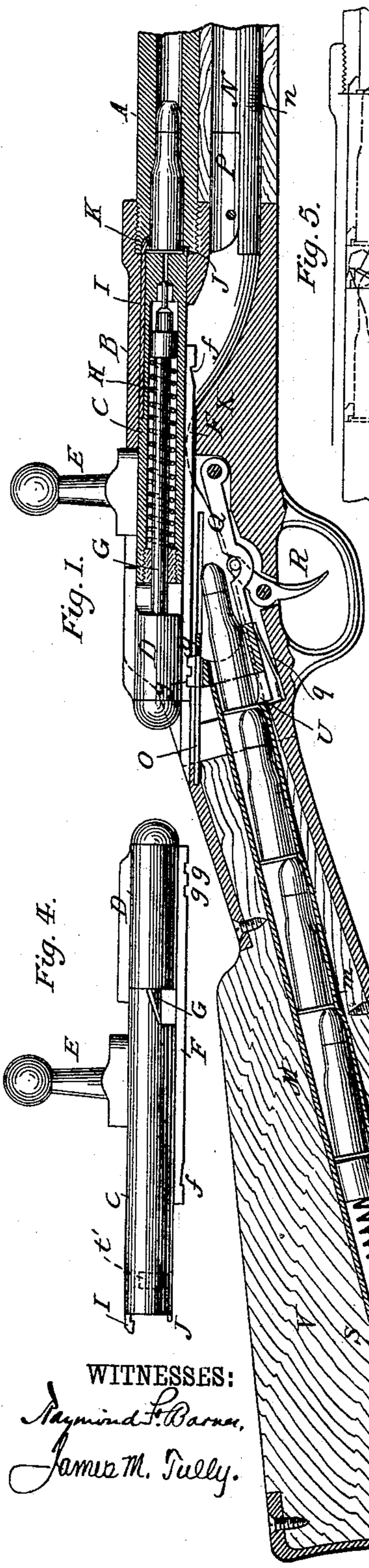
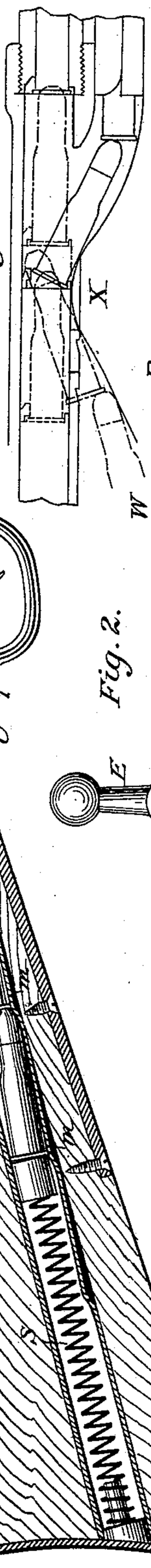
(No Model.)

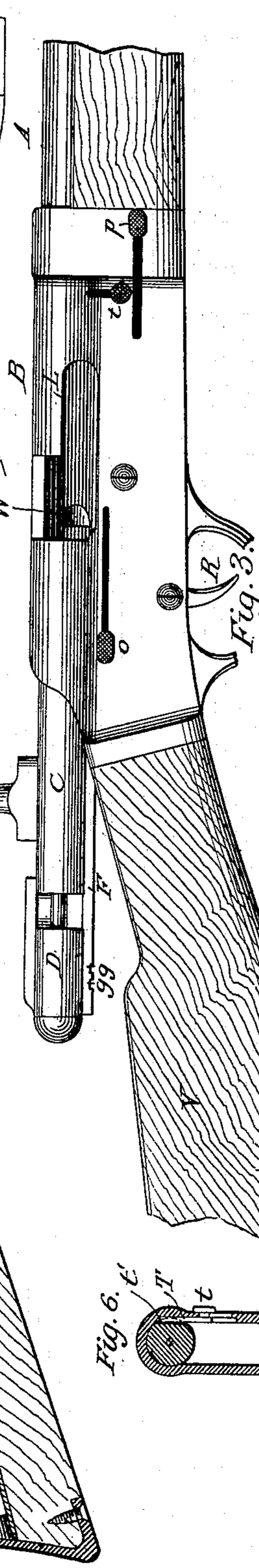
C. P. N. WEATHERBY.

