

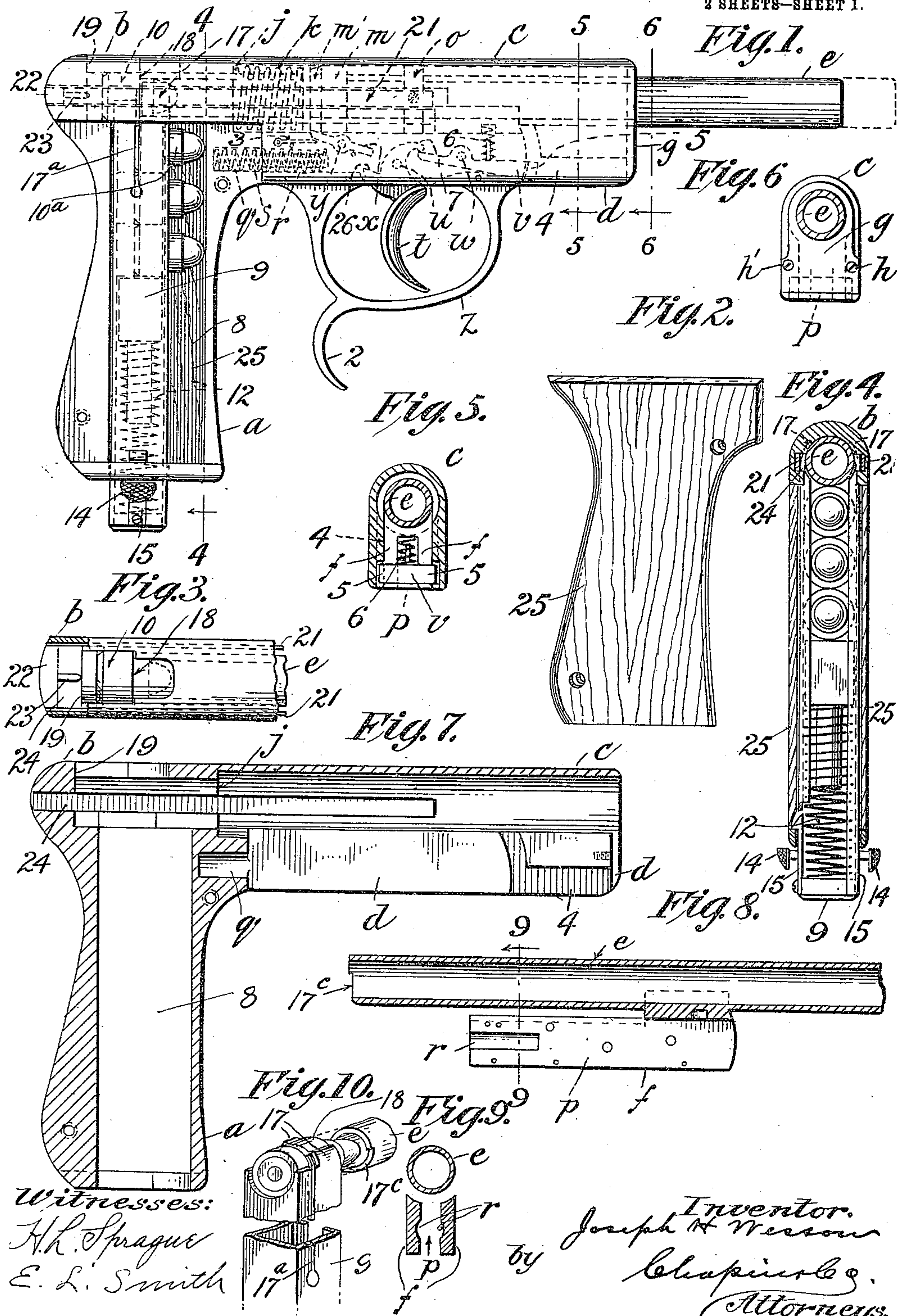
No. 839,911.

PATENTED JAN. 1, 1907.

J. H. WESSON.
MAGAZINE PISTOL.

APPLICATION FILED MAR. 1, 1905.

