A. P. TRUNDLE. AUTOMATIC MAGAZINE PISTOL. APPLICATION FILED JAN. 15, 1907.

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Patented Jan. 5, 1909.

3 SHEETS-SHEET 1.

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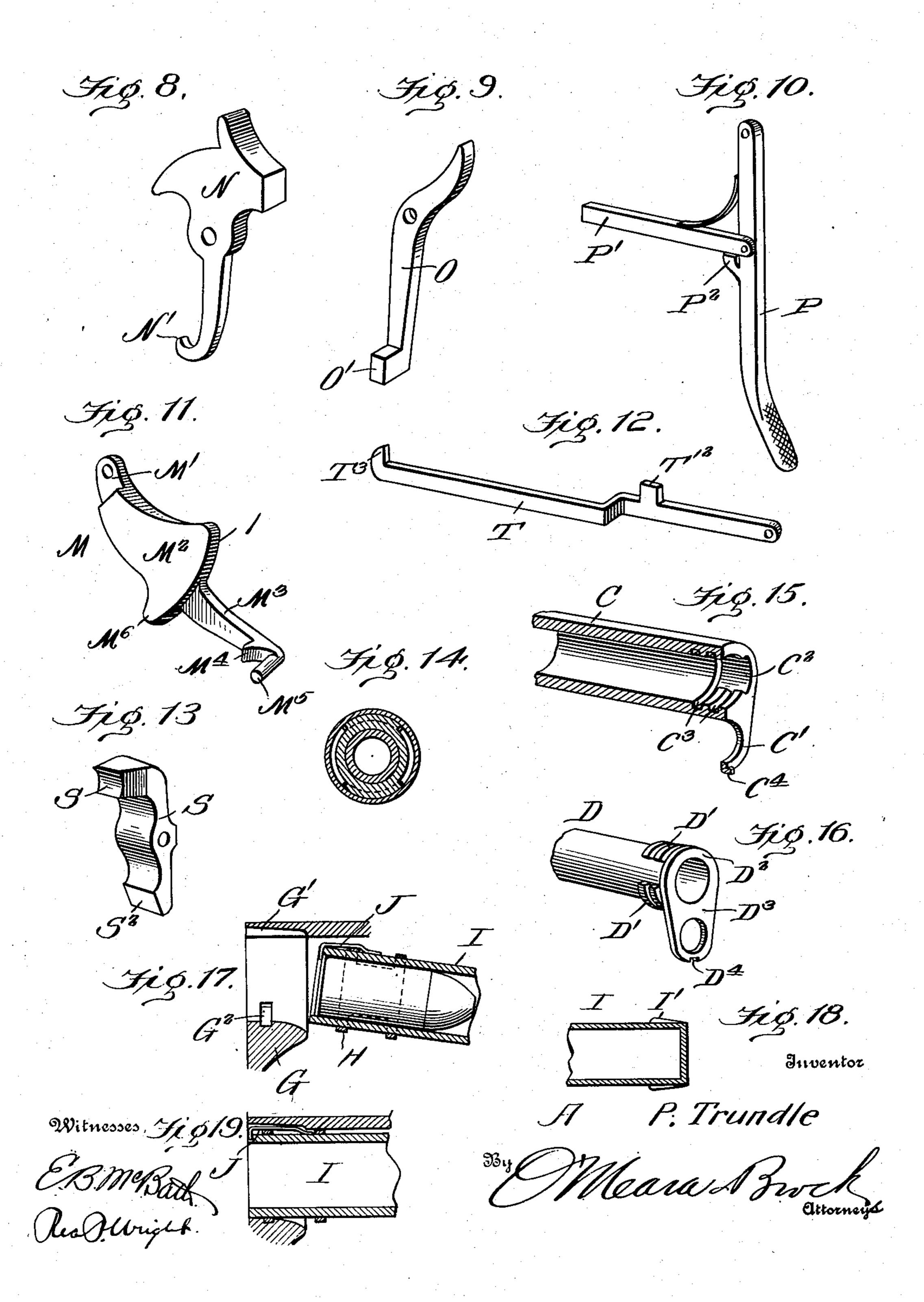
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UNITED STATES PATENT OFFICE.

ALGERNON PORTER TRUNDLE, OF PERRYVILLE, ARKANSAS.

AUTOMATIC MAGAZINE-PISTOL.

No. 908,521.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed January 15, 1907. Serial No. 352,486.

To all whom it may concern:

Be it known that I, Algernon Porter Trundle, a citizen of the United States, residing at Perryville, in the county of Perry and State of Arkansas, have invented a new and useful Improvement in an Automatic Magazine-Pistol, of which the following is a specification.

This invention relates to pistols and more particularly to automatic magazine pistols, the object being to provide a pistol in which the introducing of a cartridge, cocking of the pistol and extraction of the empty shell are accomplished automatically by the force of the bullet passing through the barrel.

