(No Model.) 2 Sheets—Sheet 1.

A. BURGESS.

MAGAZINE FIRE ARM

No. 290,393. Patented Dec. 18, 1883.

Fig: 1.

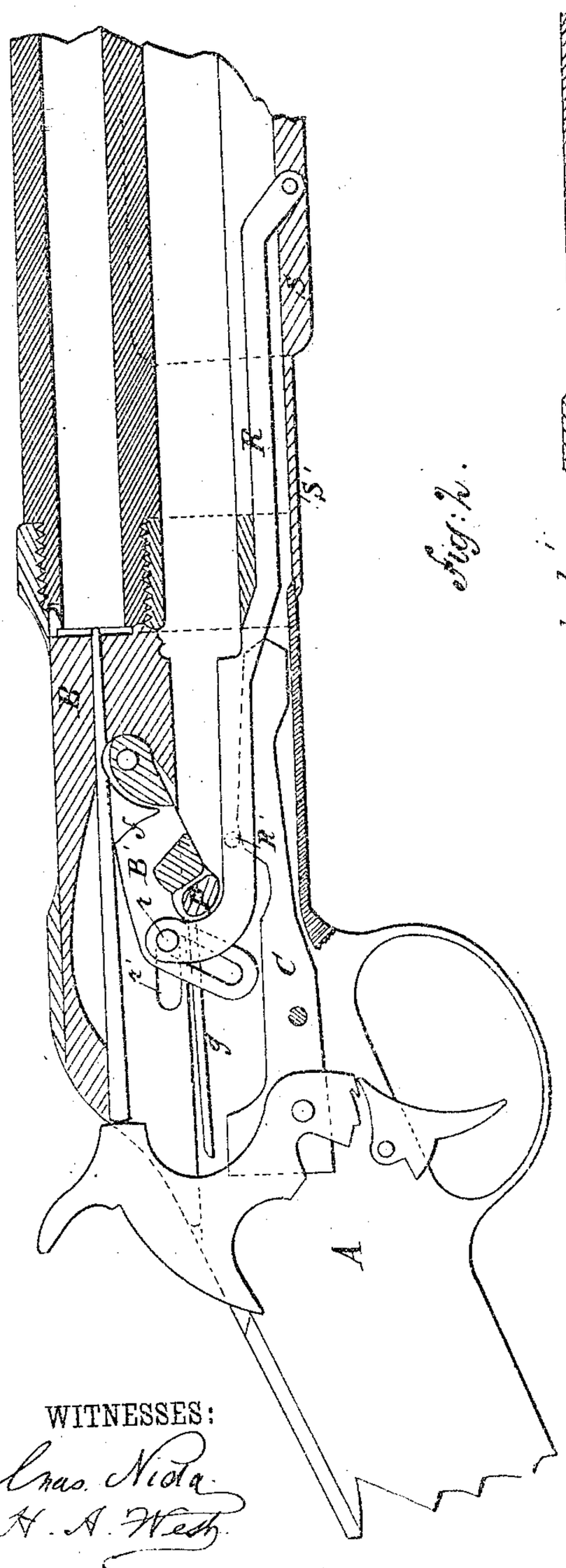
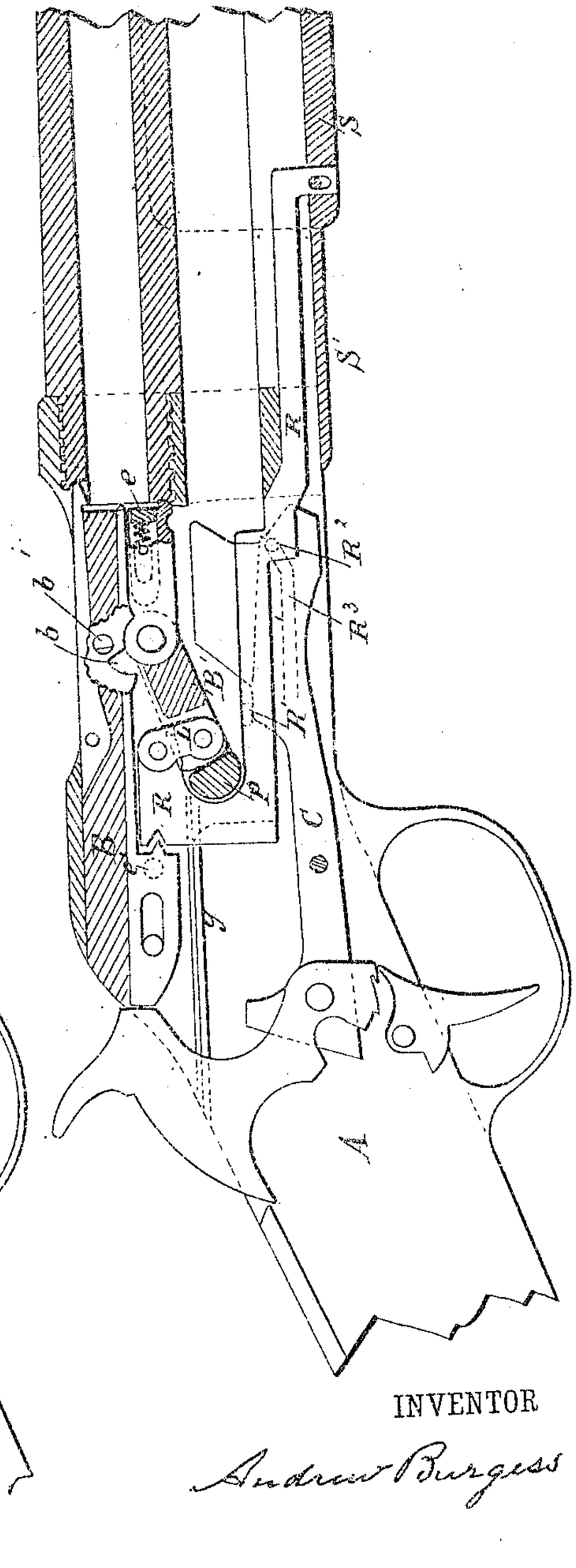