2 SHEETS—SHEET 1.

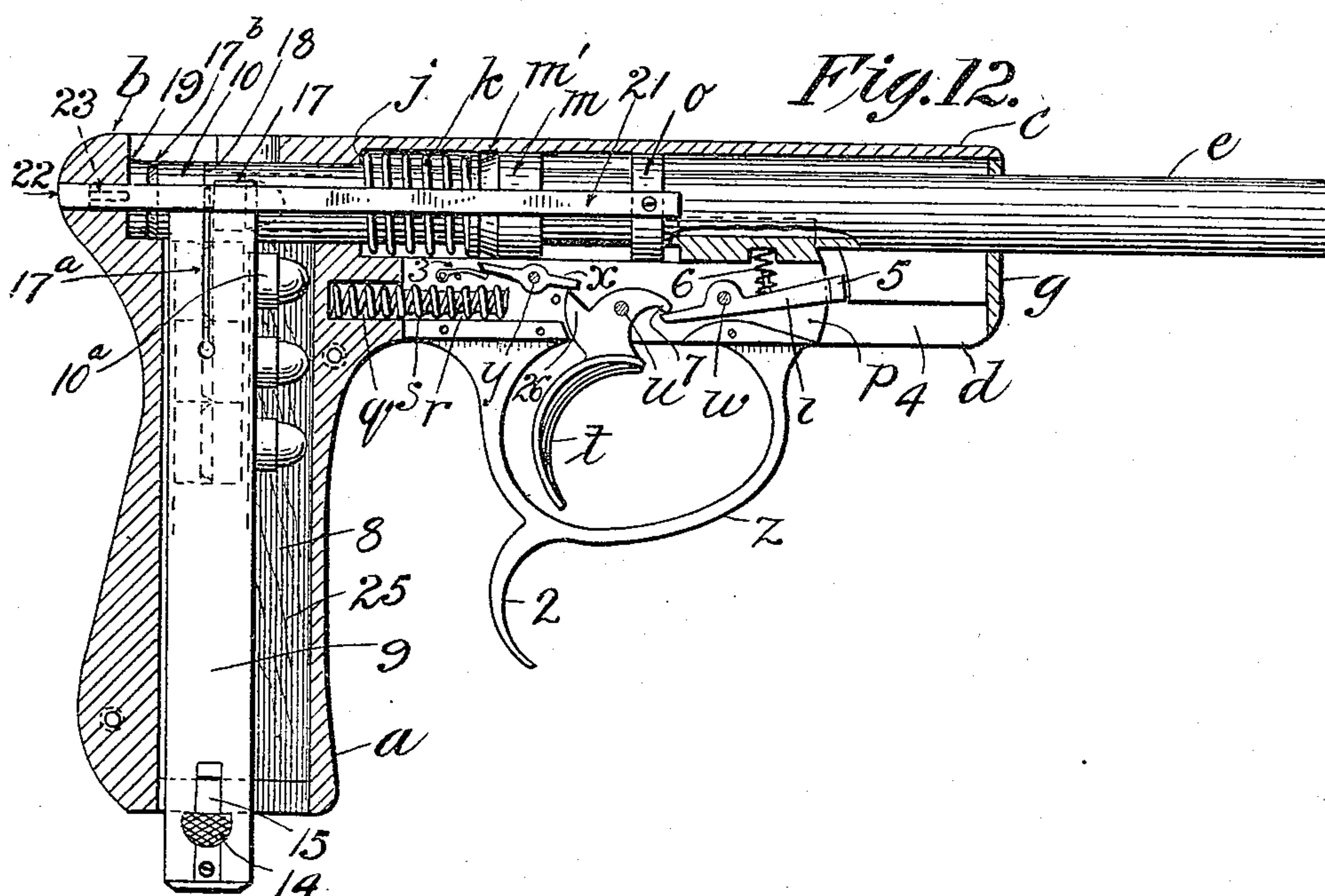
