not shown,) wherein the hammer engages the firing-pin. The arrangement and operation of the parts thus far described are so well understood by those skilled in the art that a minute description thereof in this application is not considered necessary. Suffice it to state that the arrangement of the parts is such that the pulling of the trigger, if the sear were released or unlocked, would tilt the sear in the direction required to release the hammer, and the hammer would, if it were released, be actuated by the spring *h* from its cocked position, as required to operate the firing-pin.

My improved mechanism for locking the trigger in its normal position and for locking the hammer in its cocked position comprises the following: A swinging latch *l*, arranged to swing in a vertical plane longitudinally of the firearm, is pivoted at its rear side horizontally and transversely of the firearm, as at *l'*, to any relatively stationary member of the firearm at the forward end of the stock *a*. The latch *l* has its lower end normally engaging the upper surface of the rear end of the sear *d* and has its upper end provided with a forwardly-projecting tooth l^2, that in the cocked position of the hammer engages a notch c^3 formed in the hammer, and when the hammer is in its cocked position, as shown, obviously the trigger cannot be pulled, because it is then positively locked by the aforesaid swinging latch, and upon tilting the latch, as shown in dotted lines, the hammer and the sear are released, and consequently the trigger is free to be pulled as required in the operation of the firearm.

Means for tilting the swinging latch, as aforesaid, comprises the following: A laterally-movable and preferably a swinging plate *m* engages a recess *a'*, formed in the butt or

outer end of the stock of the firearm. The plate *m* is pivoted or fulcrumed at its lower end, as at *m'*, horizontally and transversely of the stock, and hence the plate *m* is tiltable longitudinally of the stock in a vertical plane. The plate *m* in its normal position protrudes or projects outside of the recess *a'*, that has the depth required to accommodate the operation of the said plate. A suitably-applied spiral spring *n* is confined within the recess between the inner side of the plate *m* and the opposing wall of the recess *a'* and acts to retain the said plate in its normal or outwardly-swung position. A rod or link *o* operatively connects the plate *m* at the plate's upper end with the aforesaid latch *l* below the pivotal bearing *l'* of the latch—that is, the said connecting-rod *o* has its rear end pivoted perpendicularly to the plate *m* and has its forward end perpendicularly pivoted to the latch below the pivot *l'*. The said rod *o* extends, therefore, longitudinally through the stock *a*, that is suitably perforated, as at a^2, to accommodate the location and operation of the rod.

It will readily be observed that the person handling the gun upon bringing the firearm in position ready for firing against his shoulder or body presses inwardly upon the plate *m* and causes the said plate to move laterally and inwardly against the action of the spring *n* and results in the inward actuation of the rod *o*, so as to swing the latch *l* in the direction required to render the said latch inoperative, and thereby simultaneously free the hammer and the trigger.

What I claim is—

1. The combination, with the stock, the suitably-applied trigger, and the hammer for operating the firing-pin, of mechanism for locking the trigger in its normal position and adapted to lock the hammer in its cocked position, means acting to retain the said locking mechanism operative, and means for actuating the said locking mechanism as required to effect the release of the hammer and the trigger.

2. The combination, with the stock having a recess formed in its butt, the suitably-supported trigger, and the hammer for operating the firing-pin, of mechanism for locking the trigger in its normal position and adapted to lock the hammer in its cocked position, a rod that extends easily within and longitudinally of the stock and coacting with the aforesaid locking mechanism to release the hammer and the trigger, a movable plate arranged within and normally projecting outside of the aforesaid recess, and means acting to retain the said mechanism in its operative position.

3. The combination, with the stock having a recess formed in its butt, the suitably-supported trigger, the spring acting to retain the trigger in its normal position, the firing-pin-operating hammer provided with two notches or recesses, the hammer-spring, the sear engaging one of the said notches or recesses and extending over the trigger, and the spring acting to retain the sear in engagement with the hammer, of a suitably-supported latch having a tooth or member engaging the other of the aforesaid notches or recesses in the hammer and engaging the upper side of the sear, a rod operatively connected with the said latch and extending longitudinally of the stock, a movable plate within the aforesaid stock's recess and operatively connected with the rod and normally projecting outside of the said recess, and a suitably-applied spring acting to retain the latch-operating mechanism in its normal position.

Signed by me at Cleveland, Ohio, this 19th day of June, 1900.

JOSEF KALINA.

Witnesses:
C. H. DORER,
A. H. PARRATT.