Fig: 2.



WITNESSES:

Chas. Nichols

N. A. Wesh.

INVENTOR

Andrew Burgess

(No Model.) 2 Sheets—Sheet 2

A. BURGESS.

MAGAZINE FIRE ARM.

No. 290,393. Patented Dec. 18, 1883.

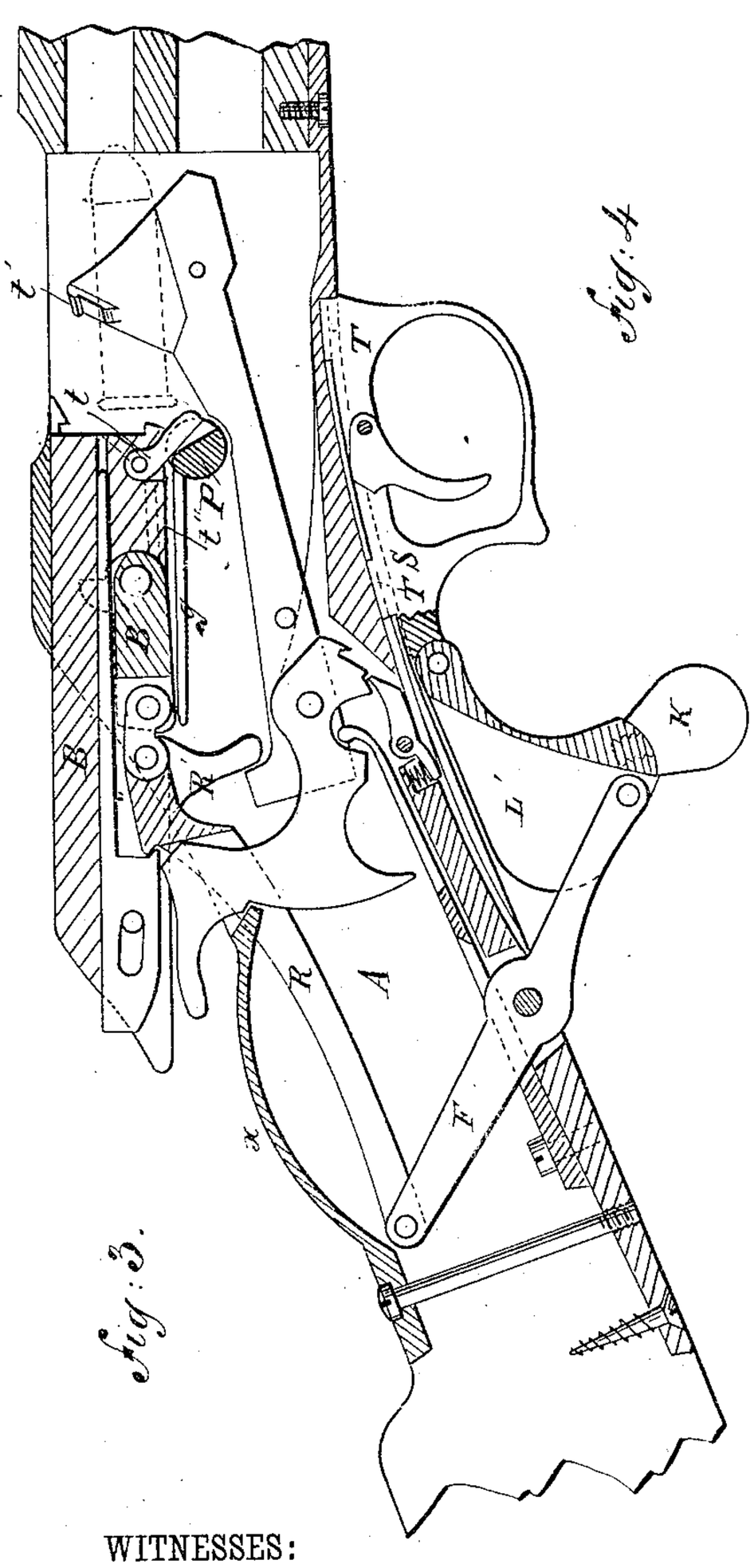


Fig. 3.

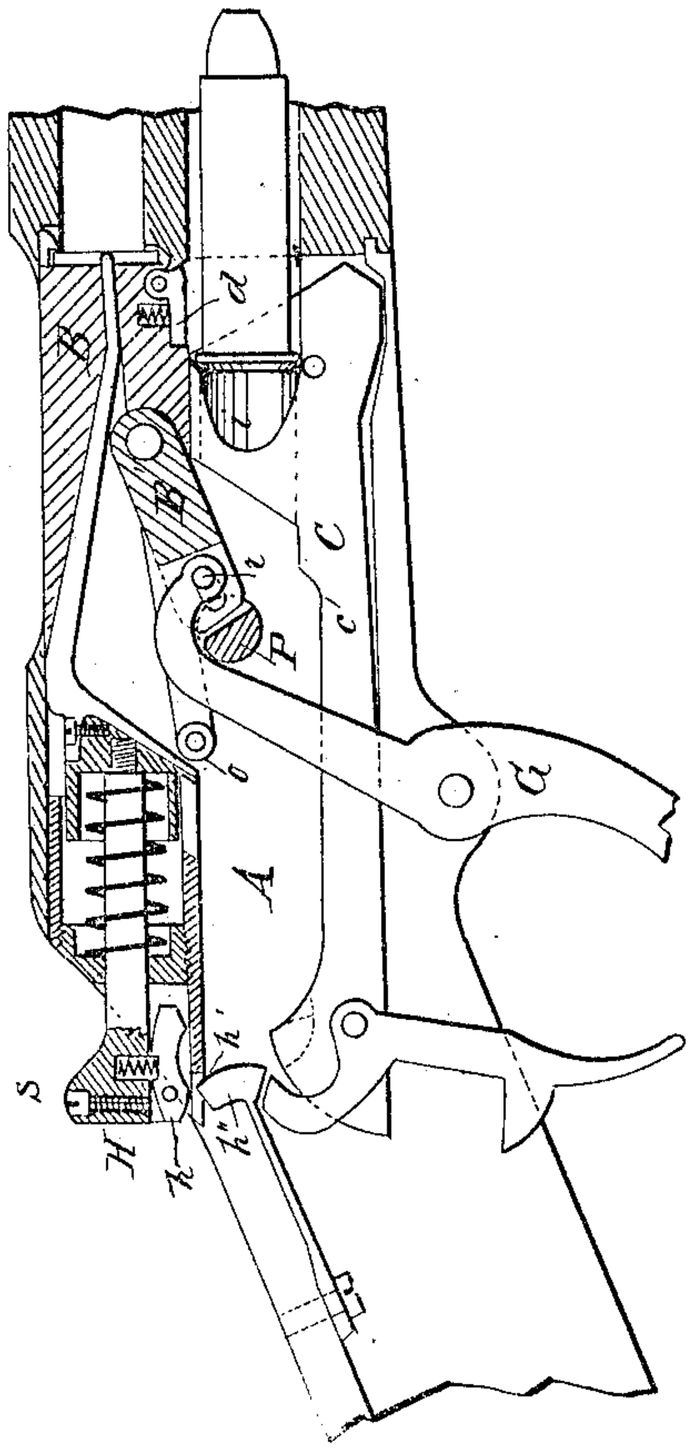


Fig. 4.

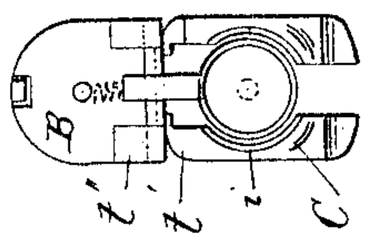


Fig. 5.