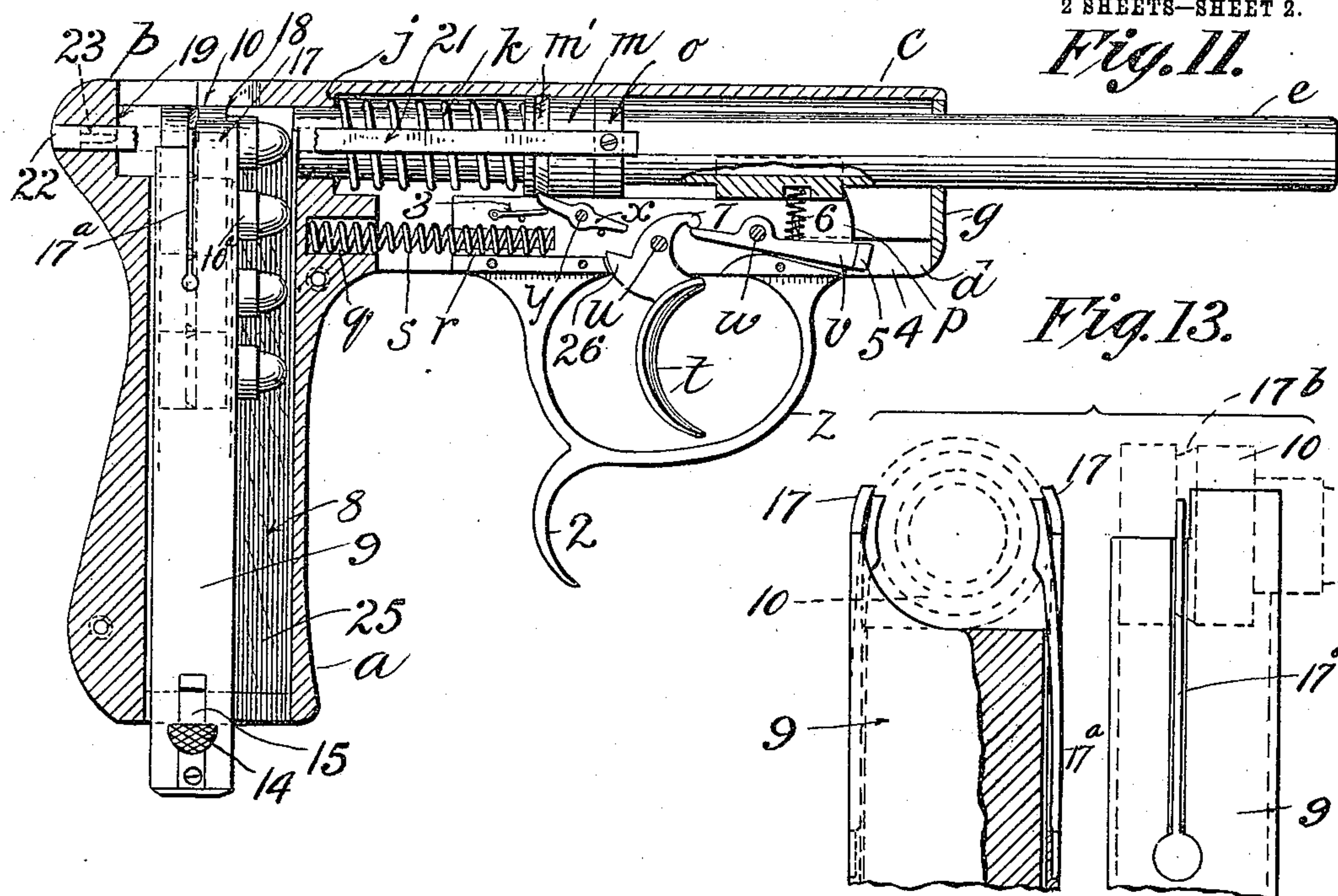


