

G. LEONARD, Jr.

Revolver.

No. 6,723.

Patented Sept. 18, 1849.

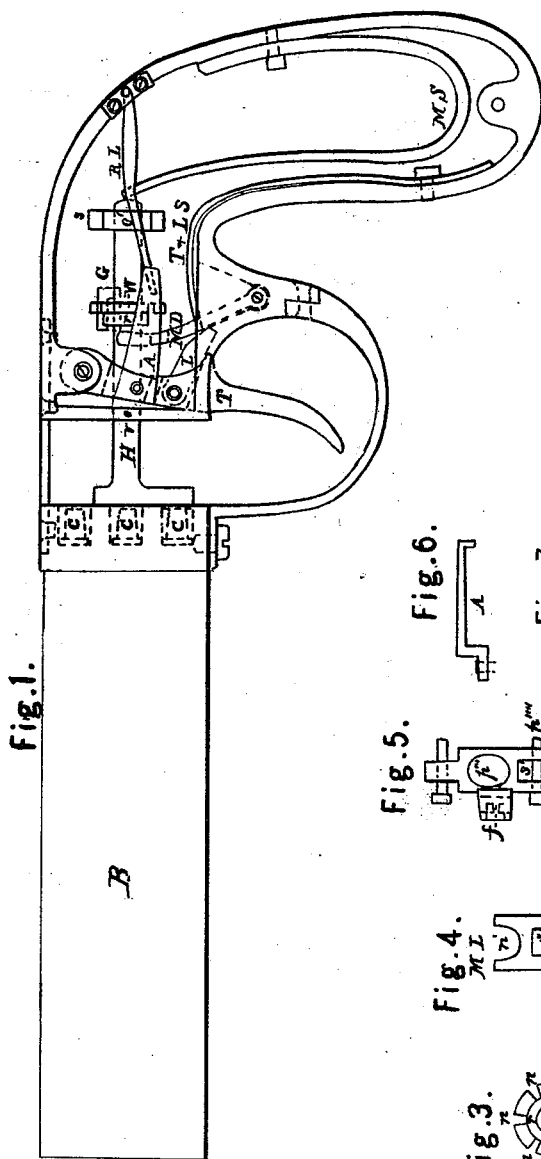


Fig. 6.



Fig. 7.

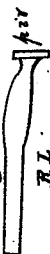


Fig. 5.

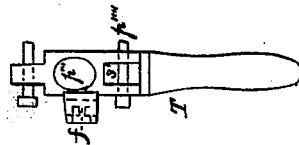


Fig. 4.

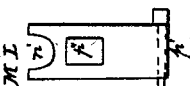


Fig. 3.

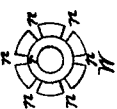


Fig. 2.



Inventor.

George Leonard Jr.

Witnesses.

John J. Davis.  
Glester Davis.

# UNITED STATES PATENT OFFICE.

GEO. LEONARD, JR., OF SHREWSBURY, MASSACHUSETTS.

IMPROVED FIRE-ARM WITH SEVERAL STATIONARY BARRELS AND A REVOLVING HAMMER.

Specification forming part of Letters Patent No. 6,723, dated September 18, 1849.

*To all whom it may concern:*

Be it known that I, GEORGE LEONARD, Jr., of Shrewsbury, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Fire-Arms, forming an important and actively new machine or instrument called a "repeating-gun," "carbine," or "pistol," of which the following is a full and exact description.

I will first state the general ideas embraced in the improvement, machine, or instrument.

In combination with several connected barrels is a lock. By the ordinary motion of a trigger the hammer is made to revolve and give repeated strokes, in proper position, to explode the charges of the several barrels, and stock of the gun, carbine, or pistol in the meantime is fixed and permanent. It has no motion necessarily connected with the explosion, but remains unchanged in situation. The general theory is that the barrels shall be connected and fixed firmly to the stock, and that no revolution of barrels or chambers is at all connected with the ordinary performance of the piece. I have said that by the ordinary motion of a trigger the hammer is made to revolve, &c. As shown in the drawings transmitted, the trigger is this agent; but I do not wish to have it a necessary condition of my patent that the trigger shall perform in this manner. It probably will be expedient for a common pistol; but for a rifled gun or carbine, where great precision in aim is desirable, the retraction, repetition, and partial revolution of the hammer I conceive should be effected by a lever, and the hammer should be detached by the slight touch of a hair-trigger; or the first and main motion of the lever may indeed be made by the trigger and bring the piece to a cock, when a slight second motion may detach the hammer and be like the effect of a hair-trigger.

