G. S. LEWIS. FIREARM.

APPLICATION FILED DEC. 16, 1909. 952,206. Patented Mar. 15, 1910. 2 SHEETS-SHEET 1.

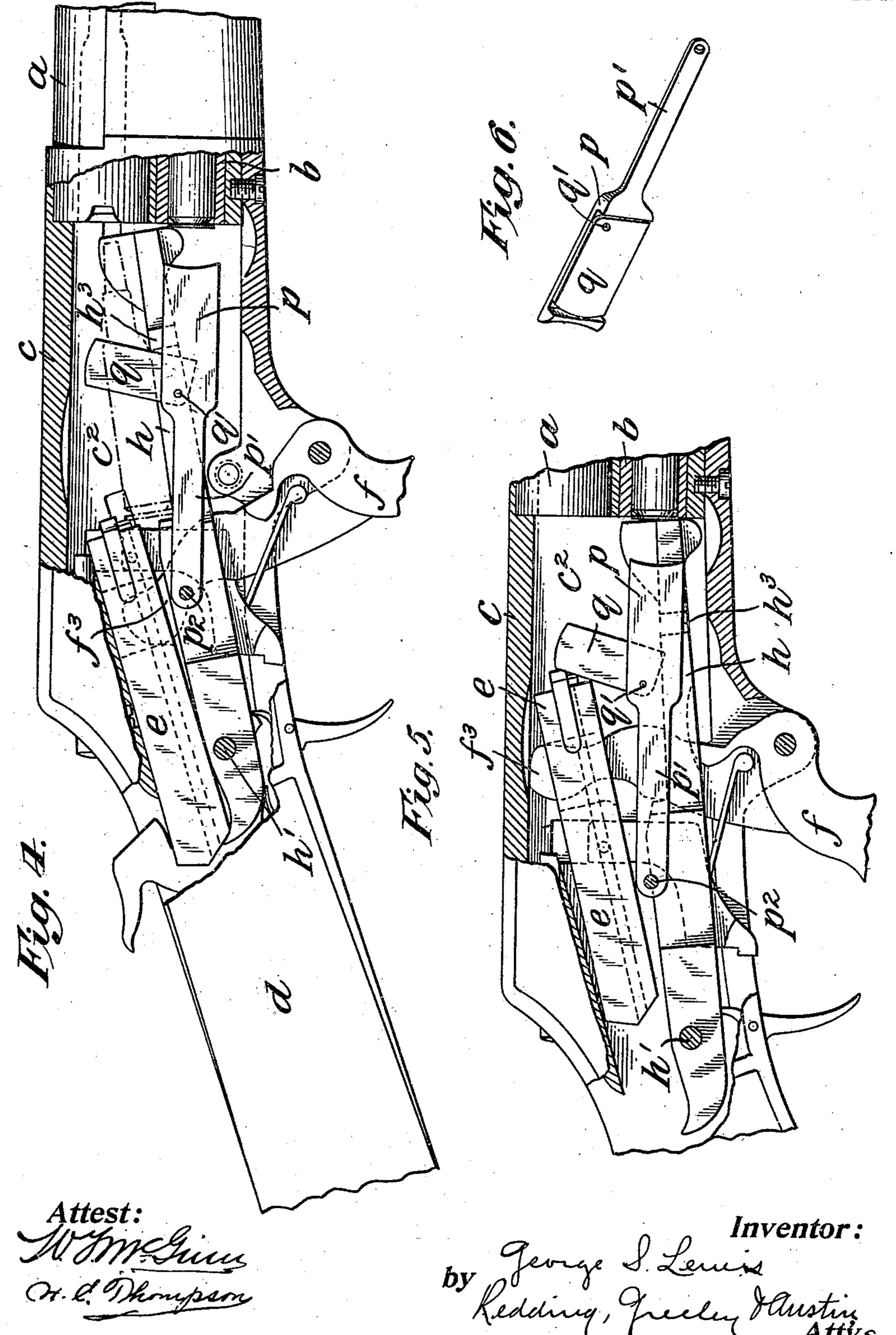
## G. S. LEWIS. FIREARM.