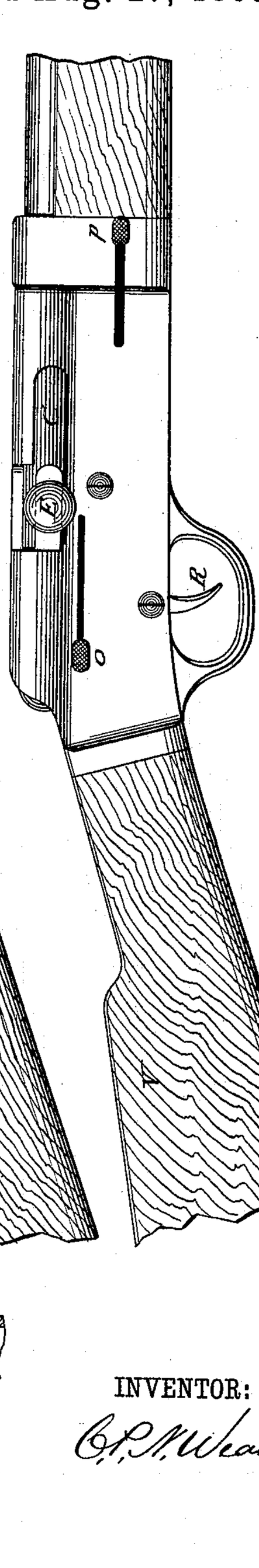
MAGAZINE FIRE ARM.

No. 409,889. Patented Aug. 27, 1889.









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UNITED STATES PATENT OFFICE.

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MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 409,889, dated August 27, 1889.

Application filed October 24, 1887. Serial No. 253,173. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PIERRE NEWTON WEATHERBY, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Magazine Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The said improvements relate, first, to the magazines, two of which are employed, one being located in the butt-stock and the other under the barrel. Each magazine is provided with a cut-off, so that cartridges may be taken from the magazines alternately or all may be taken from one before any are taken from the other magazine, and when both magazines are closed the gun may be used as an ordinary breech-loader; second, to the magazine-tubes which are formed with wave-corrugations on the bottom or side, so that the point of one bullet cannot strike against the primer of the next preceding cartridge; third, to a double irregular immovable incline, by which the cartridges from the front and rear magazines are guided in their transfer to the barrel; fourth, to the loading and extracting device, which consists of a bolt formed with a lip and a solid extracting-hook, by which means the cartridges from either magazine are held and forced into the barrel and the shells withdrawn; fifth, to the device for locking the bolt, and, sixth, to the construction of the trigger.

In the accompanying drawings, forming a part of this specification, Figure 1 is a longitudinal section of a fire-arm. Fig. 2 is a side elevation with the bolt drawn back. Fig. 3 is a side elevation with the bolt pushed in and locked. Fig. 4 is a detailed view of the bolt. Fig. 5 is a diagram showing the different positions taken by the cartridge in loading from the front and rear magazines. Fig. 6 is a detail of the lock for holding the bolt from turning to side or dropping from the rear.

A is the barrel; B, the breech-piece; C, the front part of the bolt; D, the rear part of the bolt; E, the bolt-lever; F, the bolt-fin; *f*, the notch in the end of the fin for holding the bolt. *g g* are the cocking-notches; G, the firing-pin; *t t*, spring on firing-pin; I, the extractor; J, a lip on the bolt; K, an inclined recess in the chamber; L, a space through which cartridges are loaded and shells extracted; M, the rear magazine; N, the front magazine; *m*, corrugations in the rear magazine; O, a slide for closing the rear magazine; P, a slide for closing the front magazine; *o*, a push-button on rear-magazine slide; *p*, a push-button on front-magazine slide. Q is the sear; *q*, sear-spring; R, the trigger; S, the magazine-spring; X, the double irregular incline; T, a slide for locking bolt; *s*, a push-button for operating slide T; *t'*, a recess in side of bolt to receive locking-slide T; N, a catch on end of sear for holding cartridges in the rear magazine. V is the stock of the fire-arm; W, a recess into which the cartridge falls when being ejected.

The two magazines M N are located in front and rear of the irregular incline X. These magazines are provided with cut-off slides O P, operated by push-buttons *o p*. These buttons, as shown, are operated separately by hand; but they may be made to operate automatically in such a manner that one will be closed while the other is opened. The cartridges are forced forward by spiral spring S when the slide O or P is opened. The rear-magazine tube is formed with wave-corrugations *m*, as shown, for the purpose of preventing the bullet-point of one cartridge striking against the primer in the next preceding cartridge. By this construction the form of the cartridge is preserved and the danger of accidental discharge is avoided. The front-magazine tube may also be provided with similar corrugations.