Another object of my invention is to provide the pistol with a spring actuated sliding barrel to which the lever for operating the mechanism of the pistol is connected.

Another object of my invention is to provide the pistol with a magazine tube so constructed that the cartridge will be securely held in place, while being fired and one which will release the same after it has been attached to the pistol.

Another object of my invention is to provide a positive lock for the sear so that it cannot be moved when the carrier block is in its raised position.

A still further object is to provide means for locking the carrier block in its lowered position.

Another object of my invention is to provide the pistol with a cartridge stop so that the cartridge on the carrier-block will be held in alinement with the barrel so that it will be guided therein.

With these objects in view, the invention consists in the novel features of construction, combination and arrangement of parts, hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is a side elevational view of my improved pistol. Fig. 2 is a longitudinal sectional view of the pistol. Fig. 3 is an enlarged sectional view of the pistol showing the outer end of the barrel and magazine tube broken away. Fig. 4 is a similar view showing the barrel carried forward and the carrier-block moved upwardly in position for the barrel to receive the cartridge. Fig. 5 is a similar view of the pistol showing the barrel forced back and the cartridge in position to be fired. Fig. 6 is a horizontal sectional view of a portion of the pistol showing

the shell in position to receive the barrel. Fig. 7 is a section taken on line 7—7 of Fig. 4. Fig. 8 is a perspective view of the hammer detached. Fig. 9 is a perspective view of the 60 sear detached. Fig. 10 is a perspective view of the trigger detached. Fig. 11 is a perspective view of the operating lever detached. Fig. 12 is a perspective view of the locking lever. Fig. 13 is a perspective view 65 of the cartridge stop. Fig. 14 is a section through the barrel. Fig. 15 is a longitudinal sectional view of a portion of the outer casing of the barrel. Fig. 16 is a perspective view of a portion of the inner casing of the barrel. 70 Fig. 17 is a longitudinal sectional view of the frame and magazine tube showing a cartridge arranged in the tube. Fig. 18 is a longitudinal sectional view of the end portion of the magazine tube. Fig. 19 is a sectional 75 view of a portion of the frame and magazine tube showing the end of the tube arranged therein, and Fig. 20 is a detail sectional view showing the extractor.

Referring to the drawings A indicates the 80 frame of the pistol which is provided with a grip B and a forwardly projecting cylinder C at its upper edge having a depending flange C' at its outer end provided with an opening.

Interiorly oppositely disposed longitudinal grooves C² are formed in the cylinder adjacent its end, connected together by spaced
grooves C³ in which the spaced oppositely
disposed ribs D' of a smaller and shorter cylinder D, are adapted to fit and securely lock 90
the two cylinders together. A flange D² is
formed on the end of the cylinder D provided with a depending portion D³ having an
opening formed therein, adapted to register
with the opening in the depending flange C'. 95
The lower edge of the depending portion D³
is provided with a notch D⁴ adapted to fit
over a lug C⁴ on the depending flange C' of
the cylinder C.

A barrel F having a beveled inner end is 100 arranged in the inner end of the cylinder C and is provided with a reduced portion F' which extends out through the cylinder D. A coilspring D⁵ surrounds the reduced portion F' of the barrel, one end bearing against the 105 shoulder formed by the reduced portion and the other end bearing against the shoulder D⁶ formed by reducing a portion of the inner end of the cylinder D, adapted to force the barrel backwardly after it has been carried 110 forwardly by the bullet. The barrel is also reduced, adjacent its inner end forming a

shoulder F' which is adapted to engage the end of the cylinder D and limit the forward movement of the barrel. A groove F⁸ is formed in the under side of the barrel adja-5 cent its inner end in which a lug C5, formed on the interior of the cylinder C adjacent the frame, is adapted to work, for preventing the barrel from turning in the cylinder by the twisting of the bullet carried by the rifle.

A collar G projects out from the frame under the tube C, having an inclined lower edge and provided with a longitudinal tapering groove G' in its upper side and a transverse groove G' in its lower side in which a band H 15 slidably mounted on the end of a magazine tube I, having oppositely disposed cut-out portions, is adapted to fit when the tube is shoved in the collar. A flat spring catch J is secured to the tube and extends out over the 20 forward portion of the band adapted to engage the cartridge in the tube and hold them in place. It will be readily seen as the tube is shoved forward the band will be pulled towards the end of the tube, which will force the 25 spring catch up into the longitudinal groove of the collar and out of engagement with the cartridges in the tube and allow the cartridges to be shoved out of the tube by a follower K' carried by a coil-spring K and in the 30 outer end of the magazine tube into the frame as will be hereinafter fully described.