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2 SHEETS—SHEET 2.



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MAGAZINE-PISTOL.

No. 839,911.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed March 1, 1905. Serial No. 247,912.

To all whom it may concern:

Be it known that I, JOSEPH H. WESSON, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Magazine-Pistols, in which the following is a specification.

This invention relates to magazine-pistols of the sliding-barrel type, the object of the invention being to provide an arm of this character in which the magazine is located in the handle or grip of the arm and the barrel is drawn rearwardly toward the recoil-plate across the upper end of the magazine to engage the uppermost cartridge in the latter, carrying the same to the rear against the recoil-plate, the engagement of the barrel with the cartridge inserting the latter in the barrel and the rearward movement serving to cock the arm, which may then be fired by a pull on the trigger in the usual manner. This construction is practically the reverse of the usual action of arms of this type, so far as I am aware, these having generally been so constructed that the pull on the trigger will first carry the barrel forward against the compression of a spring, which when the barrel is released moves the latter rearwardly to pick up a cartridge and fire it by carrying it back against a fixed bearing-pin.

My prior reissued patent of January 9, 1900, No. 11,800, is a good example of the type referred to, and the difference between that type and the one forming the subject-matter of this application is radical in that in this case the barrel is pulled back by the second finger to effect the loading and cocking of the arm, leaving the first finger free to pull the trigger, thus making it possible to do far more accurate shooting than is possible with the old type, in which the trigger-finger is under constant strain until the arm is fired.

In the present construction when the barrel is retracted it is moved against the tension of a barrel-spring and of a mainspring which are entirely separate, and associated with the trigger is a safety device whereby the barrel is locked in its most rearward position prior to the release of the firing mechanism.

Referring now to the drawings, Figure 1 is a side elevation of a pistol in which the invention has been embodied, one of the cheek-pieces of the grip being removed. Fig. 2

shows this cheek-piece in perspective. Fig. 3 is a top plan view of the rear end of the arm, a portion of the frame being broken away. Fig. 4 is a vertical section in the plane of line 4 4, Fig. 1. Figs. 5 and 6 are vertical sections in the planes of lines 5 5 and 6 6, Fig. 1. Fig. 7 is a longitudinal section through the frame of the arm centrally. Fig. 8 is a longitudinal section through the barrel, showing the relation of the latter to the barrel-lug. Fig. 9 is a vertical section in the plane of line 9 9, Fig. 8, looking toward the rearend of the barrel. Fig. 10 is a perspective view of the upper end of the magazine-case, showing the relation of a cartridge thereto and showing the relation of the rear end of the barrel to the cartridge, a portion of the barrel only being shown. Fig. 11 is a longitudinal sectional elevation of the frame, showing the other parts in full lines except for a portion of the barrel and a portion of the firing mechanism which are broken away, the barrel being shown in its most forward position. Fig. 12 is a similar view showing the barrel retracted in firing position, the trigger also being retracted in the barrel-lock being shown in operative position and the sear released from the firing mechanism, all the parts being in the position they will occupy at the moment just preceding the discharge. Fig. 13 is an enlarged view of the upper end of the magazine in end elevation, partly in section and in side elevation, showing the position of the retaining-spring for the cartridges in the wall of the magazine.

Referring to the drawings, the handle or grip portion of the arm in which the magazine is located is indicated by *a*, the frame portion at the upper end of the handle by *b*, and the barrel-receiving portion by *c*, this latter portion of the frame being longitudinally slotted along the under side thereof, as indicated by *d*, to receive the barrel-lug, in which is located a part of the barrel-operating mechanism and firing mechanism, as hereinafter described, the above-referred-to parts of the frame constituting, preferably, an integral construction; but for the sake of clearness of description the parts will generally be referred to in the following specification as above designated. Referring to Figs. 1, 4, 7, 11, and 12, these will disclose very clearly the construction of this integral frame of the arm, the description of which will be made in the course of the specification.

The barrel *e* is cylindrical and preferably

of uniform diameter, and depending therefrom is a longitudinally-disposed lug *f*, preferably integral with the barrel and, as shown in the sectional views, having a width equal to the diameter of the barrel. As shown in Figs. 8 and 9 principally, this lug has a recess or slot *p* milled therein from one end to the other longitudinally thereof, the width of which is shown in said Fig. 9, and it is in this slot that the trigger and some of its associated parts are located, as reference to the general views 11 and 12 will show. The lug *f* is separated from the barrel, as shown in Fig. 8, for a certain distance extending inwardly from the rear end thereof for a purpose hereinafter described. The lug has a sliding fit in the longitudinally-disposed recess *d* in the frame, and the barrel is supported in the chambered portion *c* of the frame by means of the bearing-plate *g*, secured to the forward end of the latter, which plate is secured to the frame by screws *h h'* and has a central opening therethrough for the barrel.

