

E. VON JEINSEN.
Breech Loader.

No. 84,922.

Patented Dec. 15, 1868.

Fig. 1.

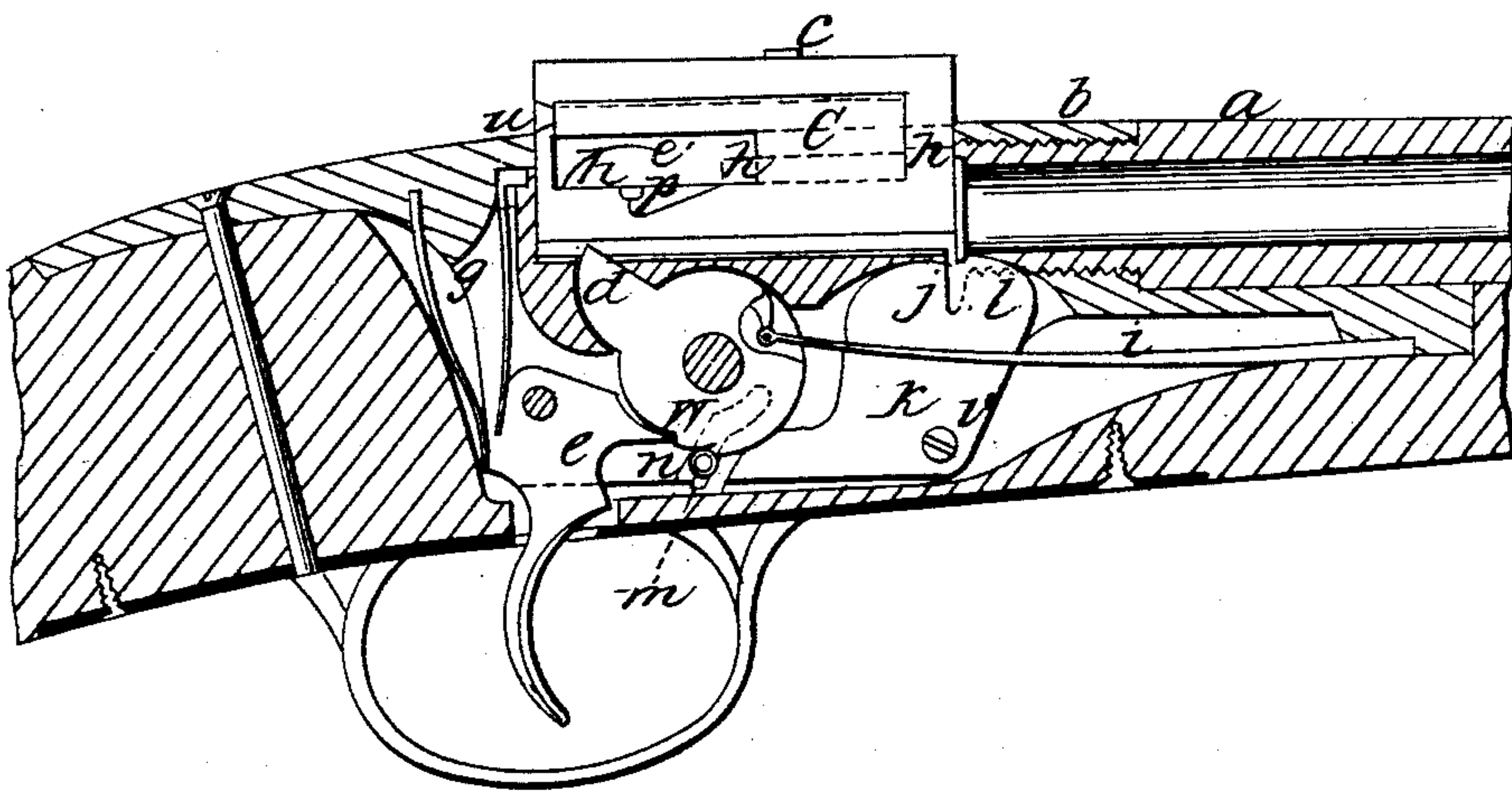
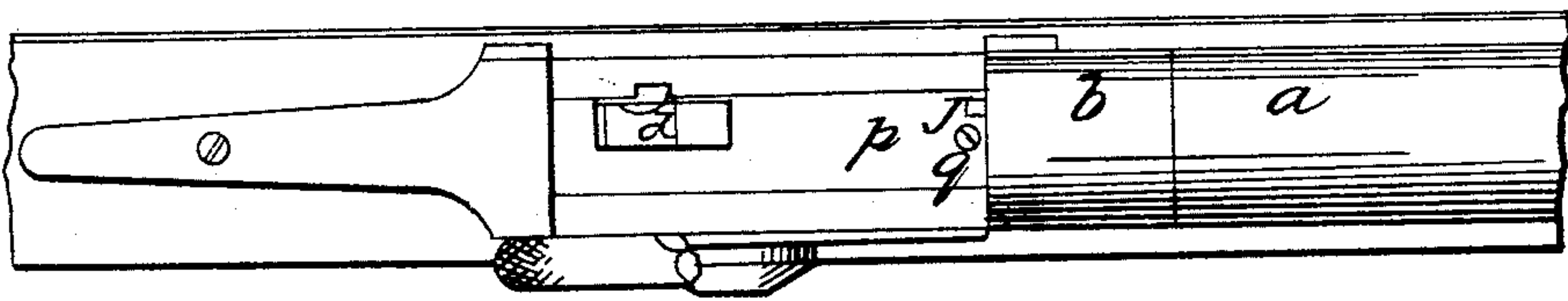


