# N. L. CHAPIN.

## Breech-loading Fire-arm.

No. 42,748.

Patented May 17, 1864.

FIG. I

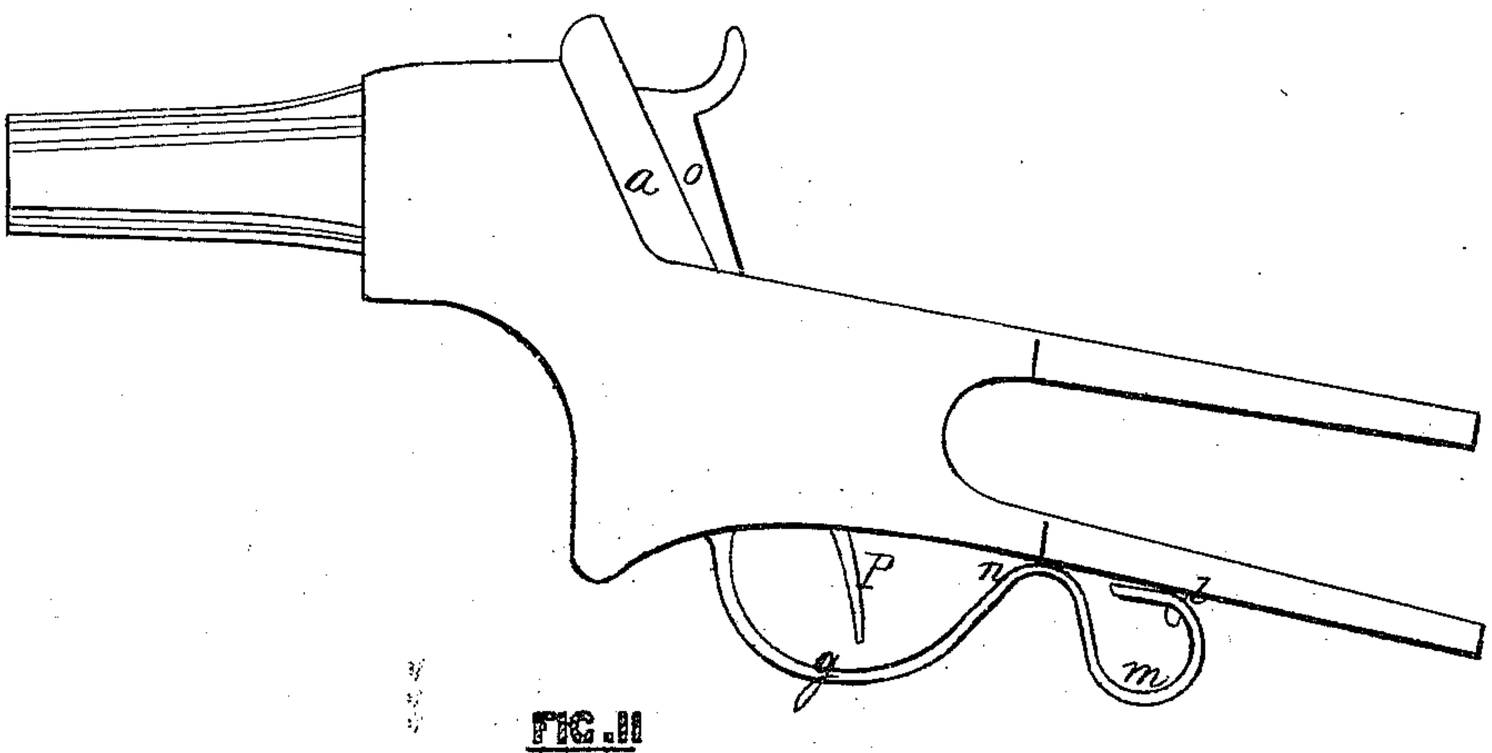
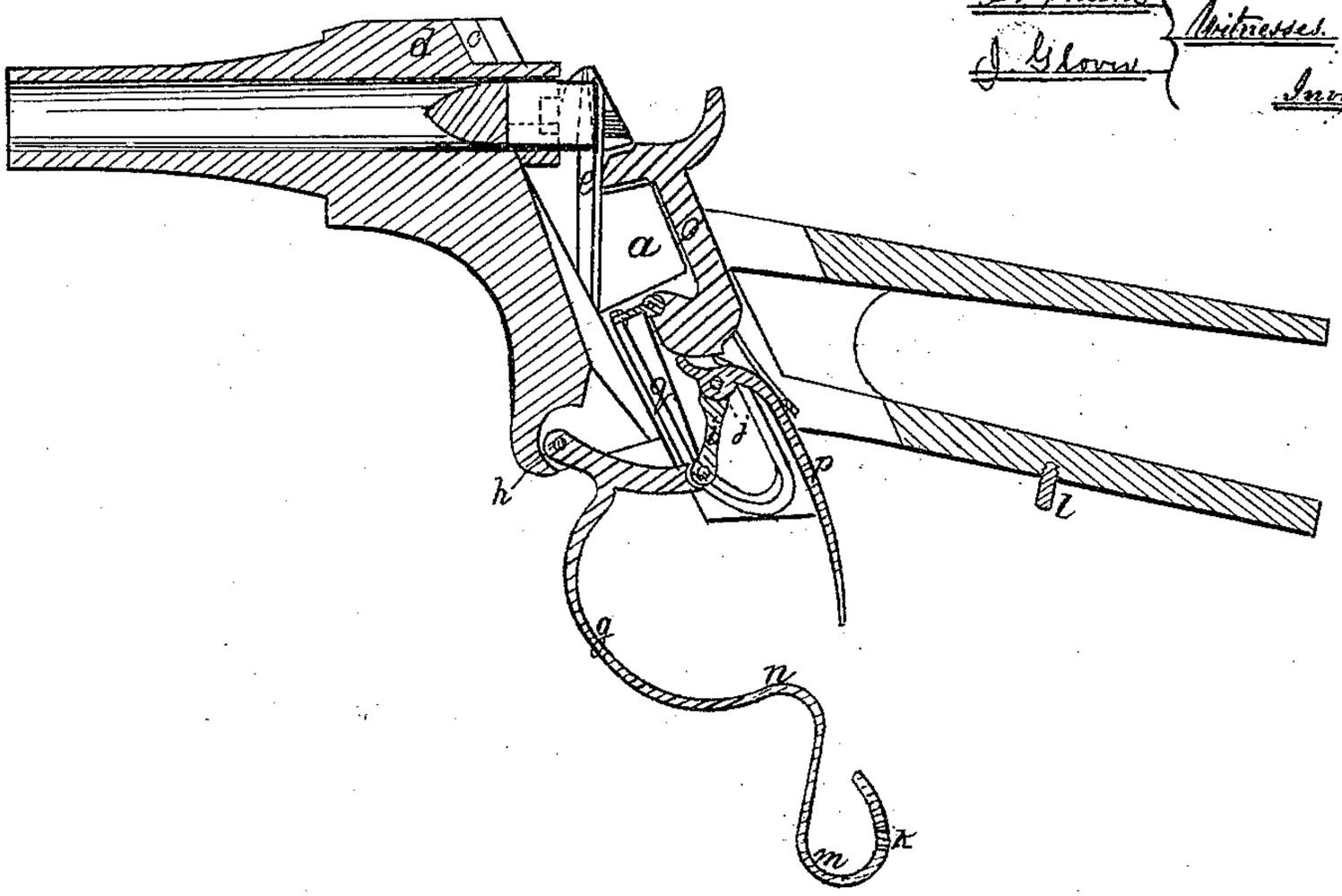