The chambered portion *c* of the frame in which the barrel is located is bored out to a larger diameter than that of the barrel as far back as the point *j*, from which the bore extending through the remaining portion of the frame is of the same diameter, and in this the rear end of the barrel is supported. It is therefore clear that by the sliding fit of the lug *f* with the recess *d* the barrel is non-rotatably supported in its frame and may slide in the latter backward and forward in a straight line.

The barrel-supporting part of the frame, bored out, as above described, as far back as the point *j*, provides an annular chamber in which is located the spring *k*, which encircles the barrel and which is the mainspring of the arm, collars *m* and *o* being located in this annular chamber and loosely encircling the barrel, the position of these collars being shown in Figs. 1, 11, and 12. The spring *k* bears against the rear end of this chamber at *j* and against the collar *m*, which is the active member of the firing mechanism.

The longitudinal slot *p*, above referred to, which extends from end to end of the lug *f*, has located therein certain operative parts of the mechanism, as follows: A hole *q* is bored in the frame, a similar hole *r* being drilled in the end of the lug *f* before the latter is slotted, these two holes being in axial alinement, and in these two holes is located a coiled spring *s*, which is the barrel-actuating spring. Forwardly of this point a trigger *t* is pivotally supported in said slot on a pin *u*, and forwardly of the trigger is a T-shaped barrel-locking lever *v*, supported to swing on the pin *w* in the plane of the trigger and toward and from the barrel. In proximity to the trigger the sear *x* is pivotally supported on the pin *y* to engage a circum-

ferential groove *m'*, turned in the collar *m*, the sear being released from its engagement therewith by a pull on the trigger in the usual manner. A trigger-guard is secured in the lower part of said slot *p* in the lug *f*, said guard being provided at the lower rear end thereof with a forwardly-curved member 2 to be grasped by the second finger of the hand, whereby the barrel may be retracted and the arm cocked, leaving the forefinger free to pull the trigger. When the barrel is thus retracted, the loading is effected, as will be described further on, and if it is not desired to fire the arm the release of the pressure on the member 2 of the guard will permit the barrel to be moved forward again to the position shown in Fig. 11, said forward movement being effected by the spring *s*, which is compressed, as shown in Fig. 12, by the retraction of the barrel; but if the arm is to be fired pressure on the trigger will act first to lock the barrel in its retracted position prior to the actuation of the sear as follows: The forward lower portion of the frame is provided with two oppositely-located L-shaped grooves 4, (shown in Figs. 5, 7, and 12,) into which the ends 5 of the cross-head on the forward end of the barrel-stop lever *v* extend, a spring 6 being located between said lever and the barrel to normally hold the lever in the position shown in Fig. 11. As the trigger is pulled the point 7 thereon depresses the rear end of the lever *v*, forcing the forward end upwardly, the ends 5 of the cross-head entering the upwardly-extending portions of the grooves 4, thus locating these ends 5 transversely of and in close contact with the end of the barrel-lug *f*, as shown in Fig. 12. A further movement of the trigger will then bring the projection 26 thereon against the end of the sear *x*, releasing the latter from the collar *m*, which will then be shot forward against the collar *o*, which is loose on the barrel. This collar is connected by straps or rods 21, which extend longitudinally of the barrel, on each side thereof, back through the rear end of the frame and in line with the axis of the barrel, to a block 22, having a firing-pin 23 therein, the rear end of the upper portion of the frame being milled out to permit the free play of the block 22 therein toward and from the base of the cartridge. This rear upper end of the frame is indicated by *b*, and the forward vertical wall thereof constitutes the recoil-plate 19 for the cartridge 10. The straps 21 are located in grooves 24, formed in opposite sides of the chambered-out portion of the frame, preferably as shown in Figs. 4 and 7. As the barrel is retracted it moves across the top of a magazine located in the handle and picking up the uppermost cartridge therein carries it back against the recoil-plate 19.