Fig. 2.



Witnesses:
C. F. Kastenhuber
Chas. Wählers

Inventor:
E. von Jeinsen
Von Schottroff & Lang
Att.

United States Patent Office.

ERNEST VON JEINSEN, OF NEW YORK, N. Y.

Letters Patent No. 84,922, dated December 15, 1868.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ERNEST VON JEINSEN, of the city, county, and State of New York, have invented a new and useful Improvement in Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 is a longitudinal section of a breech-loading fire-arm made according to my invention, the breech-block being thrown up and the breech opened.

Figure 2 is a plan view of the interior of the receiver as it appears when the breech-block is thrown up.

This invention relates to the description of fire-arms which is represented in Letters Patent granted, February 18, 1868, to myself, as assignee of William Morgenstern; and

It consists, among other things, in a novel construction of the shell-extractor.

Also, in covering over or closing the bottom of the fixed part of the receiver, so as to keep out dirt and dust.

Also, in covering the bottom of the breech-block.

Also, in so constructing the firing-pin that its rear part performs the office of covering the opening in the rear of the breech-block, through which the locking-pin *g* is projected.

The letter *a* designates the barrel of the fire-arm, and

b, the receiver.

The breech-block *c* is hinged, at its side, to the receiver, which is cut down sufficiently to allow the breech-block to be fitted therein behind the breech of the gun.

The breech-block is prevented from rising while the hammer is at half cock, first, by means of the contact of the inner surface of the breech-block formed of the shoulder *r*, with the adjacent side of the hammer *d*, which, at that time, is in a position forward of the shoulder *r*; and, second, by means of the stud *C*, on the side of the breech-block, over which stud a shoulder, which is formed on the inner side of the thumb-piece, fits at the time the hammer is at half cock, and also after firing.

The body of the firing-pin *h* is rigid, and is extended backwards (on the side opposite to the shoulder *r*) far enough to allow the rear end, *h'*, thereof to close the opening *u*, in the rear end of the breech-block, through which the locking-pin or hook of the rigid locking-arm *g* projects at the time when the trigger is drawn backwards in the act of firing.

The rigid arm *g* is moved backwards and forwards according to the movements of the sear *e*, to which it is attached, as is described in the Letters Patent above mentioned.

The said rear part, *h'*, of the firing-pin consists of a block, whose end is square, so as to fit against the square end of the breech-block, but whose front side is hollowed out, so that there shall be sufficient room to allow the hammer *d* to perform its movements in the breech-block without hindrance.

The forward end of the said part *h'* has a shoulder, *e'*, against which the back of the hammer *d* strikes when it is drawn back after firing, and thereby moves the firing-pin, so as to bring its operating-end within the receiver, clear of the breech of the barrel, and to bring its rear part, *h*, backwards to the position shown in fig. 1, in order to close the opening *u*, and keep out dust and dirt.

