

(No Model.)

E. H. THORNELEY.
SINGLE TRIGGER FOR DOUBLE BARRELED GUNS.

No. 568,285.

Patented Sept. 22, 1896.

Fig. 2.

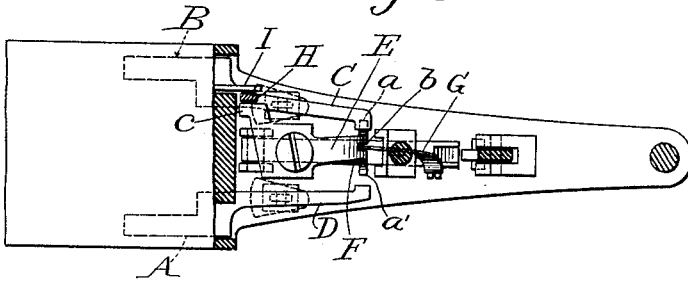


Fig. 1.

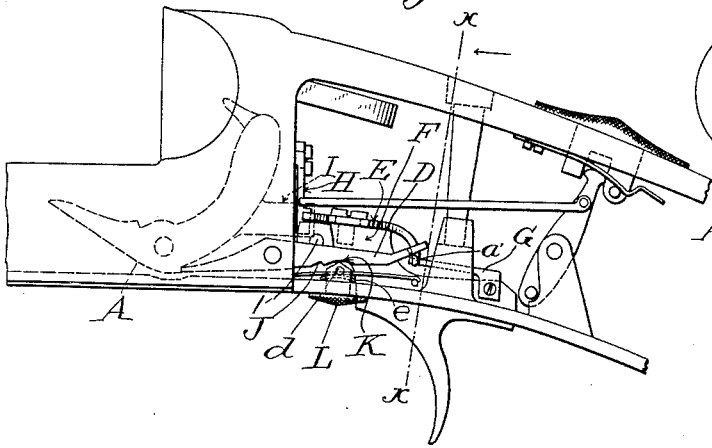


Fig. 3.

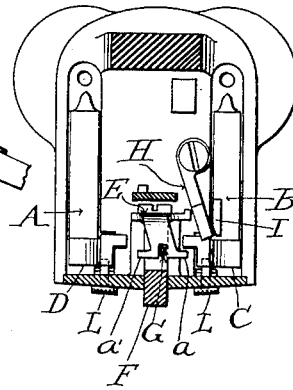
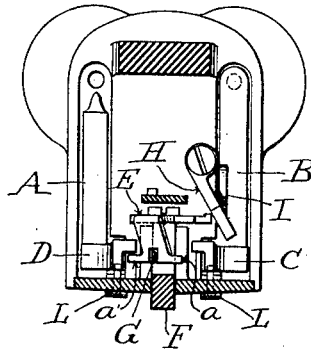


Fig. 4.



Attest
C. B. Burdick
Julia M. Pond

Inventor:
Edward H. Thorneley,
by
Dodgson,
Attys.

UNITED STATES PATENT OFFICE.

EDWARD H. THORNELEY, OF ILION, NEW YORK, ASSIGNOR OF ONE-HALF
TO ARCHIBALD W. MCGOWAN, OF SAME PLACE.

SINGLE TRIGGER FOR DOUBLE-BARRELED GUNS.

SPECIFICATION forming part of Letters Patent No. 568,285, dated September 22, 1896.

Application filed March 9, 1896. Serial No. 582,472. (No model.)

To all whom it may concern:

Be it known that I, EDWARD H. THORNELEY, a citizen of the United States, residing at Ilion, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Gun-Locks, of which the following is a specification.

My invention relates to gun-locks, and particularly to that class wherein a single trigger controls or operates both hammers of the gun.

The invention consists, further, in providing means whereby the lock mechanism may be made to fire the barrels alternately or fire either barrel continuously.

In the accompanying drawings I have shown the lock applied to a double-barreled gun provided with concealed hammers.

Referring to said drawings, Figure 1 is a side elevation of the lock mechanism; Fig. 2, a top plan view; and Figs. 3 and 4, transverse sectional views on the line *x x*, Fig. 1, showing the parts in their different positions.

As above stated, the invention is shown in connection with a gun having concealed hammers A and B, said hammers being automatically cocked by the breaking down of the gun and retained in their cocked position by the locking-sears C and D. The rear ends of said sears are given a slight upward inclination and stand normally when the gun is cocked slightly above the laterally-projecting fingers *a a* of a laterally-swinging plate or lever E, pivoted on the upper part of the trigger F, said trigger being pivoted at point 1. A spring G is secured to the end or tail of the trigger, its free end working in a notch or recess *b*, formed in the end of the plate E, and tending to throw said plate to the left, so that the arm *a* will normally occupy a position beneath the end of the left-hand sear D when the gun is uncocked. The plate E, at its forward end, upon the right-hand side, is formed with a nose or projection *c*, which engages with a pivoted or swinging arm H, secured to the rear face of the breech-block.