WITNESSES:

Chas. Nida.
H. A. West.

INVENTOR

Andrew Burgess

UNITED STATES PATENT OFFICE.

ANDREW BURGESS, OF OWEGO, NEW YORK.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 290,393, dated December 18, 1883.

Application filed July 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, ANDREW BURGESS, a citizen of the United States, residing at Owego, in the county of Tioga and State of New York, have invented certain new and useful Improvements in Magazine-Guns, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to magazine fire-arms; and it consists in certain details of construction and combinations of parts hereinafter more fully set forth.

The object of my invention is to produce a gun of simple construction, which may be easily operated, and of superior strength.

Figure 1 is a longitudinal section of the breech mechanism of a magazine-gun, showing some features of my invention. Fig. 2 is a similar view, showing other features of invention. Fig. 3 is a similar view, showing additional features of my invention. Fig. 4 is a modification, in which the working parts are operated by the ordinary guard-lever. Fig. 5 is a cross-section, showing face of a bolt and carrier.

Similar letters of reference indicate corresponding parts.

The brace B′ is here operated by a hand-piece, S, below the barrel, and which connects with the brace by means of a rod, R, which, passing between the sides of the carrier, engages by a pin, *r*, a diagonal slot in said brace. The pin *r* is guided to move longitudinally with the bolt by projecting into the slot *r′* in said bolt. The brace B′ is held up in the bolt by guide *g*, which is formed in the frame to hold the swinging end of the brace up in the bolt after it leaves the pin P, and the firing-pin is withdrawn by the brace swinging up and coming back against its projection *f*. The rod R works in a slotted opening in the fore-arm, which is closed by the extension S′ of the slide S, which moves over and covers the said slot on the outside of said fore-arm and frame.

Fig. 2 shows a modification of Fig. 1, with additional parts. The brace B′ locks the bolt in the same manner against the pin P; but in lieu of the diagonal slot, I connect the rod R to the brace by the link L, and engage the firing-pin by the rod R, to withdraw said pin. The brace B′ is provided with a projection, *b*, which, as the brace is raised to unlock the breech, engages a projection, *b′*, in the frame to start back the bolt. The ejector *e* consists of a slotted and hollow spring-pin set diagonally in the face of the bolt, which is stopped positively by the pin *e′* in the frame when the bolt reaches near its rearward limit. The carrier is raised by the projection R′ on the reciprocating rod R, said projection also forcing the carrier down when in its forward position. The rod R is also provided with a projection, R″, to engage in a groove, R‴, inside of the split carrier to force the sides of the carrier apart to admit a cartridge, and also to raise the carrier a little, as the rod recedes, to stop the magazine. The rod R is attached to the hand-slide S by a pin, and is slotted to allow said slide to follow the bottom of a tapering fore-arm. The rod R is guided longitudinally in the frame by engaging the guide *g*, or by attachment to the firing-pin.

Fig. 3 shows another modification, in which the brace B′ is operated by a similar rod, R, and link; but this rod extends rearward and is split to pass the hammer. The rear of rod R is attached to a lever, F, whose fulcrum is in the frame, its other end being attached to a reciprocating slide, S, below the frame. I here show the trigger-guard as said slide, and attached to the lever by the link L′; but the slide may be independent of the guard, and the lever may be attached to the slide by a pin and slot or other means. The slide may be attached direct to the rod R; but I prefer to use the lever to reverse the movement, so that the operator may fire the piece as he pulls the slide rearward, and I here arrange the sliding trigger so it can only reach the sear when the slide has been pulled fully back and the breech thereby closed. The slide S has T projecting guides T T, which run in corresponding grooves in the guard-strap. I fix a removable knob K, on the slide to be used when a better hand-hold is required.

In Fig. 3 I also show a lever, *t*, hung in the face of the bolt, which stops the cartridge in the magazine when the breech is closed, and which, striking the pin P when the breech is

opened, is thrown forward to start the cartridge into the chamber as it rises on the carrier, as shown in dotted lines in same figure. The projections t', extending inside the ears of the carrier, serve to expel the extracted shell as the carrier rises, and the face and sides of the bolt have grooves t'' for said projections t' to enter as the bolt closes. The upper tang has a raised portion, x, to cover the upper end of the lever F.

