(No Model.)

P. L. LORON.

REPEATING PISTOL.

No. 422,135. Patented Feb. 25, 1890.

FIG. 1.

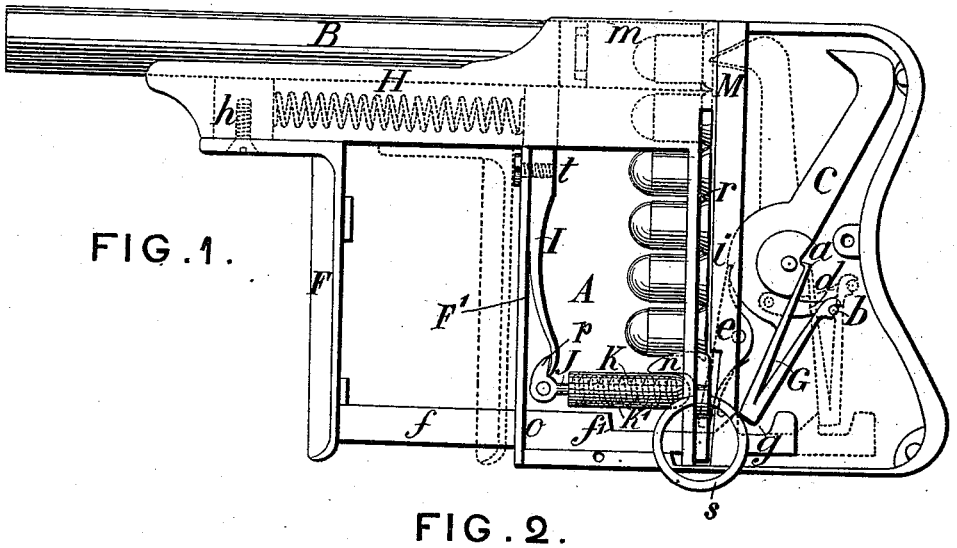


FIG. 2.

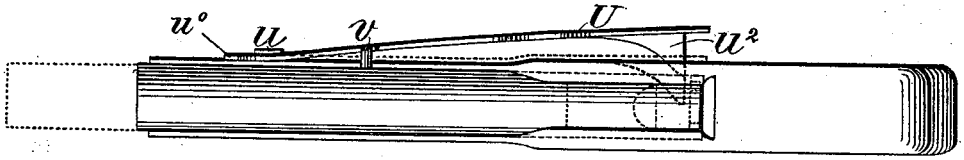
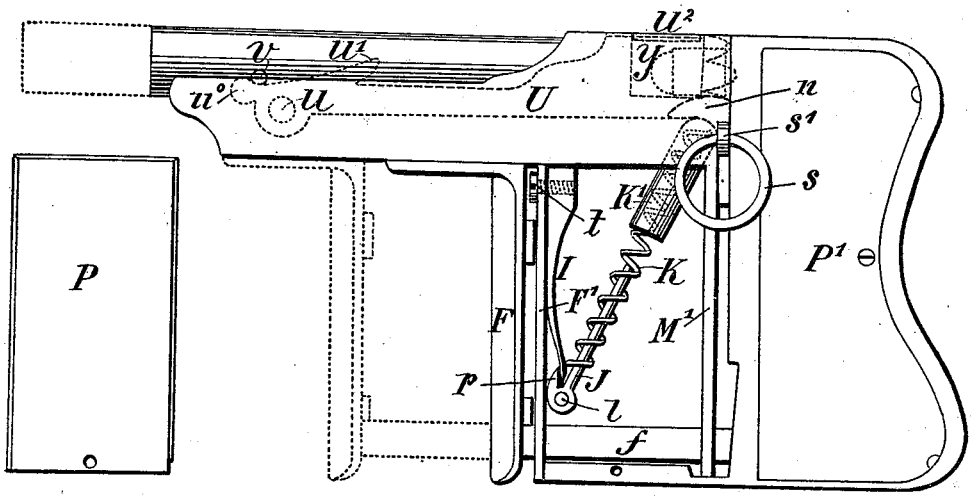


FIG. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

PAUL LÉON LORON, OF ST. ETIENNE, FRANCE.