APPLICATION FILED DEC. 16, 1909.

952,206.

Patented Mar. 15, 1910.

2 SHEETS-SHEET 2.



INDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

A STATE OF THE STA

## UNITED STATES PATENT OFFICE.

GEORGE S. LEWIS, OF CHICOPEE FALLS, MASSACHUSETTS, ASSIGNOR TO J. STEVENS ARMS & TOOL COMPANY, OF CHICOPEE FALLS, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

FIREARM.

952,206.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed December 16, 1909. Serial No. 533,380.

To all whom it may concern:

Be it known that I, George S. Lewis, a citizen of the United States, residing in Chicopee Falls, in the State of Massachu-5 setts, have invented certain new and useful Improvements in Firearms, of which the following is a specification, reference being had to the accompanying drawing, forming

a part hereof.

This invention relates to repeating firearms in which the empty cartridge shell is ejected through a side ejector opening in the frame. It is usual, in such firearms, to provide a cartridge guard plate to pre-15 vent the falling of the cartridge out through such opening as it is being lifted by the cartridge lifter, on which it is received from the magazine, to position for insertion in the chamber of the barrel and while it remains 20 in such position. Heretofore such guard plate has been pivoted, usually, upon the cartridge lifter and various means have been devised for turning the guard plate upon its pivot to close or partly close the ejector 25 opening and to return it to its normal position.

The present invention has for its object to improve the arrangement and operation of the guard plate and in accordance therewith it is pivoted on the inner side of the spring gate which closes the loading opening in the frame, through which cartridges are inserted in the magazine, and it is operated in one direction by the upward move-35 ment of the cartridge lifter and in the other direction by the closing movement of the

breech-block.

The invention will be more fully explained hereinafter with reference to the accompanying drawings in which it is illustrated

and in which—

Figure 1 is a view in side elevation of a sporting rifle of a well known type to which the invention may be applied. Fig. 2 45 is a detail view, also in side elevation, partly broken out, showing, on a larger scale, so much of the rifle as is necessary for the application of the invention to be understood. Fig. 3 is a top view of the parts 50 shown in Fig. 2, with the frame partly in horizontal section, on the plane indicated by the broken line 3-3 of Fig. 2, with the breech-block removed. Fig. 4 is a similar view to Fig. 2, but with more of the side of 55 the frame broken away and with the breech-

block in its open position and the cartridge lifter in the loading position. Fig. 5 is a view similar to Fig. 4, but with parts broken off and showing the breech-block in an intermediate position of its closing movement. 60 Fig. 6 is a detail view showing the spring gate and the guard plate mounted thereon.

It will be obvious that except so far as concerns the loading gate the guard plate and parts which immediately coöperate 65 therewith, the firearm to which the invention is applied may be of any ordinary or desired construction. In the firearm represented in the drawings, the barrel a, chambered, as usual, to receive the cartridge, the 70 magazine b, the frame or receiver c and the stock d, are formed substantially as usual, the frame or receiver c being suitably chambered, as at  $c^2$ , to permit proper movement of the longitudinally movable breech-block 75 e, actuated by the guard lever f, and of the cartridge lifter h. The cartridge lifter h is shown as pivoted near its rear end, as at h', and as adapted to be raised by the rearward movement of the breech-block e and to 80be restored to normal position by the forwardly extended finger f<sup>3</sup> of the guard lever f.

The frame of receiver is provided with a side ejector opening  $c^5$ , through which the 85 empty cartridge shell is ejected and, below the opening  $c^{\overline{5}}$  with a loading opening  $c^6$ , through which cartridges may be inserted into the magazine tube b. The opening  $c^{6}$ is closed, as usual, by a spring gate p, which 90 is carried by a spring arm p', secured to the inner right hand side of the frame, as at  $p^2$ , so that while the opening  $c^6$  is normally closed, the gate p may yield inwardly to permit cartridges to be slipped into the maga- 95

zine.