The double incline X is formed of an irregular shape, as shown, for the purpose of guiding the cartridge as it is forced from the magazine. It will be observed that the two sides are of different shape. This variation is necessary in order to bring the rim of the cartridge into proper contact with the extracting-hook.

The bolt is constructed in two parts C D. The front part C is provided with a solid beveled extracting-hook I, which, in connection

with the lip J, formed on or secured to the bolt, seizes hold of the cartridge that has been forced up the irregular incline by the magazine-spring. The extractor is so beveled as to conform to the beveled recess K, formed in the chamber of the barrel, so as to solidly press the extracting-hook on the rim of the cartridge-shell.

The locking-piece T fits into a recess t' on the side of the bolt, to prevent the same from turning or dropping out when the gun is used for drilling purposes. This locking of the bolt prevents accidental discharge and the emptying of the chamber.

The trigger R is formed with a solid ring in one end, through which the cartridges pass into and out of the rear magazine.

The magazines are filled from the same aperture L, and the cartridges are retained in the rear magazine by a catch W on end of sear Q, and in the front magazine by lip J on part C of the bolt. When filled, the two magazines are closed by means of slides O P, and the gun may then be used as an ordinary breech-loader until it is desired to use it as a repeater. Then the slides may be opened to fire alternately or to fire all from one magazine. The front or rear magazine being opened, a cartridge is forced up the front or rear part of the irregular incline and under the extracting-hook and drawn or pushed into position by the bolt to enter the chamber, and being forced home the bolt is turned down and the sear released and the cartridge discharged. The sear Q is released only when bolt-lever E is turned down. The bolt-lever is then turned up and the gun is cocked by the same movement, and thus the point of the firing-pin is removed from the primer of the exploded cartridge. The bolt being now forced back extracts the shell, said extraction being made certain by the pressure of the beveled extracting-hook into the beveled recess in the chamber.

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

1. A sear pivoted at one end and provided with a ring through which cartridges pass to and from the magazine in the stock of the fire-arm, a detent extending from the under side and rear of said ring for arresting the succeeding cartridges while the preceding one is being discharged and its shell extracted, and the top of said ring being adapted to engage in cocking-notches in the under side of the bolt-pin, said gear and its actuating parts being made in one solid piece.

2. The combination of a combined sear and ring through which cartridges pass to and from the magazine in the stock of a fire-arm, a detent projecting from the rear and under side of said ring for arresting the movement of the succeeding cartridges in the magazine until the preceding one is discharged and its shell extracted, the top of said ring being adapted to engage in cocking-notches in the under side of the bolt-pin, with an independent trigger, which, by its independent action, permits the detent in the rear of the ring to positively obstruct the forward movement of the cartridges until relieved by said trigger.

3. In the herein-described magazine fire-arm, the combination of the magazine in the stock of said fire-arm, and the actuating-spring therein, with a sear and ring through which the cartridges pass to and from said magazine, the extension or detent on the rear of said ring for arresting the forward movement of the cartridge while each preceding one is being discharged from the fire-arm, the top of said ring being adapted to engage in cocking-notches in the under side of the bolt-pin, and the independent trigger engaging and operating said sear.

4. In combination with a fire-arm, a magazine extending from the butt to the muzzle thereof, and being provided with an actuating-spring in the extreme ends, while the central portion of the magazine terminates in the double inclined plane, the apex of which terminates beneath and within the plane of the under side of the reciprocating breech-bolt, whereby the cartridges from either magazine can be forced by their respective springs up the inclines when the breech-bolt is retracted in alignment with the bore of the barrel of said fire-arm.

5. In combination with a double magazine the entire length of the fire-arm, provided with actuating-springs in the extreme ends, while the inner ends terminate by means of a double incline in an aligning cartridge-chamber, through which the breech-bolt reciprocates, the two slide-plates which, when in position, arrest alternatingly the forward and backward movement of the cartridges in their respective magazines at the will of the operator while the fire-arm is being discharged.

6. In a magazine fire-arm, the combination of a front and rear cartridge-magazine having terminal inclined planes terminating in an apex in the plane of the aligning chamber and beneath and within the plane of the under side of the reciprocating breech-bolt, the detent-slides for opening and closing alternately the ingress to said aligning chamber, whereby the cartridges can be forced alternately from their respective magazines up their respective inclines into the aligning chamber and forced by the breech-bolt into the bore of the barrel, thereby equalizing the diminishing weight of said magazine fire-arm while in use.

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Witnesses:

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