Fig. 4 shows a further modification, in which I operate the brace B′ by a guard-lever, G, and arrange the lock in the bolt of the gun. The brace B′ is hung in the bolt, as before, to lock it against the pin P. The brace is split vertically at its rear to admit the end of the lever G and the roller o, and the hole in the brace for the pin r is slightly slotted to allow the lever to raise the brace. As the brace rises, the roller o, engaging the inclined face f of the firing-pin, (which is fixed in the hammer or thumb-piece H,) forces it back until the dog or sear h falls behind the notch h' to cock the piece, by which time the brace will have risen above the locking-pin and the bolt will be free to move rearward by force of the lever operating upon the brace B′, and will close by the same means upon the return movement of the lever, and the pull of the trigger will force up the spring-pin h'', as shown in Fig. 4, to raise sear h from its notch h' in the bolt to release the hammer. I furnish the thumb-piece H with a set-screw to regulate the engagement of the sear in its notch, and thereby regulate the force of the trigger-pull.

The sides of split carrier C are arranged to spring together and hold the cartridge forward by an interior inclined abutment, i, Fig. 4, when the breech is closed, and a spring-pawl, d, is hung in the bottom of the bolt, with a forward projection, d', to strike the frame when the bolt is closed, to retire its rear end into the bolt; but as soon as the bolt starts back the pawl springs down to engage the flange of the cartridge and force it back through the narrow inclined part i, and thereby spread open the carrier, as seen in Fig. 5, (which shows the face of bolt and carrier,) and pull the cartridge back with the bolt until the cartridge-flange falls down the depression e of the carrier, which releases it from the pawl and allows the bolt to move back from over it, and the pawl coming in contact with the inclined top of pin P rides over it.

The brace may be made to lock against the top of the frame by a reversal of parts similar to that shown in my application of the 12th of July, 1883, or the brace operated laterally to lock in the side of the frame, as in said application, by mechanism, as here shown, all within the frame.

The locking-shoulder shown consists of a pin, P, passing through the frame and held from turning by a spline or any ordinary means, and a part of said pin is cut away to present a greater bearing for the brace to lock against. When the pin P is removed, it leaves an opening through which the pin r may be inserted to couple the parts to the brace, or removed when taking the works apart.

It will be seen that I bend or curve the rod or lever that works the brace around the locking-pin. This may be avoided by making the locking-shoulder as a mere projection inside of one or both sides of the frame. This leaves the center open for the operating rod or lever to pass. For greater strength I prefer to make the locking-brace the full width of the bolt.

I do not herein claim all the mechanism shown in the drawings and described in the specification above, as parts of the device and modifications are described and claimed in two applications filed by me November 17, 1883.

What I do claim in this application is—

1. A reciprocating bolt, a locking-brace pivoted therein adapted to bear against an abutment in the frame, as described, a link pivoted to said locking-brace, a draw-rod connected to said link, and a reciprocating handle beneath the frame connected to said draw-rod, all the elements in combination, substantially as stated.

2. A reciprocating bolt, a locking-brace pivoted therein and adapted to bear against an abutment in the frame, as described, a link pivoted to said locking-brace, a draw-rod pivotally connected to said link and extending forward, and a sliding sleeve connected with the front portion of said draw-rod, all combined so that the reciprocation of the sleeve operates the bolt through the intermediate mechanism, substantially as described.

3. The combination, with a breech-bolt, its locking devices, and a reciprocating rod, R, of a slotted frame, through which said rod extends, the sleeve S connected thereto, as described, and the sleeve-extension S′, which covers said slot in the frame, all substantially as and for the purposes set forth.

4. The combination, with a reciprocating bolt, a locking-brace pivoted therein, a link connected to said brace, and operating mechanism, substantially as described, connected to the link, of a removable pin, as P, which extends through the frame and forms an abutment for the locking-brace, all substantially as stated.

5. The combination, with a reciprocating bolt and locking devices, substantially as described, of a longitudinally-reciprocating rod and handle, by which the bolt is manipulated, as set forth, a projection on the reciprocating rod, and a projection on the carrier to engage therewith, whereby the carrier may be raised by the backward movement of the reciprocating rod, substantially as described.

6. The combination, with a reciprocating handle beneath the gun and a rod connected thereto and to the bolt-locking mechanism, substantially as described, of projections on said rod and a slotted carrier engaging said

projections, as described, whereby the carrier is slightly moved to open or stop the magazine.

7. The combination, with a reciprocating bolt, of a lever pivoted therein near the front of the bolt and extending below the same, and a stop in the frame to engage said lever, whereby the lever stops the backward movement of the cartridge from the magazine until it reaches the stop, when it throws the lever forward to push the cartridge toward the chamber, as set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

ANDREW BURGESS.

Witnesses:
JOHN A. DAVIES,
CHAS. A. REED.