As stated, the magazine is located in the

handle of the arm, a rectangular chamber 8 being provided in the latter for its reception, the opposite side walls of this opening being formed by the cheek-pieces 25 of the handle.

5 In this chamber is a rectangular magazine-case 9, which in its general construction is the same as described in my aforesaid re-issued patent of January 9, 1900, No. 11,800, the cartridges 10 being inserted in
10 the magazine through the upper end thereof and located therein one above the other, as described in my said patent, there being a spring 12 in the lower end of the case to feed the cartridges upward. The cartridge-case
15 is held in place in the handle by means of two springs 15, having the buttons 14 thereon, the springs being provided with hooks to engage lips in the frame, as shown in Fig. 4. By pressing on these buttons 14 the
20 spring-hooks may be disengaged from the handle and the case drawn out. As described in my said prior patent, the cartridges 10, as shown in the various figures of the drawings, are provided with a strong re-
25 inforcing-ring 18, which is fitted over the shells proper, the latter being indicated by 10^a. The forward ends of the shell extend beyond the end of the reinforcing-ring far enough to permit the entrance of the end of
30 the cartridge into the barrel, said reinforcing-ring constituting practically a continuation of the barrel when the latter is in firing position, as shown in Figs. 1, 3, and 12.

To bring the cartridge into axial alinement
35 with the barrel, the upper ends of the magazine-case 9 are curved inward, as shown particularly in Fig. 10, to constitute the lips 17, which overlap the reinforcing-ring of the cartridge and constitute a stop against
40 which the uppermost cartridge is forced by the magazine-spring 12. The lips 17, however, do not extend across the entire end of the case, but toward the rear side of the case are cut away to such an extent that when the
45 barrel pushes the top cartridge back to the position shown in Fig. 12 the reinforcing-ring on the cartridge will be moved out from under these lips, as shown in this figure, and thus be in position to be ejected as soon as
50 the barrel moves forward, leaving the empty cartridge-case in the position in which it was fired, attention being called to the fact that while in this position it is still located in the path of movement of the cartridges in the
55 magazine, and therefore when freed from the barrel it will be ejected by the upward movement of the cartridges in the magazine, the uppermost one of the latter being caught by the lips 17 at the top of the case 9 in position
60 to be engaged by the next retracting movement of the barrel and carried rearwardly against the recoil-plate 19. The arm having been fired, a release of the pressure on the trigger will permit the spring 6 to throw the
65 locking-lever *v* downward to the position

shown in Fig. 11, whereupon the release of pressure upon the member 2 of the guard will permit the spring *s* to throw the barrel forward, and this movement will carry the
70 sear (whose rear end is normally pressed upward by the spring 3) into engagement again with the groove *m'* of the collar *m*, thus bringing the parts into position again for another shot.

From the foregoing description it is appar- 75 ent that in its general features the magazine is like that described in my said prior patent. In two points, however, it differs therefrom—viz., in the provision of the lips 17 to arrest the upward movement of the cartridges and 80 in the provision of the springs 17^a, (shown in Fig. 13 most clearly,) whereby the uppermost cartridge may be held against endwise movement except when pushed out of the magazine by the rearward movement of the 85 barrel. These springs are set in grooves in the opposite side walls of the magazine, and their free upper ends snap into grooves 17^b in the reinforcing-ring on the cartridge, the shape of which is such as to allow the car- 90 tridge to move toward the recoil-plate only, and when it is in position thereagainst these free ends of the springs will snap inward against the shell in front of the reinforcing-ring on the cartridge, and thus prevent the 95 latter from being drawn forward by the forward movement of the barrel should the shell perchance stick in the barrel. A shallow notch 17^c in the end of the barrel, Fig. 11, provides space for the end of the spring 17^a 100 between the barrel and the reinforcing-ring on the cartridge when these parts are in contact. In operation, therefore, the barrel, the trigger, and the collar *m*, engaged by the sear, and the locking-lever *v* are all moved rear- 105 wardly by a pull on the member 2 of the trigger-guard or equivalent member. This compresses the mainspring *k* and the barrel-spring *s*. When the barrel comes to a stop by the contact of the end of the cartridge 110 with the recoil-plate and the trigger is pulled by the forefinger, the lever *v* is thrown into locking engagement with the fore-end of the lug on the barrel, and a subsequent move- 115 ment of the trigger in the same direction disengages the sear from the collar *m*, which is shot forward by its spring *k* against the collar *o*, which through the straps 21 will carry the firing-pin 23 against the primer in the cartridge. Pressure on the trigger and its 120 guard is now released, and the locking-lever is disengaged from the lug *f* and vertical portions of the grooves 4 in the sides of the frame, and the barrel-spring *s* will carry the barrel forward, the sear *x* passing under the 125 collar *m* and engaging the groove *m'* therein. As soon as the barrel is separated from the cartridge the spring 12 in the magazine pushes the line of cartridges therein upward, ejecting the empty shell and locating a load- 130