One side of the frame is provided with a removable plate A' which is secured thereto by a bolt A⁵ so that it can be readily removed 35 so that the works can be repaired, when desired. A slot A³ is formed in the plate adjacent its upper end through which extends a machine screw L, which is secured in a threaded bar formed in a cut-out portion of 40 the end of the barrel and on which is mounted the reduced apertured end M' of a lever M which is provided with an enlarged curved portion M² having an arm M³ projecting therefrom which is provided with a lug M4 45 adjacent its end and a pin M⁵ at its end adapted to fit over and rest on the curved hook N' of a spring actuated hammer N which is mounted on a bolt N2 in the forward end and works in a slot formed in the upper 50 edge of the frame. The hammer is provided with a shoulder having the usual notch in which the pointed end of the spring actuated sear O is adapted to catch when the hammer is shoved backwardly by the lever. The 55 lower end of the sear O is provided with a shoulder O' adapted to be engaged by a spring-actuated pivoted arm P' mounted on a spring actuated trigger P above the lug P2 which trigger is pivotally mounted at its up-60 per end in apertured ears formed on a wall A4 of the frame, and extends out through a slot

frame over the same. The lug M4 of the arm M3 is adapted to en-65 gage the upper end of a pivoted pawl Q

in the frame having a guard A5 secured to the

mounted on the wall A' of the frame when carried forwardly by the barrel and throws the pawl out of a notch formed in the end of a carrier block R having a grooved upper face provided with a beveled forward edge and 70 which is provided with spaced bores in its under side, in which are secured tubes R' in which work pins R² secured to the bottom of the frame. The pins are surrounded by coilsprings R³ adapted to force the block up- 75 wardly so as to receive a cartridge from the magazine and carry the same up in alinement with the barrel. A slot is formed in the side of the frame in which is mounted a spring actuated cartridge stop S having a grooved 80 upper angled end S' having a beveled edge which is adapted to be forced into engagement with the cartridge by the inclined shoulder R4 of the carrier coming into engagement with the beveled lower end S2 of 85 the stop so that cartridges will be held in alinement with the barrel so that when the barrel is forced backwardly by the spring after being fired, the cartridge will be guided into the same.

As the barrel is moved backwardly the point Mo of the enlargement of the lever M is brought into engagement with the inclined shoulder of the carrier-block which will press the block downwardly into alinement with 95 the magazine tube, so as to receive another cartridge. Mounted under the carrier block on a post T', secured to the bottom of the frame, is the apertured end of a spring actuated lever T having a hooked end T³ and an 100 upwardly projecting lug T2 which is adapted to be engaged by the carrier-block for throwing the hooked end T³ out of engagement with the sear so that the trigger can force the sear out of engagement with the hammer. 105 The lever is normally adapted to engage the sear and prevent the same from being moved by the trigger when the block is forced upwardly. A spring actuated firing pin U is arranged in the breech-block V of the frame 110 adapted to be forced into engagement with the cartridge in the barrel by the hammer, when the trigger is pulled which will force the sear backwardly out of engagement with the notch of the hammer. A spring extrac- 115 tor W is mounted in the breech-block of the frame, adapted to engage the rim of the shell of the cartridge when the barrel is moved forward by the bullet and hold it up against the breech-block so that when the carrier- 120 block is moved upwardly, the cartridge thereon will strike the shell and throw it out of an opening in the top of the frame.

The operation of the pistol is as follows:— The magazine tube is filled with cartridges 125 and placed in the collar of the frame and pulled forward so as to release the cartridges, so that the follower will force a cartridge on the carrier-block as the barrel is shoved forward which can be readily done by pressing 130

on the head of the machine-screw, working in the slot of the detachable plate. The carrier-block will be forced up and the cartridges held in alinement with the barrel by a stop, 5 at the same time the lever will be carried forward by the barrel which will pull the hammer back so as to engage the sear which is locked by the lever. Now, by releasing the barrel, the spring will force the barrel back, 10 the point of the lever being brought into en-

gagement with the carrier-block so as to depress the block which will release the locking lever and allow the trigger to trip the sear out of the notch of the hammer, which will 15 be forced against the firing pin and explode the cartridges. The balls passing through the barrel will carry it forward and operate the mechanism as desired, so that all it is necessary to do, is to pull the trigger and the 20 cartridge will be fed into the barrel and exploded and the empty shells thrown out.

Having thus fully described my invention, what I claim as new and desire to secure by

Letters Patent is:

1. In a pistol, the combination with the hammer, sear and carrier-block, of a reciprocating barrel, a lever carried by the barrel for operating said hammer and carrier-block, and a sear locking lever operated by the car-30 rier block.

2. In an automatic fire arm, the combination with a sliding barrel operated by the force of the bullet, of a hammer and carrier block, means for locking said carrier-block, 35 and a lever carried by said barrel for operating said hammer, carrier-block and locking means.