On the inner side of the gate p, as at q', is pivoted, near its rear upper corner, a cartridge guard plate q, which stands normally parallel with the gate p, as shown in Fig. 6,  $^{100}$ but may be turned on its pivot, as shown in Fig. 4. In the former position, the ejector opening  $c^5$  is unobstructed by the guard plate, but in the latter position such opening is obstructed by the guard plate in such 105 manner as to prevent the falling out of a cartridge through the ejector opening when it rests upon the lifter in loading position. To effect the movement of the guard plate to close the ejector opening, a lug  $h^3$  is 110

formed on the right hand side of the cartridge lifter h, such lug projecting to the right sufficiently to stand under the edge of the guard plate q when the parts are in the position represented in Fig. 2, so that as the lifter is raised to the loading position, as shown in Fig. 4, the lug  $h^3$  engages the lower edge of the guard plate and swings it on its pivot to the position shown in Fig. 4, in which it closes or obstructs the ejector opening  $c^5$ . In this position, the guard plate stands in front of the right hand shoulder of the breech-block, so that when the breechblock moves forward, as shown in Fig. 5,

15 it swings the guard plate forward and downward sufficiently to clear the opening  $c^5$ , leaving it unobstructed for the ejection of the empty cartridge shell. If the guard plate q is loosely pivoted on the gate p, it 20 will drop by gravity to the position shown in Fig. 6, but it is immaterial whether it

drops fully to such position or not.

It will be seen that the guard plate is certain in operation, is small and light in 25 weight, and that a minimum of labor is required in forming and applying the guard plate and in providing for its operation.

Various changes in details of construction and arrangement may be made to suit dif-30 ferent conditions of use and the invention, therefore, is not limited to the precise construction and arrangement shown and described herein.

I claim as my invention:

1. In a repeating firearm, the combination of a frame having a side ejector opening, a cartridge guard plate adapted to close the opening and a cartridge lifter adapted to engage the guard plate in its upward 40 movement to cause the same to close the opening, said guard plate being mounted independently of the lifter.

2. In a repeating firearm, the combination of a frame having a side ejector open-45 ing, a cartridge guard plate pivoted below the opening and adapted to close the same, and a cartridge lifter adapted to engage the guard plate in its upward movement to cause the same to close the opening, said guard plate being pivoted independently of 50 the lifter.

3. In a repeating firearm, the combination of a frame having a side ejector opening and a loading opening, a gate to close the loading opening, a cartridge guard plate 55 mounted movably on the gate, and a cartridge lifter adapted to engage the guard plate in its upward movement to cause the same to close the opening.

4. In a repeating firearm, the combina- 60 tion of a frame having a side ejector opening and a loading opening, a gate to close the loading opening, a cartridge guard plate pivoted on the gate, and a cartridge lifter adapted to engage the guard plate in its up- 65 ward movement to cause the same to close

the opening.

5. In a repeating firearm, the combination of a frame having a side ejector opening, a cartridge guard plate adapted to close 70 the opening, a cartridge lifter adapted to engage the guard plate in its upward movement to cause the same to close the opening, and a breech-block movable longitudinally in the frame and adapted to engage the 75 guard plate in its forward movement to move it away from the opening, said guard plate being mounted independently of the lifter.

6. In a repeating firearm, the combina- 80 tion of a frame having a side ejector opening and a loading opening, a gate to close the loading opening, a guard plate pivoted on the gate and adapted to close the ejector opening, a cartridge lifter adapted to en- 85 gage the guard plate in its upward movement to cause the same to close the ejector opening and a breech-block movable longitudinally in the frame and adapted to engage the guard plate in its forward move- 90 ment to move the same away from the ejector opening.

This specification signed and witnessed this seventh day of December, A. D. 1909. GEORGE S. LEWIS.

Signed in the presence of— CHARLES P. FAY, E. C. Fink.