(No Model.)

A. BURGESS.

MAGAZINE GUN.

No. 340,479. Patented Apr. 20, 1886.

Fig. 1.

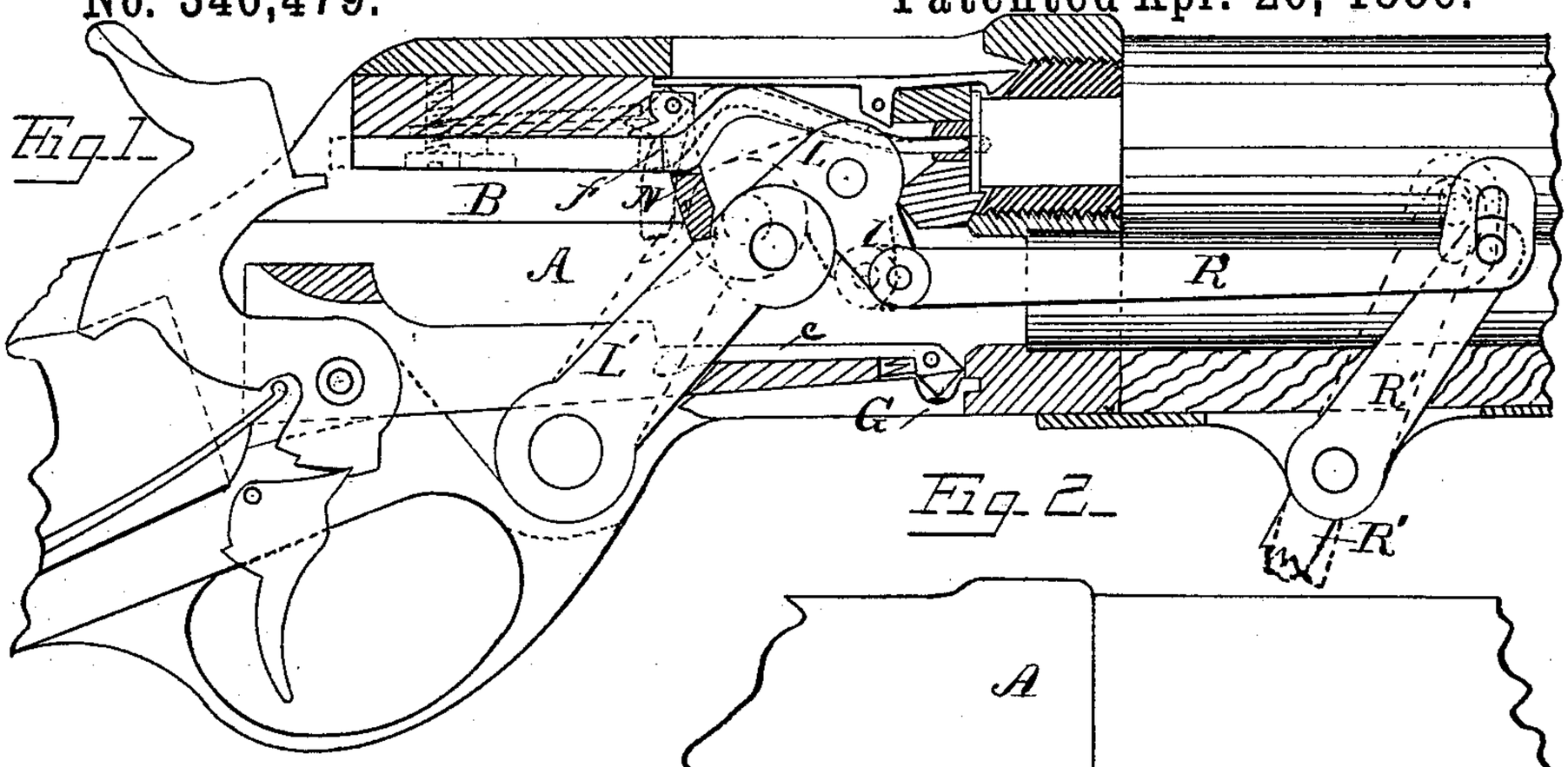


Fig. 2.

