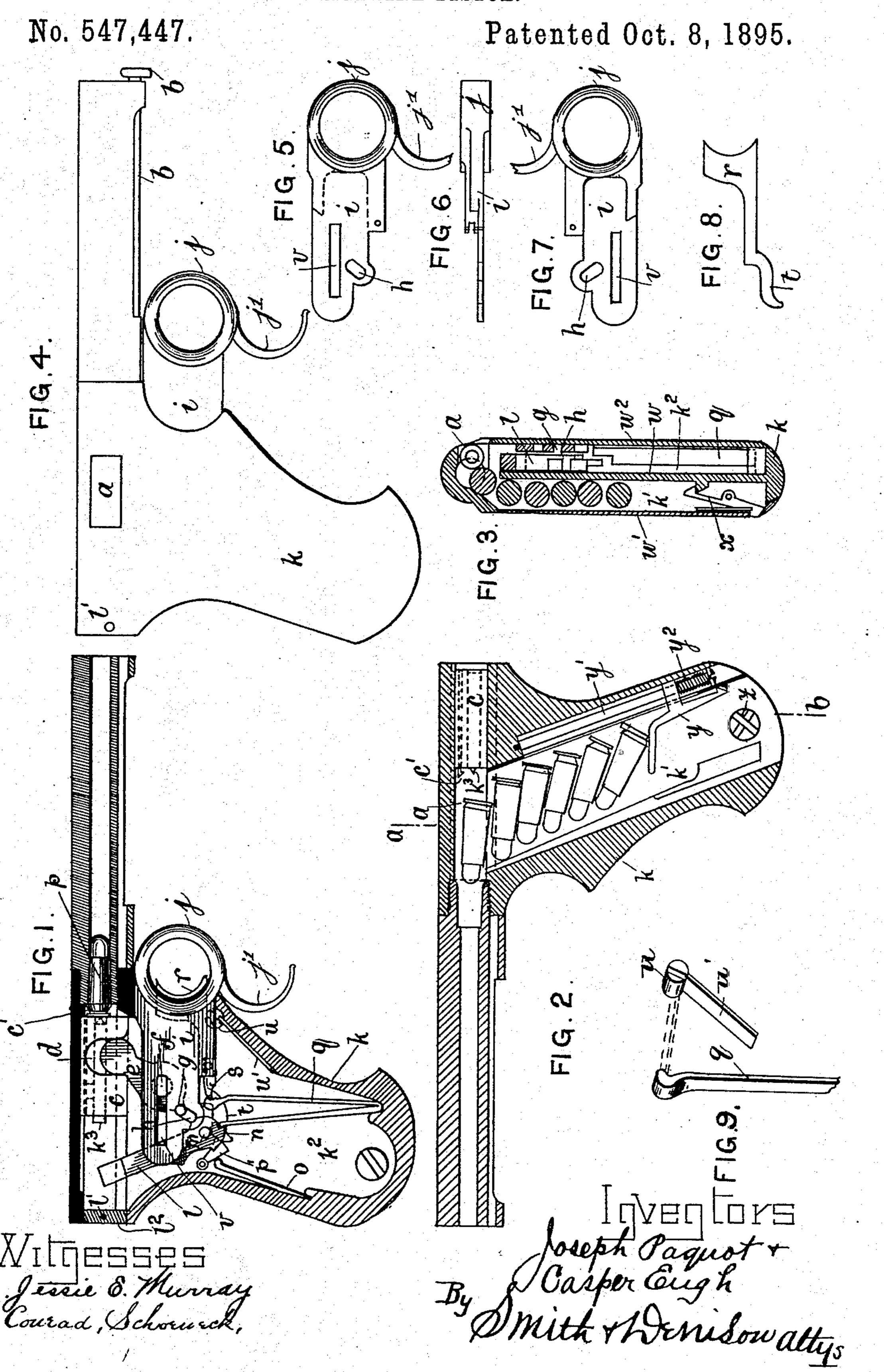
## J. PAQUOT & C. ENGH. MAGAZINE PISTOL.



## United States Patent Office.

JOSEPH PAQUOT AND CASPER ENGH, OF LIEGE, BELGIUM.

## MAGAZINE-PISTOL.

SPECIFICATION forming part of Letters Patent No. 547,447, dated October 8, 1895.

Application filed October 15, 1894. Serial No. 525,957. (No model.)

To all whom it may concern:

Be it known that we, Joseph Paquot and Casper Engh, subjects of the King of Belgium, residing at Liege, in the Kingdom of Belgium, have invented certain new and useful Improvements in Magazine-Pistols, of which the following is a specification.

This invention relates to repeating or magazine pistols, and has for its object to provide to precision and rapidity of firing, solidity and simplicity of construction, lightness of weight and convenience in handling, and to avoid the danger so common with revolvers.