REPEATING-PISTOL.

SPECIFICATION forming part of Letters Patent No. 422,135, dated February 25, 1890.

Application filed May 13, 1889. Serial No. 310,535. (No model.) Patented in France June 4, 1887, No. 184,025; in Belgium November 30, 1887, No. 79,468, and in Spain June 25, 1888, No. 8,417.

To all whom it may concern:

Be it known that I, PAUL LÉON LORON, a citizen of the French Republic, residing at St. Etienne, in the Department of Loire, France, have invented certain new and useful Improvements in Repeating-Pistols, (for which I have secured Letters Patent in France, No. 184,025, dated June 4, 1887; in Belgium, No. 79,468, dated November 30, 1887, and in Spain, No. 8,417, dated June 25, 1888,) of which the following is a specification.

This invention comprises the firing and repeating mechanism, which are entirely placed within the stock and butt of pistol for the purpose of constructing a neat and handsome fire-arm to be received within a flat casing and to easily wear it in the pocket. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a left-hand side view of my improved pistol ready for firing, one side wall being removed to better show the working parts, of which firing mechanism is received from the ordinary butt and repeating mechanism from a magazine beneath the ordinary stock of the weapon. Fig. 2 is a horizontal projection of the pistol, showing the extractor of the cartridge-shell just in action; and Fig. 3 shows the pistol just discharging its last cartridge previously stored in the magazine, the shell of the latter being removed, while the frame of the firing mechanism is covered by a plate P′.

Similar letters refer to similar parts throughout the several views.

The trigger, which is actuated with two fingers by closing the hand, is retracted toward the hand-piece and pulls at the same time the barrel connected therewith toward the cartridge. Departing from the commonly-employed movement, the trigger adopted according to my invention requires for its action a reciprocating sliding motion.

As shown in Fig. 1, the pistol is cocked when the trigger F is at rest, and the mechanism for releasing the hammer *c* is only actuated, as indicated by the dotted lines, when said trigger is drawn entirely backward to the magazine A. Before arriving in its extreme position the trigger F acts, by means of a cavity *g* in the sliding branch *f* of the trigger, upon the mainspring G, which is thereby bent while turning upon its nose *a*, engaging over the tumbler and the pivot *b* of the link or bridle *d*. When the trigger, which is guided by means of the arm *f* in a notch *o* of the shank F′ of the frame of the magazine beneath the stock, has completed its backward stroke, the shoulder *f′* of said branch acts upon the end of the sear *e*, thereby releasing the nose of the same from the notch *i* of the tumbler, and thus allowing the hammer *c* to strike at this very moment upon the cartridge in the barrel and so discharging the weapon.

The barrel B, to which the trigger F is fastened by means of a screw *h*, is adapted to follow the movement of the trigger and to receive the uppermost cartridge previously elevated from the magazine. The cartridge is just struck from the hammer *c* at the very moment when the breech end of the barrel arrives at the breech-plate M of the weapon.

When the weapon is discharged and the trigger released, the latter returns into its former position under the action of a spring H, inclosed within the stock of the weapon, and the rear shoulder, formed by the cavity *g* of the branch *f*, turns the mainspring G into its initial position, thus cocking again the weapon as the nose of the sear *e*, under the action of a separate spring, has meanwhile re-engaged with the tumbler of the hammer *c*. The magazine is adapted for the reception of six cartridges placed one above the other and being guided by means of their rear border within two lateral vertical slits *r*, formed by the lower extension of the breech-plate M and a fork-shaped bracket M′ of the frame of the magazine. The latter is charged from above by dropping the cartridges through the open chamber *m*, between the breech end of the forward-moved barrel B and the breech-plate M. The lowermost cartridge will then rest upon an ascending carrier *n*, which serves to elevate the cartridges successively to the breech. This carrier *n* is also guided within the slit *r* by means of two lateral ears *s′*, each of them serving at the same time for the reception of a ring *s*.

