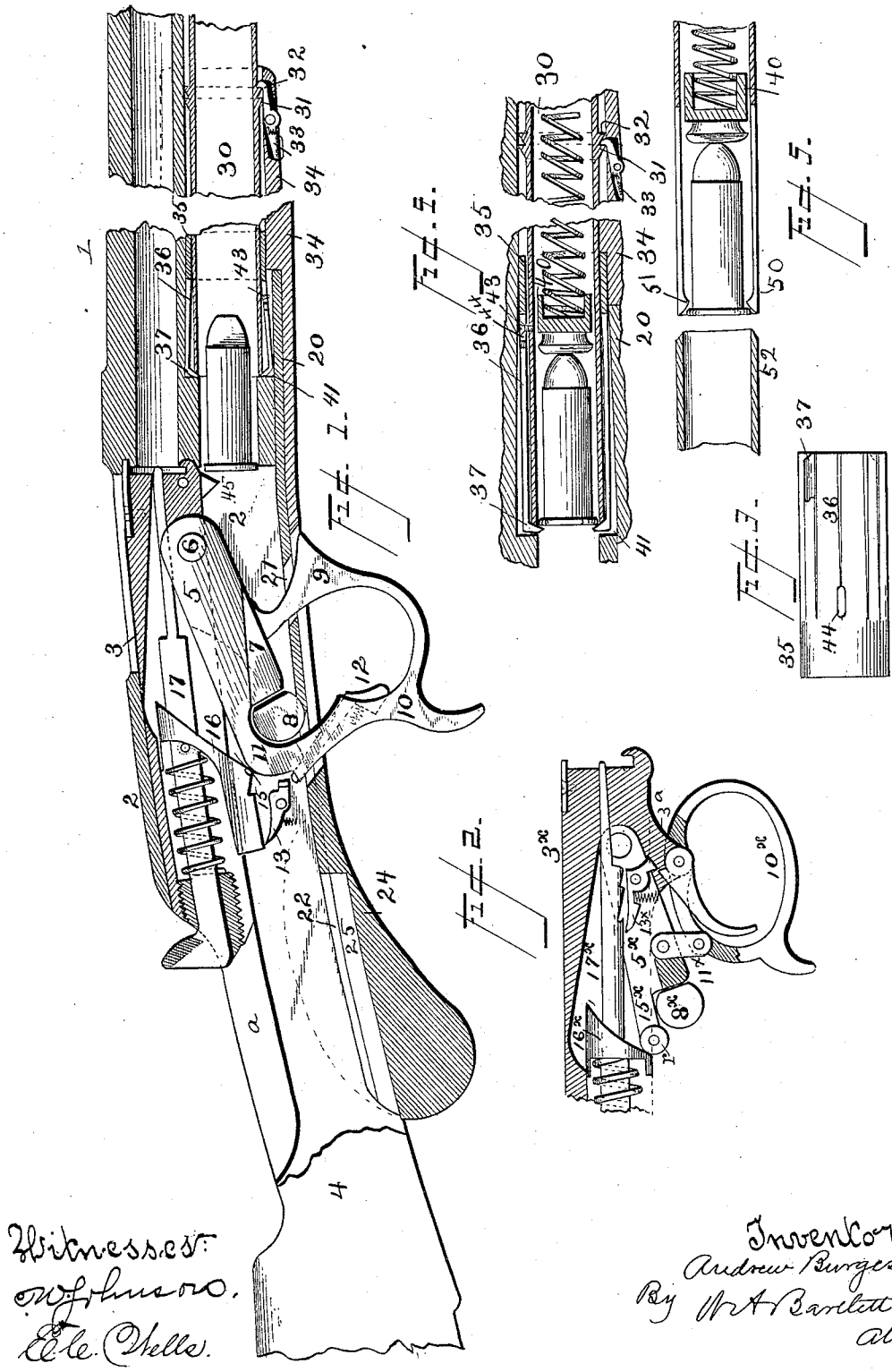
(No Model.)

A. BURGESS.

MAGAZINE FIREARM.

No. 589,117. Patented Aug. 31, 1897.



Witnesses:
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UNITED STATES PATENT OFFICE.

ANDREW BURGESS, OF BUFFALO, NEW YORK.

MAGAZINE-FIREARM.