The invention will be described with ref-15 erence to the accompanying drawings, in which—

Figure 1 is a longitudinal section through the barrel and the right side of the butt; Fig. 2, a longitudinal section through the barrel 20 and the left side of the butt. Fig. 3 is a cross-section on the line a b of Fig. 2. Fig. 4 is a side elevation from the right. Fig. 5 is an elevation of the operating slide from the right; Fig. 6, a plan view of the same; Fig. 7, an 25 elevation of the same from the left. Fig. 8

is a side elevation of the trigger from the right. Fig. 9 is a detail view of the stud u.

Referring to the drawings, a is an opening for ejection of the spent cartridge; b, the 30 ramrod; c, the bolt which throws the cartridge into position; c', the cartridge - ex-

tractor; d, a recess in the bolt to receive the head of a lever e, which latter turns on a pin f and carries a stud g, engaging in a slot h in a slide i, provided with a ring j, by which it may be pulled in or out.

j' is a supplementary half ring to allow of two fingers being used in firing.

k is the hollow butt, divided by a partition w into two chambers k' and  $k^2$ , which receive the cartridges and lock, respectively;  $k^3$ , the firing-pin working in the bolt c; l, the hammer pivoted at m and having a tooth n; o, a spring pressing a tumbler p' against the

tooth n of the hammer; p, a cartridge in position for firing; q, a double spring of which one arm operates the hammer while the other arm engages a small arm s pivoted on the slide i.

r is the trigger, having one end t in engagement with the tumbler p'.

u is a loose stud carrying a rigid arm u',

which together form a precision-firing catch adapted to be turned up to engage the spring q.

v is a guide-slot in the slide i in which engages the head of the pin f, the said head being reduced approximately to a rectangular cross-section.

w' is the cover-plate of the magazine held in position by a spring-catch x.

 $w^2$  is the cover-plate of the lock.

y is a cartridge-elevator acting under the impulse of a spring  $y^2$ , coiled on a pin y'.

z is a connecting-pivot for securing the cover-plate  $w^2$  of the lock.

This pistol works with a bolt c and with a rectilinear movement, and is operated for repeated firing by simply pulling the trigger and slide with the finger. For this purpose the slide i is normally pressed outward into the 70 position shown in Fig. 4 by the spring q, and in taking this position it pulls on the stud gby means of the slot h, thereby throwing over the lever e which turns on the pivot f. By this movement the head of the lever ethrows 75 back the bolt c, thereby cocking the hammer land allowing a cartridge to spring up in front of the bolt. On grasping the pistol in the customary manner and pulling the slide i inward by placing the finger in the ring j the 80 parts will assume the position shown in Fig. 1, the bolt c being thrown forward, pushing before it the cartridge p into position for firing, while the hammer w still remains cocked, being held so by the tumbler p'. The trigger 85 r, which slides within the slide i, is carried along with the latter in the movement just described until its end t engages with the tumbler p', as shown. The trigger r now projects a little into the ring j, and on the pull 90 of the finger on the ring j being still continued the trigger r is consequently pressed inward, thus pushing, by means of its end t, the tumbler p' out of engagement with the tooth n of the hammer l, so that the latter, un- 95 der the impulse of the spring q, springs against the firing-pin  $k^3$ , striking the latter into the cartridge, and the pistol is fired. The bolt c, which can only be returned by movement of the slide i, withstands the pressure of the 100 powder-gases. Upon removing the pressure of the finger on the ring j the slide i again springs outward to the position shown in Fig. 4, throwing back the bolt c, while the ex-

tractor c' draws back the spent cartridge, and the hammer l, which during the firing rested behind the bolt c, is again cocked by the latter and the pistol is thus again ready for an-5 other shot, the spent cartridge being pushed out sidewise at a by a fresh cartridge rising

to take its place.

For firing with more precision of aim the ramrod b is detached and is inserted in a hole 10 transversely through the head of the stud uof the precision-firing catch, so as to obtain sufficient leverage to rotate the latter, thereby raising the arm u' until its end is heard to enter the notch in the claw of the spring q, 15 thus taking the pressure of the spring from off the slide i. The ramfod is then replaced in its socket below the barrel. If the pistol be now taken in the right hand and the slide i be drawn out by pulling the ring j with the 20 left hand, the bolt c will be thrown back, the spent cartridge extracted, another cartridge elevated in front of the bolt, and the hammer l cocked, all precisely the same as was done by the spring q in the movement described in 25 the previous paragraph with reference to repeated firing. The slide i is now pushed in, thus throwing the bolt forward, so that the parts assume the position shown in Fig. 1, with the exception that the arm u' will in this 30 case be up in engagement with the spring q, thus taking the pressure of the latter from off the slide i, so that the parts will remain in the position shown while precise aim is taken, when a slight pressure on the trigger r will 35 fire the pistol, whereas in the case of repeated firing, previously described, the parts were only retained in this position by continued pressure of the finger on the ring j of the slide, which prevented precision of aim. After fir-40 ing the slide i is again drawn out and pushed n by the left hand in order to prepare for another shot. To allow of two fingers being used in firing, and thus facilitate considerably the operating of the mechanism, the slide i is 45 formed with a supplementary half ring j'. Precision of aim may thus be obtained with repetition of fire, and directly the magazine is empty of cartridges shots may be discharged in the usual manner by loading each time 50 afresh a single cartridge through the aperture a.