Upon reference to Figs. 3 and 4 it will be seen that the pivot of the arm H and the nose or projection *c* are in the same vertical line, and consequently the arm H stands in an in-

clined position when the gun is uncocked. The hammer A is provided with a rearwardly-extending arm I, adapted to bear against the upper portion of the side face of the swinging arm H when the gun is uncocked or in the position shown in Fig. 4.

As the barrels are tipped downwardly and the hammers cocked the arm I will be thrown down, causing the arm H to assume a more nearly vertical position and in so doing to press against nose *c* of the plate E and swing said plate about its pivot, withdrawing the arm *b* from beneath the sear D and causing the arm *a* to pass under the sear C. The spring G is, during this movement of the plate E, put under tension. The parts are now in the position indicated in Figs. 1, 2, and 3. If the trigger now be pulled, the arm *a* will release the sear C and cause the right hammer B to fire. As the hammer moves, the end of the lever I will be elevated and the spring G will turn the plate E upon its pivot, bringing the arm *b* beneath the sear D. At the same time the nose *c* of plate E will throw the arm or lever H back to its most oblique position, into engagement at its upper end with the end of the lever I. If the trigger be again pulled, the left-hand hammer B will be fired. When the gun is again cocked, the parts will assume the position as given above, so that the right-hand barrel may be fired.

Under some circumstances it may be desirable to fire one barrel only, and that one continuously, and to accomplish this each sear is provided with a safety-stop, whereby the hammer for either barrel may be thrown out of action or rendered inoperative.

The under face of each sear between its pivot and rear end is provided with two notches or recesses J and K, the notch K being of such depth and formation that the upper end of the safety-stop L will enter therein and not prevent the end of the sear from swinging down to its lowest position.

The forward notch J is shallow, and when the safety-stop L, which is mounted in a slot formed in the trigger-plate, is shoved forward its upper end will elevate the sear and enter said notch J. A pin *d* is passed transversely

through the upper end of the stop, said pin bearing on a spring *e*, the ends of which impinge upon the trigger-plate. This spring serves to keep the safety-stop in its proper adjusted position. When the rear end of the sear is elevated, it is of course impossible to cock the hammer upon that side of the gun where such adjustment is made, but the hammer on the other side is unaffected. At the same time the arm of the pivoted plate will always be under the sear of the hammer which is free to be fired, so that but one pull of said trigger is necessary. It is of course to be understood that a safety-stop is applied to each sear.

The usual safety mechanism will be employed in addition to the separate stops for each sear. Such mechanism is here shown as acting upon the heel of the trigger, as this is the most common form.

I do not wish to limit myself to the application of the lock mechanism to a double-barreled gun, but may use it where a plurality of barrels are employed.

Having thus described my invention, what I claim is—

1. In a lock for firearms, the combination of two hammers; sears for each hammer; a trigger; a plate pivoted to the upper face of said trigger and provided with two laterally-projecting arms at its rear end, and a nose or projection at one side on its forward end; a spring for throwing the plate in one direction; an arm pivoted to the breech-block and having its lower end in engagement with the nose on the pivoted plate; and a projecting arm on one of the hammers adapted to bear

upon the pivoted arm for throwing it in the opposite direction.

2. In a lock for firearms, the combination of two hammers; sears for each hammer; a trigger; a plate pivoted to the upper face of said trigger and provided with two laterally-projecting arms at its rear end, and a nose or projection at one side on its forward end; a spring for throwing the plate in one direction; an arm pivoted to the breech-block and having its lower end in engagement with the nose on the pivoted plate; a projecting arm on one of the hammers adapted to bear upon the pivoted arm for throwing it in the opposite direction; and independent safety-stops for each sear.

3. In a lock for firearms, the combination of two hammers; sears for each hammer; a trigger; a plate pivoted to the upper face of said trigger and provided with two laterally-projecting arms at its rear end, and a nose or projection at one side on its forward end; a spring for throwing the plate in one direction; an arm pivoted to the breech-block and having its lower end in engagement with the nose on the pivoted plate; a projecting arm on one of the hammers adapted to bear upon the pivoted arm; independent safety-stops for each sear; and a safety-stop common to both hammers.

In witness whereof I hereunto set my hand in the presence of two witnesses.

EDWARD H. THORNELEY.

Witnesses:

CHARLES N. HILLIARD,
MABEL S. ACKLER.