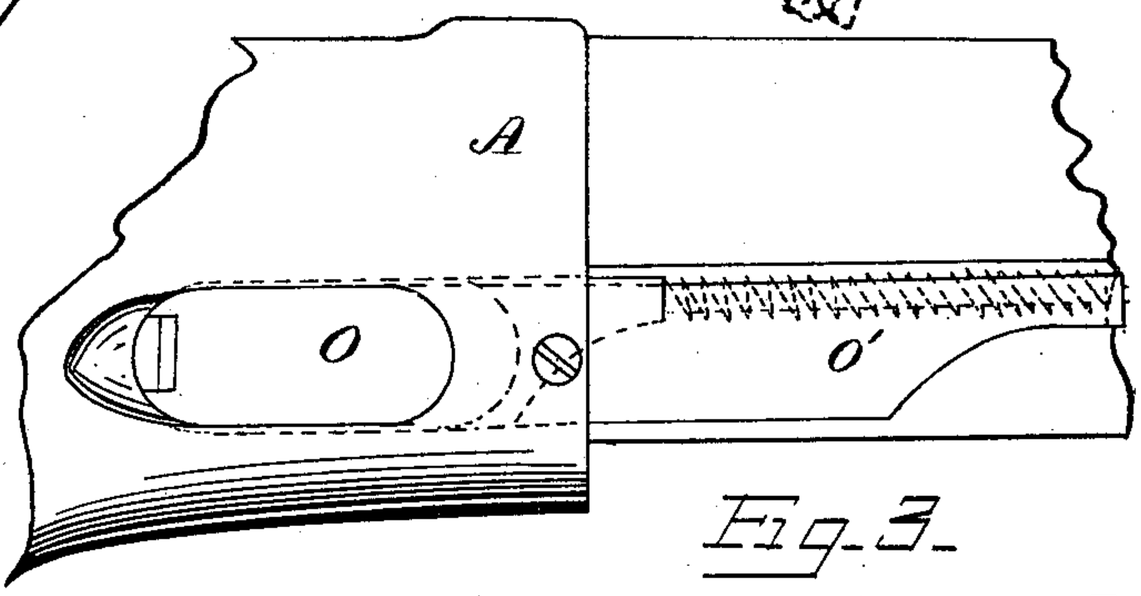


Fig. 3.

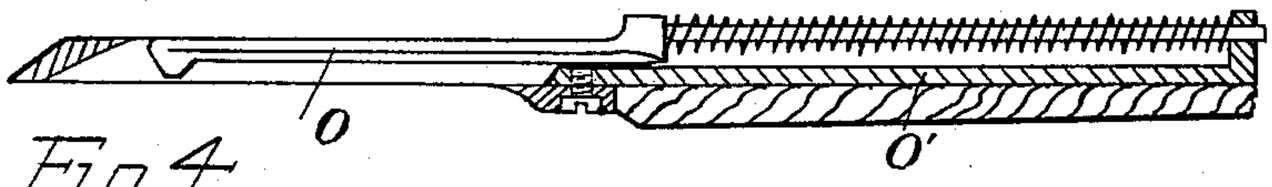


Fig. 4.

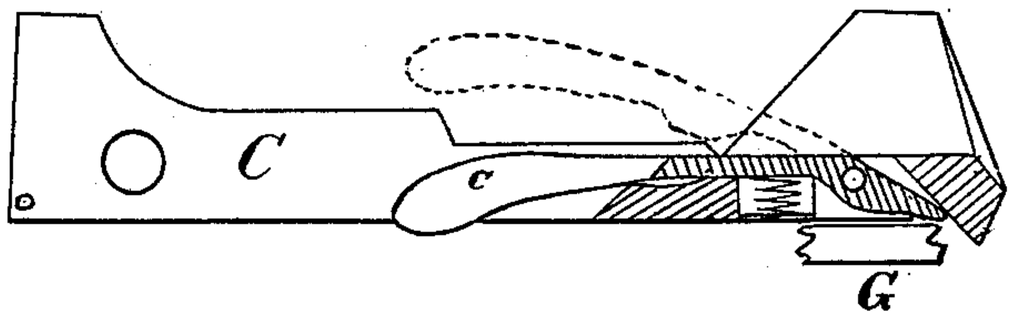


Fig. 6.