I will now describe my repeating-pistol.

It has six barrels in the general form of a common revolving-pistol. The cones marked C C C in the drawings are fitted on the ends of the barrels. The central cavity contains the ramrod. The upper part of the barrels is fixed by a stud to the stock, and the lower part is connected with the stock by the guard. The end of the barrels containing the cones is placed about five-eighths of an inch from the

end of the stock. In the vacuity between the barrels and stock the head and fore part of the hammer play.

The head of the hammer (marked H, Figure 2) is formed like a piston-head. On one side of it is a projection, *p*, which is the striking part, and from the center of the head a verge or journal, *v*, Fig. 1, proceeds back through a perforation, *o*, in the front end of the stock to the mainspring M S, where it is confined in a hole, *o'*, through the stud *s*. On the verge, about midway between the front of the stock and the stud *s*, is fixed the repeating-wheel, (marked W in the drawings,) having six notches or escapement-cavities *n n n n n n*, Fig. 3, on its circumference. The wheel has a projecting ring, *r*, Figs. 1 and 3, in front, against which the main lever M L, Fig. 1, bears. The main lever M L turns on a pivot, *p'*, Figs. 1 and 4, fixed in a cavity in the guard. It is a broad flat piece, has a square perforation, *p''*, Fig. 4, just above its center, for the latch, and a semi-circular notch, *n'*, in the upper part, so as to embrace the verge *v*, Fig. 1.

The trigger T, Fig. 1, is hung in the front and upper part of the stock, has a perforation, *p'''*, Fig. 5, for the passage of the verge, and just below a square slot, *s'*, where the latch is fixed and turns on a pivot, *p''''*. It also has an arm, (marked A in the drawings,) and this arm has a fork, *f*, Fig. 5, at the end, on one side, so as to seize and embrace one edge of the repeating-lever R L, Fig. 1. The repeating-lever is hung on a pivot-pin, Fig. 7, in the back of the stock, and swings so as just to clear the verge and its stud, and one end embraces at the proper time the notches in the wheel, and causes it and the hammer to revolve. A glance at the mainspring M S, Fig. 1, and at the trigger and latch-spring T and L S, will give a correct idea of them.

The operation is as follows: Place the forefinger beside the barrels, the middle finger upon the trigger. The trigger being pulled, the latch bears on the main lever just below the perforation, and forces it, and in consequence the wheel and hammer, back. The arm A rises and throws the repeating-lever into a notch of the wheel, which it causes to revolve, together with the hammer. When the whole gets back sufficiently far the latch is detached and slips

through the perforation  $p''$ , Fig. 4, in the main lever, when the mainspring drives the wheel, hammer, and main lever forward, and the blow is given. Just as the hammer strikes, a notch in the wheel is seized by the guide G, Fig. 1, so as to keep the hammer in the exact position required. The trigger and latch spring now bears on the beveled end of the latch and forces the latch and trigger forward till the latch escapes over the perforation in the main lever and is forced by the spring down to its first position with regard to the wheel W, arm A, and repeating-lever R L. I do not conceive them at all essential to my improvement or invention. The repetition and revolution in my first trials were made by means of a six-armed wheel, which was turned gradually, on proceeding backward one-sixth of a revolution, by a triangular cam fixed on the side of the stock, and the escapement was made by an arm slipping over a bevel-ended spring fastened to the side of the stock and lying close to the straight side of the cam.

I do not regard the cam and spring as convenient or expedient for an ordinary pistol; but there are cases where the cam and spring may be necessary or useful. For instance, if the central cavity in the barrels should be made a

rifled barrel, and this barrel be continued back nearly through the stock, the verge must then be a collar on the barrel, and a wheel upon the collar would have so large a diameter as to destroy the efficiency of the arm and repeating-lever, and render the cam and spring important.

What I claim as my invention, and desire to secure by Letters Patent, is—

A fire-arm with the following essential elements: several fixed barrels and a revolving hammer. The successive discharge of the barrels is effected by the hammer, and the whole is constructed substantially as herein described, but irrespective of the positions of the cones, of the form or position of the hammer, or of the mechanical devices by which the revolution of the hammer is effected or the stroke given.

In testimony whereof I, the said GEORGE LEONARD, Jr., hereto subscribe my name, in the presence of the witnesses whose names are hereto subscribed, on the 10th day of October, A. D. 1848.

GEORGE LEONARD, Jr.

In presence of—

ELIZABETH DAVIS,  
SYLVESTER DAVIS.