SPECIFICATION forming part of Letters Patent No. 589,117, dated August 31, 1897.

Application filed February 25, 1892. Serial No. 422,784. (No model.)

To all whom it may concern:

Be it known that I, ANDREW BURGESS, residing at Buffalo, in the county of Erie 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.

This invention relates to magazine-firearms.

The object of the invention is to produce a magazine-gun in which the movement of the bolt and operating-handle may be in a slightly-curved direction in opening and closing the breech, also to improve the breech locking and unlocking mechanism, also to produce an improved detachable magazine and magazine-stop, also to improve in various particulars guns of the class described.

Figure 1 is a broken central longitudinal section of a magazine-gun of the character described, the carrier and some other parts omitted. Fig. 2 is a modification, in longitudinal section, of the bolt-locking brace and connections. Fig. 3 is an elevation of the split sleeve surrounding the magazine and forming the cartridge-detent. Fig. 4 is a detail longitudinal section of magazine-tube and connections. Fig. 5 is a modification of the magazine, showing the cartridge-retaining fingers integral with the magazine-tube.

The numeral 1 indicates the gun-barrel, of usual construction, connected to the shoe or receiver 2 in usual manner.

The receiver 2 is curved and has a curved way in which the curved bolt 3 travels. The stock 4 is connected to the shoe in the usual manner.

The locking-brace 5 is pivoted in the bolt, as on the transverse pin 6, and said brace has a shoulder 7, which bears against the abutment 8 in the frame or shoe. By preference there will be an abutment 8 at each side of the frame, with a slot or opening between, and a shoulder 7 at each side of the brace, but for light charges one abutment will serve.

The locking-brace has an extension 9, projecting down through a slot in the bottom of the frame, and this projection may be extended to form a trigger-guard and operating-handle, as at 10, Fig. 1. To give additional strength, the handle 10 may be connected to the brace at the rear of the abutment, extending over said abutment, as at 11, Fig. 1.

The trigger 12 is carried in the guard in such manner as to be in position to engage the sear 13 when the breech is closed. In unlocking the breech the point of the trigger swings the sear out of its way, the sear immediately returning to position.

The shoulder 15 of the locking-lever is in front of the cam-face 16, which face is rigid with the firing pin or hammer 17. A backward pull or lift on the handle 10 carries up the rear end of the brace 5, disengaging the brace from the abutments 8 and at the same time carrying back the firing pin or hammer. After the brace is released from the abutment a backward pull on the handle carries the brace and bolt backward, thus opening the gun-breech. The handle follows the curve of the under part of the frame, while the bolt follows a corresponding curve of the upper part.

The firing-pin is shown in Fig. 1 with a curve corresponding to that of the bolt; but this is not essential, as the pin may be straight.

To close the opening in the bottom of the frame or shoe, a slide-piece 20 is provided, said slide-piece having a mortise 21, through which the bar 9 of the handle passes. This slide 20 is not essential, as the slot in the bottom of the frame is narrow, but the plate is a desirable feature to exclude dirt. The slide-plate 20 may move in guide-grooves 22 in the frame.

The slide-plate 20 is shown as having a handle-piece 24 connected thereto, said handle-piece extending around the lower part of the small of the stock and forming a pistol-grip. When such a handpiece is used, it will be cut away, as indicated at 25, so that the handle may slide lengthwise of the frame.

The advantage of the curved construction of the bolt and frame is that for some persons it affords an easier movement than the straight longitudinal movement usual in my guns of this general character. The connec-

tion between the handle and bolt being direct the hand of the operator travels in approximately the same curve as the curve of the frame, and the bolt moving back in the depression *a* of the frame does not project above the body of the gun, as in other bolt constructions.

It is obvious that the top of the frame may be extended over the depression *a* to cover it by a simple change in construction.

In Fig. 2 the locking-brace $5^{\times}$ engages the abutment $8^{\times}$, as has been described, but the handle $10^{\times}$ is not integral with the brace. Said handle is pivotally connected to a projection 3^{a} from the lower part of the bolt $3^{\times}$. The rear end of the handle $10^{\times}$ is connected by a link $11^{\times}$ to the brace $5^{\times}$, and the lifting of the rear end of the handle $10^{\times}$ serves to unlock the bolt. The rear extension $15^{\times}$ of the brace has a roller *r*, which engages the cam-face $16^{\times}$ on the firing-pin to cam the same backward. In this modification the sear $13^{\times}$ is pivoted to the locking-brace. In both modifications the sear operates to hold the hammer or firing-pin cocked, and is itself operated by the trigger to release the firing-pin in manner well known in this art.