When the magazine is intended to be charged, the carrier *n* is caused to descend

against the action of the springs K and I by the aid of said rings *s*, as the combined action of these springs tends to elevate the said carrier with the cartridges toward the breech of the weapon. The spring I is secured at one end to the shank F′ of the stock by means of a screw *t*, while the other end engages over a nose *p* of the rod J, pivoted at *l* to the shell of the magazine and serving to guide the spiral spring K and to cause the shell *k′*, under action of the former, to follow the movements of the carrier *n*. These two springs act upon the latter, so as to elevate the same toward the breech end of the barrel, as will be understood by comparing the two extreme positions of parts shown by Figs. 1 and 3 of the drawings.

The extractor of the cartridge-shells consists of the blade U, having the tendency of a spring, which is secured to the foremost end and at one side of the stock of the weapon by means of a bolt *u*, serving as a pivot to allow the extractor to oscillate under the action of a pin *v*, fixed to the barrel B. The pin *v* bears against the race, which is formed by that part of the extractor lying between the noses u° and *u′* of the same. As the pin *v* partakes of the motion of the barrel B, it will cause the extractor to oscillate around its pivot *u*, but simultaneously the blade of the extractor will be bent, by reason of its tongue or sheath u^2 bearing against the rear end of the barrel when in the position as shown by Fig. 2.

In the position, Fig. 2, shown in dotted lines, the sheath or tongue u^2 serves to retain the uppermost cartridge against the action of the spring K within the breech of the weapon until it is received by the barrel, which, on its backward movement and by the aid of the pin *v*, bends the blade U of the extractors and simultaneously oscillates the same in such a manner that its tongue or sheath u^2 can laterally enter underneath the cartridge received from the barrel, in order to throw out its shell after the weapon has been discharged and the barrel again pushed forward under the action of the spring H. The operation of the sheath u^2 within the breech of the weapon is allowed by means of the rectangular opening *y* in the side wall of the breech, Fig. 3.

Having now particularly described and ascertained the nature of my said invention, what I claim, and desire to secure by Letters Patent, is—

1. In repeating fire-arms, the combination of a trigger firmly secured to the barrel and both adapted to longitudinally slide in the stock under the action of a spring, a branch of the trigger located parallel to the barrel and provided with a cavity to act upon the mainspring and a shoulder to operate the sear engaging with the hammer, which are arranged within the hollow butt of the arm, all substantially as and for the purpose described.

2. The combination, in a repeating fire-arm, of the reciprocating trigger attached to and moving with the barrel under the action of a spring H, the branch *f*, connected to the trigger and provided with a shoulder *f′* and cavity *g*, and extending into the frame of the magazine and the butt, the mainspring G, sear *e*, tumbler and hammer *c*, all arranged and actuated substantially as specified.

3. In a repeating fire-arm having a reciprocating barrel, the combination of the cartridge-carrier vertically guided in the frame of the arm, the spring I, secured to the frame, the rod J, pivoted at *l* in front of the cartridge-carrier within the magazine and engaging with the spring I, the spring K, and the socket K′, connected to the rod J, with the cartridge-shell extractor U, secured laterally to the stock and actuated by a lateral projection or pin *v* of the barrel, all substantially as and for the purpose set forth.

4. In a repeating fire-arm, the combination of a reciprocating barrel provided with a lateral projection or pin *v*, the cartridge-shell extractor U, pivoted at its foremost end to one side of the stock, and having there an inclined race for the pin *v*, and at its rear end a tongue or sheath u^2, adapted to laterally enter underneath the cartridge within the breech, all substantially as and for the purpose specified.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 30th day of November, 1888.

PAUL LÉON LORON.

Witnesses:

GEORGES EDMOND DELORME,

JEAN RANCHAURF.