ed one under the lips 17 in position to be picked up by the next rearward movement of the barrel.

Attention is called to the fact that the collar *o* is loose on the barrel, and when the collar *m* strikes it is driven forward until it comes in contact with the lug *f*, where the latter joins the barrel, and when a new cartridge is carried back against the recoil-plate it will strike the end of the firing-pin, which will then project through said plate and push it back into the plate, thus moving the collar *o* back to the position shown in Fig. 12.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a firearm of the character described, a suitable frame and a recoil-plate thereon, a barrel slidable toward and from said plate, a magazine across the delivery end of which the barrel moves to pick up a cartridge, a firing mechanism comprising a hammer, an actuating-spring therefor, and a trigger, a locking device for the barrel, and means operatively disposed relative to the trigger to effect the locking of the barrel in advance of the release of the hammer, said means comprising a pivoted stop-lever one end of which is engaged by a portion of the trigger, and the opposite end of which is adapted to enter an upwardly-extending slot in the forward lower portion of the frame.

2. In a firearm of the character described, a suitable frame and a recoil-plate thereon, a barrel slidable toward and from the recoil-plate, and means independent of the trigger to slide the barrel toward the recoil-plate, a device to lock the barrel to the frame in firing position, a trigger movable with the barrel, a firing mechanism comprising a hammer, a mainspring, and a firing-pin; means to cock the hammer by the movement of the barrel toward the recoil-plate, and means to actuate the barrel-locking device by the movement of the trigger, in advance of the release of the hammer.

3. In a firearm of the character described, a suitable frame and a recoil-plate thereon, a barrel slidable toward and from the recoil-plate, a device to lock the barrel to the frame in firing position, a trigger movable with the barrel, a firing mechanism comprising a hammer, a mainspring, and a firing-pin; means to cock the hammer by the movement of the barrel toward the recoil-plate, and means to actuate the barrel-locking device by the movement of the trigger in advance of the release of the hammer, in combination with a magazine and suitable feeding devices in the latter to locate a cartridge in the path of the movement of the barrel toward the recoil-plate, said locking means comprising a pivoted stop-lever one end of which is engaged by a portion of the trigger, and the opposite end of which is adapted to enter an upwardly-

extending slot in the forward lower portion of the frame.

4. In a firearm of the character described, a suitable frame and a recoil-plate thereon, a barrel slidable in the frame toward the recoil-plate, and a spring to move the barrel in the opposite direction; a trigger, a sear, and a barrel-locking lever mounted on a lug on the barrel, and means to actuate the locking-lever, by the movement of the trigger, in advance of the actuation of the sear a hammer operatively located relative to the sear to be moved to cocked position by the movement of the barrel toward the recoil-plate, and a suitable firing-pin operatively disposed for actuation by the hammer upon the release of the latter.

5. In a firearm of the character described, a suitable frame and a recoil-plate thereon, a barrel slidable in the frame toward the recoil-plate, and a spring to move the barrel in the opposite direction; a trigger, a sear, and a barrel-locking lever mounted on a lug on the barrel, and means to actuate the locking-lever by the movement of the trigger, in advance of the actuation of the sear; a hammer operatively located relative to the sear to be moved to cocked position by the movement of the barrel toward the recoil-plate, and a suitable firing-pin operatively disposed for actuation by the hammer upon the release of the latter, in combination with a magazine, and suitable feeding devices in the latter to locate a cartridge in the path of the movement of the barrel toward the recoil-plate.