FIG. II




T. Smith
J. Gloom
} Witnesses.

Inventor.

L. N. Chapin
by Atty T. T. Everett

# UNITED STATES PATENT OFFICE.

LINUS N. CHAPIN, OF NEW LISBON, NEW YORK.

## IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **42,748**, dated May 17, 1864.

*To all whom it may concern:*

Be it known that I, LINUS N. CHAPIN, of New Lisbon, in the county of Otsego and State of New York, have invented a certain new and useful Improvement in Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters and marks thereon.

The improvement made the subject of this application relates to breech-loading pieces, and is specially allied to such as are intended to use the metallic or flanged cartridge.

The drawings forming part of this specification show my improvement attached to a breech-loading musket or rifle; but, as is evident, the improvement may be applied to other pieces and ordnance.

Figure 1 of these drawings is a side view of a part of the stock and barrel of a rifle, and Fig. 2 a longitudinal sectional view of the same.

In both figures, where like parts are shown, like marks and letters are used to indicate the parts.

The breech-block *a* has a flange, *b*, which moves in a groove, *c*, on the rear end of the barrel *d*, the movement of the block being inclined or in the line of an angle to the line of the barrel. On the inner surface of the block is a vertical groove, *e*, in which fits the flange *f* of the cartridge. An upward movement of the block carries the cartridge forward into the gun and securely blocks up the breech, while a downward movement draws out the cartridge, or the cartridge-blank in case it has been exploded, and allows of its easy removal from the piece to be replaced by another cartridge. The block is elevated and lowered by a lever, *g*, which also forms the trigger-guard, the front end of the lever being pivoted at *h*, and having a link, *i*, which is divided at its upper end, and embracing the upper end of the trigger. The two have a common pivot, *j*, upon which both may be turned. In the rear end of the lever is a slot, *k*, which fits around a pin, *l*, the curved part *m* of the lever acting as a spring to clasp the pin. Slight pressure on the lever at *n* will liberate the lever from the pin. The hammer *o* and the trigger *p* are both attached to the block and move with it, the hammer being connected to a spring, *q*, by a link, *r*, and the trigger having a spring, *s*. The face of the hammer is beveled, as is shown by Fig. 2, so that in elevating the block the hammer head or face easily and safely slides onto and against the end of the cartridge.

From the above recital of the construction and operation of my improvement, it will be perceived that the breech-block may quickly and easily be operated, the piece being rapidly loaded and discharged, that it may be carried with great safety when loaded, and that as a whole it is a neat, cheap, simple, and yet effective arrangement of parts for a breech-loading gun.

What I claim as new, and desire to secure by Letters Patent, is—

1. The groove *e* in the breech-block for moving the cartridge or blank, as herein described.

2. In combination with the groove *e*, beveling the end or face of the hammer, as and for the purposes set forth.

This specification signed this 23d day of December, 1863.

LINUS N. CHAPIN.

Witnesses:

THOS. T. EVERETT,

C. M. LAMMOND.