3. In an automatic fire arm, the combination with a sliding barrel, of a hammer and carrier-block, a pivoted pawl for locking said carrier-block and a lever carried by said barrel for operating said hammer, carrier-block

and pawl.

4. In an automatic fire arm, the combina-45 tion with a sliding barrel, of a hammer, sear and carrier-block, a pawl for locking said carrier-block, a lever carried by the barrel for operating said hammer and carrier-block and a sear locking lever operated by said carrier-50 block.

5. In an automatic fire arm, the combination with a sliding barrel, of a hammer and carrier-block, said carrier-block being provided with an inclined shoulder, and a lever 55 carried by said barrel adapted to engage said shoulder on its backward movement and to operate said hammer on its forward movement for the purpose described.

6. In an automatic fire arm, the combina-60 tion with a sliding barrel, of a hammer, and a spring actuated carrier-block, a lever pivotally connected to said barrel adapted to engage said hammer and carrier-block for cocking said hammer, and depressing said carrier

65 block.

7. In an automatic fire arm, the combination with a sliding barrel, of a hammer provided with a hook, a spring actuated carrierblock having an inclined shoulder and a lever carried by the barrel provided with a pin fit- 70 ting in the hook of the hammer and with an enlarged portion adapted to engage the inclined shoulder of the carrier-block.

8. In an automatic fire arm, the combination with a sliding barrel, of a hammer, sear 75 and spring actuated carrier-block, a lever carried by said barrel for operating said hammer and depressing said carrier-block, and a sear locking lever operated by said carrier-

block.

9. In a fire-arm, the combination with a frame provided with a cylinder, of a barrel slidably mounted in said cylinder, a carrierblock and a hammer mounted on said frame, means for locking said carrier-block and 85 means carried by the barrel for operating said block, locking means and hammer, for the purpose described.

10. In a fire arm, the combination with a frame provided with a cylinder, of a spring 90 actuated barrel slidably mounted in said cylinder, a hammer and carrier-block mounted in said frame, a pawl for locking said block, and a lever carried by the barrel for operating said hammer, pawl and carrier-block, for 95

the purpose described.

11. In a fire arm, the combination with a frame provided with a cylinder, of a barrel slidably mounted in said cylinder, a magazine tube connected to said frame, a spring 100 actuated carrier-block and hammer, a pawl for locking said carrier-block and a lever carried by the barrel for operating said hammer and pawl and for depressing said carrier-block.

12. In an automatic fire arm, the combination with a frame provided with a cylinder, of a reciprocating barrel mounted in said cylinder, a magazine tube detachably connected to said frame, firing mechanism mounted in 110 said frame, a sear, a carrier-block mounted in said frame, a locking lever operated by said carrier block engaging said sear, and a lever carried by the barrel for operating said mechanism and carrier-block, for the purpose de- 115 scribed.

13. In a pistol, the combination with the frame having a breech-block provided with a firing pin, a hammer mounted in said frame, a sear, a reciprocating barrel mounted in 120 said frame adapted to operate said hammer, a locking lever adapted to engage said sear and a carrier-block adapted to engage said lever, for the purpose described.

14. In an automatic fire arm, the combi- 125 nation with a sliding barrel, of a hammer and carrier-block, a lever carried by the barrel for operating said hammer and carrierblock and a cartridge stop operated by said carrier-block.

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15. In an automatic fire-arm, provided with a firing pin, hammer and sear, of a reciprocating barrel, a carrier block, a magazine tube, a sear lock operated by the carrier-5 block, and a lever carried by the barrel for operating said hammer and carrier-block, for

the purpose described.

16. In an automatic pistol provided with a firing pin, a hammer, sear and trigger 10 mounted in said pistol, a magazine tube connected to said pistol, a spring actuated carrier block arranged in said pistol, a pawl for locking said block, and a reciprocating barrel provided with a lever for operating 15 said hammer, pawl and carrier-block, for the

purpose described.

17. In an automatic fire arm, the combination with a frame provided with a breechblock and a cylinder, a spring actuated re-20 ciprocating barrel mounted in said cylinder, a hammer and sear mounted in said frame, a trigger mounted in said frame provided with

a spring actuated arm, a carrier-block working in said frame, a locking lever adapted to engage said sear, and a lever carried by the 25 barrel for cocking said hammer and releasing

said sear, for the purpose described.

18. In an automatic fire-arm, the combination with the frame provided with a breechblock having a spring actuated firing pin, of a 30 hammer, sear and trigger mounted in said frame, a magazine tube connected to said frame, a spring actuated carrier-block arranged in said frame, a reciprocating barrel mounted in a cylinder formed on the frame, a 35 lever carried by the barrel for operating said hammer and carrier-block, and a sear locking lever adapted to be released by the carrier-block, for the purpose described.

ALGERNON PORTER TRUNDLE.

Witnesses:

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