6. In a firearm of the character described, a suitable frame and a recoil-plate thereon, a barrel slidable in the frame toward and from said plate, a firing mechanism comprising a mainspring, a hammer, and a trigger, the latter being movable with the barrel; means, independent of the trigger to slide the barrel toward the recoil-plate, and a spring to return the same to normal position, the hammer being disposed relative to the barrel to be moved to cocked position by the movement of the barrel toward the recoil-plate, the trigger being operatively located relative to the hammer to release the latter at the proper time.

7. In a firearm of the character described, a frame and a recoil-plate thereon, a barrel slidable in the frame toward and from said plate, a member loose in the frame, movable in one direction with the barrel and constituting a hammer, a second member loosely mounted on the barrel and against which the first-mentioned member strikes when released, straps connected with the firing-pin, a spring to move said member in the opposite direction, a firing-pin operatively disposed relative to said members, together with a sear and a trigger movable with the barrel, said sear to engage the hammer member and said trigger to effect the release of the sear,

and means to slide the barrel whereby when the sear releases the hammer member the second-mentioned member is engaged thereby and the blow is transferred to the firing-pin by the second member as described.

8. In a firearm of the character described, a frame, and a recoil-plate thereon, a member loose in the frame and slidable therein with the barrel toward the recoil-plate and constituting a hammer, a second member loosely mounted on the barrel and against which the first-mentioned member strikes when released, straps connected with the firing-pin, a firing-pin operatively disposed relative to said hammer, a spring to move the latter in the opposite direction, and means, comprising a trigger and a sear for releasing the hammer at the proper time, in combination with a magazine and feeding devices therein to locate a cartridge in the path of the movement of the barrel toward the recoil-plate, and a spring to move the barrel away from the recoil-plate, whereby when the sear releases the hammer member the second-mentioned member is engaged thereby and the blow is transferred to the firing-pin by the second member, as described.

9. In a firearm of the character described, a suitable frame, and a recoil-plate thereon, a barrel slidable toward and from the plate and means independent of the trigger to slide the barrel, a device movable with the barrel to lock the latter in firing position, a trigger to actuate said device in advance of the release of the hammer, interfering means to block the movement of the trigger before the barrel reaches a firing position, a suitable hammer, and means to move the latter to cocked position by the movement of the barrel toward the recoil-plate, and a sear operatively disposed relative to the hammer and trigger.

10. In a firearm of the character described, a suitable frame and a recoil-plate thereon, a barrel slidable in said frame toward and

from said plate, there being a chamber in the frame through which the barrel extends, separate members slidable on the barrel in said chamber, one of which members constitutes a hammer; a rigid connection extending from the other of said members lengthwise of the barrel, a firing-pin loosely mounted in the frame behind the recoil-plate and extending through the latter, with which pin said rigid member is connected; a mainspring between the hammer and the frame, and means to move the hammer to cocked position by the movement of the barrel toward the recoil-plate, and suitable mechanism to lock the barrel in firing position, and a trigger to effect the release of the hammer.

11. In a firearm of the character described, a suitable frame and a recoil-plate thereon, a barrel slidable in the frame toward and from the recoil-plate, means independent of the trigger to slide the barrel, a magazine in the handle below and in front of an ejector-opening in the top of the frame, means to limit the upward movement of the shells in axial alinement with the barrel and in front of the opening whereby when the barrel is moved toward the rear to firing position the topmost shell is pushed against the recoil-plate, and whereby after the barrel is advanced the empty shell is ejected.

12. In a magazine-pistol, a frame, a barrel slidable therein by means independent of the trigger, and across an opening in the frame, springs arranged on the magazine and adapted to engage a crease in the uppermost cartridge when held in axial alinement with the barrel, whereby, when the cartridge is engaged by the barrel the same will be disengaged from the springs and carried back against the recoil-plate.

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