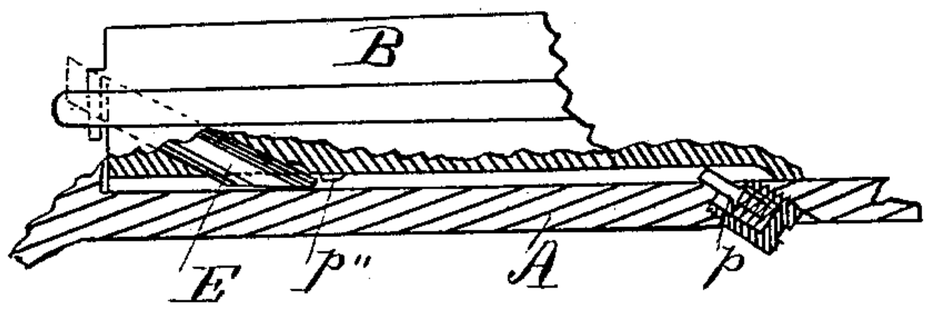
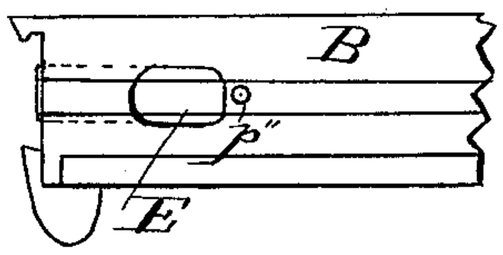


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

ANDREW BURGESS, OF OWEGO, NEW YORK.

MAGAZINE-GUN.

SPECIFICATION forming part of Letters Patent No. 340,479, dated April 20, 1886.

Application filed November 10, 1883. Serial No. 111,421. (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 guns; and it consists in certain details of construction and combinations of parts, as hereinafter pointed out and claimed.

The object of my invention is to adapt a particular form of operative mechanism to the locking-links of a bolt-gun; also to simplify and improve various parts of the arm.

In the accompanying drawings, Figure 1 is a longitudinal section of the gun; Fig. 2, a side view of the part of the frame showing the loading-trap; Fig. 3, a horizontal view, partly in section, of the same; Fig. 4, a side view of the section of carrier, with its elevating-lever; Fig. 5, a side view of the front part of the bolt, showing the ejector; and Fig. 6, a top plan of bolt with a part of its side and part of frame in horizontal section, showing relative position of the ejector and its operating-pin.

Like letters of reference indicate corresponding parts.

A is the frame of the gun; B, the bolt; C, the carrier; E, the ejector; *p*, the spring-ejector pin. G is the guard-strap or bottom of frame. L is the top locking-link; L′, the lower link, and *l* the projection on top link, to which the operating-rod R is pivoted. N is the lever which forces back the firing-pin. O is the sliding trap to cover the loading-aperture, and O′ shield-strap, to protect the slide O and attach it to the frame.

This gun is provided with a reciprocating bolt, which is locked against the bottom of the frame, as clearly shown in Fig. 1, by links L L′, forming a locking-brace, extending obliquely upward and forward from a bearing in the frame or receiver, and holding against a bearing in the front part of the bolt.

The link L has a projection, *l*, to which a rod, R, is attached, and the rod R extends forward to terminate in a sliding hand-piece or to be attached to a lever, by which it is reciprocated to operate the bolt. I have shown the rod R slotted vertically at its forward end, and the lever R′ connected therewith by a pin, to allow the vibrating lever to reciprocate said rod in a straight horizontal line.

When the rod R is forced rearward, its engagement with the link L turns said link back and upward, and has the effect to unlock the bolt by forcing the pivots of the links out of line, and the continued rearward movement of said rod carries the bolt back until the breech is fully open. The lever N, being split in its upper portion to work over the firing-pin, is pivoted at its top to the top of the bolt, and is provided with a spring to force its lower end forward against the rear of the link L, and the rear of lever N engages projecting shoulders on the firing-pin, so that when said link turns back and upward it forces back the firing-pin by engagement with the shoulders thereon, as at *f*, Fig. 1.

The ejector consists of a pin passing diagonally through the side and face of the bolt, a spring stop-pin, *p*, Fig. 6, projecting inside of the frame into a groove in the bolt, and a projection, *p″*, in said groove of the bolt to push back the pin *p*, thereby fully compressing the spring of said pin until it rides over and engages the rear of ejecting-pin to start it forward positively, until the spring-pin *p* proceeds so far over the projection *p″* as to allow it to spring forward and impart a quick movement to the ejecting-pin *p* to expel the cartridge-shell. The pin stop *p* will be forced back on the return of the bolt by diagonal contact of *p″*.

