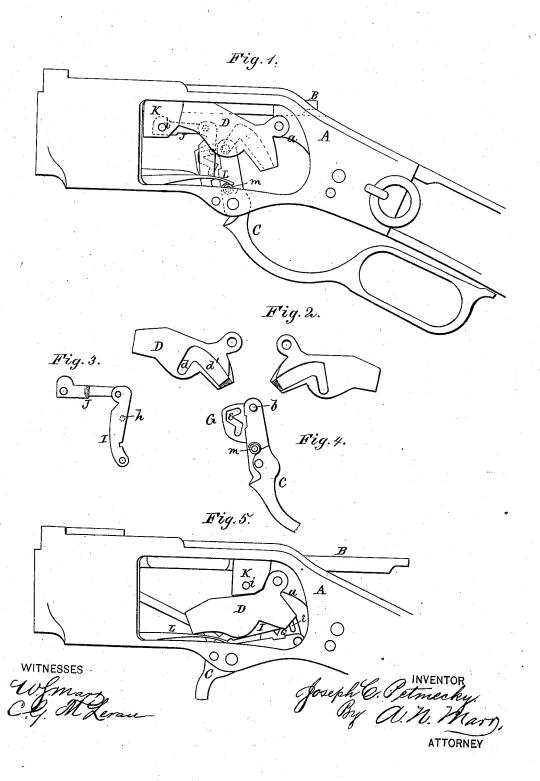
## J. C. PETMECKY.

## BREECH-LOADING FIRE-ARMS.

No. 193,670.

Patented July 31, 1877.



## UNITED STATES PATENT OFFICE.

JOSEPH C. PETMECKY, OF AUSTIN, TEXAS.

## IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 193,670, dated July 31, 1877; application filed June 22, 1877.

To all whom it may concern:

Be it known that I, JOSEPH C. PETMECKY, of Austin, in the county of Travis and State of Texas, have invented certain new and useful Improvements in Magazine Fire-Arms; and do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to letters of reference marked thereon, which form a part of this specification:

This invention relates to that class of firearms known as the "Winchester Repeating Fire-Arm;" and it consists in certain improvements in the interior mechanism for operating the breech-block and resisting the recoil, and in the combination of parts, as will be hereinafter more fully set forth, and pointed out in the claims.

In the annexed drawings, which fully illustrates my invention, Figure 1 is a side view of the frame with the covering plate removed to show the interior mechanism. Figs. 2, 3, and 4 are detailed views of parts of said mechanism. Fig. 5 is a side view of the mechanism, showing the braces thrown down and the breech opened.

A represents the frame of a Winchester repeating fire-arm; B, the breech-pin, and C the finger-lever, constructed substantially in the known and usual way for such arms.

D D represent braces or brace-levers, which are substituted for the links now used to receive and resist the recoil when discharged. These braces, which I call "breech-braces," are of the form shown in Fig. 2, and are pivoted to a lug, a, within the frame A, in line with the breech-pin base.

Through the upper short end of the fingerlever C is passed a pin, b, the ends of which project into transverse grooves d d', made in the inner sides of the breech-braces D D, so as to move them up and down by the fingerlever to brace the breech when closed, and move the braces out of the way of the breechpin base, so that the same can move back, as shown in Fig. 5.

From the upper end of the groove d extends a circular groove, d', rearward and to about the pivot point of the braces D, as shown. In these circular grooves the ends of

the pin b rest when the finger-lever is thrown back, and hold the braces in position.

When the breech-braces D D, as thus constructed and operated, are thrown upward they fit closely up against the back of the breech pin base, closing the breech perfectly tight, and forming a firm and solid resistance to the recoil.

The upper short end of the finger-lever is provided with a plate or projection, G, in which is made a cam slot, e, somewhat in the form of a letter Z. In this slot works a pin, h, projecting from the side of a lever, I, the lower end of which is pivoted in the lower part of the frame. The upper end of this lever is by a link, J, connected with the breech-pin base K.

The link is attached to said base by a pin, i, passing through the same, and the base is made solid at that place instead of having milled cavities in it, as is now the case.

Heretofore the finger-lever has been provided with an inclined plane, on which the springs work that hold said lever in position. Instead of such inclined plane I provide the finger-lever with a roller, m, so as to pass with less friction under the springs L.

By these improvements I gain an increase of strength and capability to resist the recoil, and also the advantage of being able to increase the charge of powder, so as to carry the ball farther and with increased velocity with perfect safety and without increase of recoil or rebound.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The breech-braces D D, provided with the grooves d d', and operated by means of the pin b in the end of the finger-lever C, substantially as and for the purposes herein set forth.

2. The combination of the finger-lever C, with projection G, having slot e, the lever I with pin h, the link J, and the breech-pin base K, all constructed substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnessess.

J. C. PETMECKY.

Witnesses:

WILLIAM F. NORTH, JOHN B. COSTA.