The tubular magazine 30 is carried under the barrel and is slipped out for loading, or an empty magazine may be displaced and a full one inserted. The tubular magazine has two collars 31 32 rigidly connected thereto. A spring-hook 33 in the forestock 34 engages one of these collars to hold the magazine in the gun, and may be operated by the finger to release the magazine.

The mouth of the magazine is surrounded by a ring 35, which ring is extended, as a split sleeve 36, the ends of the fingers forming said split sleeve being inclined inward, so as to project slightly in front of the mouth of the magazine when free to do so. The inner faces of these projecting ends are inclined, as at 37, and the end of the magazine-tube may be correspondingly beveled.

When the magazine is out of the gun, it is filled with cartridges by pressing them into the opening between the ends of the fingers 36. The fingers will close behind the heads of the cartridges and thus act as a detent to prevent the spring cartridge-follower 40 from throwing the cartridges out of the magazine.

When the magazine is inserted from the front of the forestock, the ends of fingers 37 come against the flat shoulder 41 in the frame at the same time that the spring-hook 33 engages the shoulder 31 on the magazine-tube and the magazine is simply held in place, but will not feed, as the split sleeve acts as a detent. (See Fig. 4.) To open this detent, the magazine is pushed in farther until the spring-hook engages shoulder 32 of the magazine. The split sleeve will be then pressed farther onto the magazine-tube, as in Fig. 1, thus expanding the fingers, and the cartridges will then feed back into the receiver under the impulse of the spring-follower.

The bolt may be provided with a cartridge-check 45, of usual construction.

The sleeve 36 is held to the end of the magazine in any convenient manner, as by a pin 43 passing through a slot 44 in the sleeve.

In the modification Fig. 5 the end of the tubular magazine is slitted, forming spring-fingers 50, and the ends of these fingers have inclined projections 51. These projections close behind the head of a cartridge. When the magazine is pressed to place in the gun, a ring 52 with a beveled front enters between these fingers and expands them, so that they no longer act as a detent.

I do not claim herein the construction by which the spring-fingers are expanded, as shown in Fig. 5, the same being shown and claimed in my application, Serial No. 452,991, filed November 25, 1892.

What I claim is—

1. In a breech-loading gun, the frame having a curved guideway in its upper surface, a curved bolt moving in said guideway, a handle at the bottom of the frame, and a direct connection from the bolt through a slot in the frame to the handle, whereby the handle and bolt are moved in the same general direction in opening and closing, all combined substantially as described.

2. A breech-loading gun having a curved bolt and guideway therefor, and an operating-handle connected directly to said bolt and moving in a curved path corresponding to the path of the bolt in opening and closing the same.

3. The combination with the frame having a curved boltway, of the curved bolt moving therein, the locking-brace pivoted to the bolt and having an extension reaching through a slot in the bottom of the frame, and a handle connected to said brace, substantially as described.

4. In a breech-loading gun the combination of the slotted frame having a curved boltway, a curved bolt moving therein, a locking-brace connected to said bolt and extending through the slot in the bottom of the frame, and a sliding plate having a handle-piece and connected to said brace, substantially as described.

5. In a breech-loading gun, the combination of the frame and bolt moving therein, the locking-brace pivoted to the bolt and having a bearing against an abutment in the frame, and projections from said brace in front and in rear of said abutment and extending downward to form the trigger-guard, substantially as described.

6. In a magazine-gun, the magazine-tube, the sleeve surrounding said tube and having fingers extending inward over the ends of the tube, the proximate surfaces of these parts

provided with inclines by which the fingers are expanded by longitudinal movement relative to the tube, and an abutment in the frame against which said sleeve bears to expand the fingers.

7. The magazine having spring-fingers at its outer end, an abutment in the frame against which said spring-fingers bear when in operative position and a holding-catch by which the magazine may be adjusted in the gun to expand said fingers when in operative position, and allow them to close when in inoperative position, all combined substantially as described.

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

ANDREW BURGESS.

Witnesses:
JOSEPH ROY,
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