In order to load or recharge the magazine, the pistol must be taken in the left hand at the same time that the right-hand thumb fits 55 into the hollow formed in the cover-plate w' of the magazine, in order to depress the catch x, and the cover-plate is then pushed downward until the opening is large enough to allow of the cartridges being inserted, and the 60 magazine is then closed. A stop-tenon may be used as a precaution to lock the bolt c in its backmost position while recharging, as above.

In order to take the pistol to pieces the pin 65 y' of the magazine must be unscrewed, and then this pin drops out of itself by the pressure of the spiral spring 1/2, the plate w' cov-1

ering the magazine and the elevator y are withdrawn, the connecting-pivot z is turned a quarter of a revolution in order that it may 70 stand with its two wings opposite the groove formed in the bottom of the magazine, and the cover-plate of the lock may then be removed, the operating slide-piece i is withdrawn, the spring q of the hammer l is taken 75 off, the pin l' of the wedge  $l^2$  which covers the passage of the bolt is removed, and also the  $\operatorname{cock} l$ , the bolt c, the closing piece or lever e, the tumbler p', the spring o of the tumbler, and the catch uu' of the precision-firing ar- 80 rangement. The cartridge employed for this weapon is choked, of a caliber of six millimeters, or of other caliber according to the use of the pistol, and loaded with a metallic ball and a special smokeless powder which 85 produces very little detonation. A better trajectory is obtained with this improved pistol than with any other hitherto employed.

We declare that what we claim is—

1. In a pistol, the combination with a bolt 90 c having a recess d, of a pivoted lever e having its head engaging in said recess, and a slide i having a slot h in which engages a stud g on said lever, substantially as set forth.

2. In a pistol, the combination with a bolt 95 c having a recess d, of a lever e engaging in said recess and movable on a fulcrum pin fhaving its head reduced approximately to a rectangular cross section, and a slide i having a slot h in which engages a stud g on said le- roo ver and a slot v in which engages the laterally flattened head of said fulcrum pin, whereby said slide is guided in a straight line and is adapted to operate through the lever e, the bolt c, so as to throw the cartridge into posi- 105 tion for firing and to hold said bolt as a closing piece to said cartridge during fire, substantially as set forth.

3. In a pistol the combination with a hammer, a tumbler, a bolt and a pivoted lever en- 110 gaging said bolt, of a slide i, adapted to operate said lever and thereby the bolt, and a trigger r carried by said slide and movable therein and adapted to engage the tumbler to free the hammer for the purpose of percussion sub-115

stantially as set forth.

4. In a pistol the combination with a hammer, a bolt, and a slide having means for operating said bolt, of a double main spring qhaving one arm engaging the hammer, and the 120 other engaging the slide, whereby both the percussion and the automatic action of the pistol are effected by one spring substantially as set forth.

5. In a pistol, the combination with a ham- 125 mer and a tumbler engaging said hammer, of bolt c, a firing pin  $k^3$  within said bolt, a cartridge extractor c' on said bolt, pivoted lever e, slide i, a trigger r carried by said slide but movable therein and having one end t adapt- 130 ed to engage said tumbler, and a double mainspring q having one arm engaging the hammer and the other engaging a small arm s pivoted on said slide, whereby the bolt is

moved forward to throw a cartridge into position for firing, the hammer is caused to strike the firing pin, the bolt is held as a closing piece to the cartridge during fire, the bolt is 5 withdrawn, the cartridge extracted and ejected and the hammer again cocked, all by one single pressure of the finger, substantially as set forth.

6. In a pistol, the combination with a hamto mer, a bolt, and a slide having means for operating said bolt, of a double mainspring qhaving one arm engaging the hammer and the other engaging the slide, a ring j formed on said slide, and a loose stud u located between the ring j and the upper end of the front arm of the spring, and carrying a rigid arm u' and adapted to be turned as desired to bring said arm either out of or into engagement with one arm of said spring, whereby the weapon may 20 be used either for quick firing by leaving the

spring free to automatically return the slide, or for greater precision of aim by taking the spring pressure from off the said slide, sub-

stantially as set forth.

7. In a repeating or magazine pistol the 25 combination with a chamber or magazine adapted to contain a number of cartridges, of a pin y' arranged longitudinally in the rear of said chamber, and an elevator y carried by and movable on said pin and impelled up- 30 ward by a spring  $y^2$  coiled on said pin, substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of

two subscribing witnesses.

CASPER ENGII.

Witnesses:

H. Debrus, J. BOTTON.