I provide the vibrating carrier with the spring-lever *c*, pivoted to its forward end, so that its spring pressing the rear long arm of said lever upward raises it above the floor of the carrier, as seen in dotted lines in Fig. 4, to raise the rear arm of the cartridge as the carrier vibrates upward, so that the raised cartridge may more nearly align with the bore of the gun. As the carrier falls, the short arm of lever *c* abuts against the frame, and the lever is depressed thereby.

The loading-aperture in the side of the frame is closed by the sliding trap O, which extends forward of the frame, the inner part of the wood of the fore-arm being there cut out to receive it. This leaves the wood so thin that it is liable to break in or shrink, so as to obstruct the free working of the slide O.

To support the wood and protect and sup-

port the slide and the spring, I insert the shield-piece O′, which is attached to the frame, and, extending forward, bends inward to guide the tail of the slide and form a rest for the forward end of the spiral spring, as shown in Figs. 2 and 3.

The rod R may be attached to either of the locking-links in any ordinary manner; but I prefer to pivot the said rod to the projection *l*.

The unlocking movement of breech is indicated in dotted lines in Fig. 1.

The operating-rod R may be moved by the lever here shown, or by a sliding sleeve or handle. In either case the movement of rod R is practically in a straight line.

What I claim is—

1. The combination, with the reciprocating bolt of a fire-arm, of a locking-link, as L′, pivoted in the bottom and extending obliquely forward to locking position, a locking-link, L, pivoted to said first-mentioned link and forming therewith a toggle-lever, said link L being pivoted to the bolt, and a reciprocating rod or bar connected to said links and to a suitable operating-handle, substantially as described, whereby the links may be unlocked and the bolt moved back by a backward movement of the bar, and vice versa, as set forth.

2. In a fire-arm, a reciprocating bolt, a link, as L′, pivoted in the bottom of the frame, a second link, L, pivoted to said link L′ and to the bolt, and having an arm, *l*, which forms with said link L a bell-crank lever, a reciprocating rod or bar connected to said arm *l*, and an operating-handle for said rod, all combined substantially as set forth.

3. The combination, with the locking mechanism of a breech-loading fire-arm, constructed substantially as described, of a reciprocating rod, as R, connected thereto, and a pivoted lever connected to said rod by slot-and-pin connection, whereby the rod may be reciprocated by swinging the lever, substantially as set forth.

4. The combination, with a reciprocating bolt, of a firing-pin moving longitudinally therein, a bolt-supporting brace pivoted in the forward part of the bolt and locking against a resistance-piece in the receiver when the bolt is in its forward position, and a lever pivoted in the bolt in position to engage the firing-pin and bolt-brace, said lever being engaged by the locking-brace and the lever and pin held back by such engagement, except when the bolt is completely locked, as set forth.

5. The combination, with a reciprocating bolt, of a firing-pin moving longitudinally therein, a brace pivoted in the forward part of the bolt and locking against a resistance-piece in the receiver when the bolt is in its forward position, a lever pivoted in the body of the bolt in position to engage said firing-pin and brace, and operated by the brace at the beginning of its unlocking movement to retract the firing-pin, and a reciprocating rod connected with the locking-brace, extending forward and connected to an operating-handle under the barrel, all substantially as described.

6. A reciprocating breech-bolt, a sliding firing-pin therein, a lever as N, pivoted in the bolt so as to bear against said pin when forced back, a spring to press said lever forward, and locking-links, one pivoted in the frame and the other to the bolt and both pivoted together to form a toggle-lever, whereby the spring forces lever N forward to straighten the toggle and the toggle forces back the lever to withdraw the firing-pin, all combined substantially as set forth.

7. The combination, with a vibrating carrier, of a lever pivoted therein, a spring arranged to raise the rear end of the lever, and an abutment in the frame which forces the lever down when the carrier falls, substantially as described.

8. A reciprocating breech-bolt, an ejector arranged obliquely therein, a fixed stud in rear of said ejector, and a spring-pin in the frame, arranged, substantially as described, so as to be thrown back by the stud as the bolt is drawn back, and to throw the ejector quickly forward immediately thereafter, all combined substantially as stated.

9. The combination, with the frame of a magazine-gun, of a plate, O′, secured to said frame and extending forward inside the stock, and a loading-gate having its bearing in said plate, substantially as shown and set forth.

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

ANDREW BURGESS.

Witnesses:

W. A. BARTLETT,

B. F. MORSELL.