The breech-block is thrown up, so as to expose the breech of the barrel by means of the contact of the hammer *d*, when it is drawn back after firing, with the shoulder *r*, on the inside of the breech-block, as is described in the Letters Patent above mentioned.

The body of the firing-pin, *h h'*, is kept in place, and the same partly covered, by means of a plate, *o*, seen in fig. 1.

This plate prevents dust and dirt from lodging in the joints between the body of the firing-pin and the sides of the breech-block.

I provide also a covering plate, *p*, in the bottom of the receiver, as shown most clearly in fig. 2, for the purpose of preventing the receiver from becoming foul, the said plate *p* being cut away to allow the hammer *d* to operate through it, and being also cut away at its forward end to receive the pin *q*, and to allow the hook *j*, of the shell-extractor, to operate at the breech of the barrel.

The pin *q* is a vertical pin, which is pushed upwards constantly by a horizontal spring extending under the breech of the barrel. (See the dotted outline thereof in fig. 2.)

The face of the said pin has a double inclination, the apex of which is at right angles to the axis of the receiver, through whose bottom plate it is pushed by its spring. Its purpose is to prevent the cartridge, after it has been placed in the breech, from slipping out, and also to accelerate the movement of the empty shell, after the extractor has drawn it over the pin, such acceleration being produced by the upward movement of the inclined face of the pin against the rim of the shell after the said pin has been depressed by the passage of the rim over it. The pin is of course depressed when a fresh cartridge is placed in the breech, and its forward inclined face acts in like manner to crowd the cartridge into the breech.

The letter *k* designates the shell-extractor, whose hook, *j*, is seen in figs. 1 and 2, projecting through the bottom plate *p*.

The said extractor consists of a right-angled lever, turning on a pivot, *v*. One of its limbs extends back-

wards in a horizontal direction, and has, on its side, near its end, a pin, on which is mounted an anti-friction roller, *m*, which plays in a slot, *n*, formed on the side of the tumbler, which, in this example, is in one piece with the hammer.

The upper part of said slot *n* is made concentric with the axis of the tumbler, for the purpose of preventing any motion being imparted to the extractor while the roller-pin *m* is in that part of the slot where it will be until after the full-cock notch *W* has passed the sere. Any further movement of the tumbler in the same direction causes the roller-pin *m* to move downwards through the straight part of the slot, which is eccentric to the axis of the tumbler, and during this movement the extractor is turned on its pin *V*, and its hook, *j*, is moved away from the breech, carrying the empty shell along with it, and forcing the flange of the shell past the central ridge of the pin *q*.

In both the figs. 1 and 2 of the drawing, the hook *j* of the extractor is represented as having completed its backward movement for the purpose of extracting a shell from the breech.

The space in the stock, under the breech, in which the extractor moves, is likely to become foul, because it becomes a receptacle for dust and dirt, and in order to prevent such a result, I shut off access thereto by forming a limb, *l*, on the body of the extractor, in front of the hook *j*, and shaping and arranging the same in such a manner that it occupies and fills the place which

is left vacant by the backward movement of said hook *j*, when extracting a shell, and consequently prevents the entrance of dust, dirt, or other matters.

The periphery of the said limb *l* is concentric with the axis of the extractor, and the under parts of the receiver and of the barrel are cut away on a corresponding curve, to make room for the said limb *l* during the time that the extractor is out of action.

The extractor is operated in both directions by positive force through the rotation of the tumbler.

Having thus described my invention,

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

1. The limb *l*, on the body of the shell-extractor, so arranged as to close the place left vacant by the hook *j*, when extracting a shell, substantially as described.
2. The covering-plate *p*, over the bottom of the receiver, arranged substantially as and for the purpose set forth.
3. The slot *n*, on the tumbler, in combination with the extractor *k*, and a pin, which works in said slot, substantially as described.

This specification signed by me, this 21st day of January, 1868.

ERNEST v. JEINSEN.

Witnesses:

W. HAUFF,
JOHN C. POLLER.