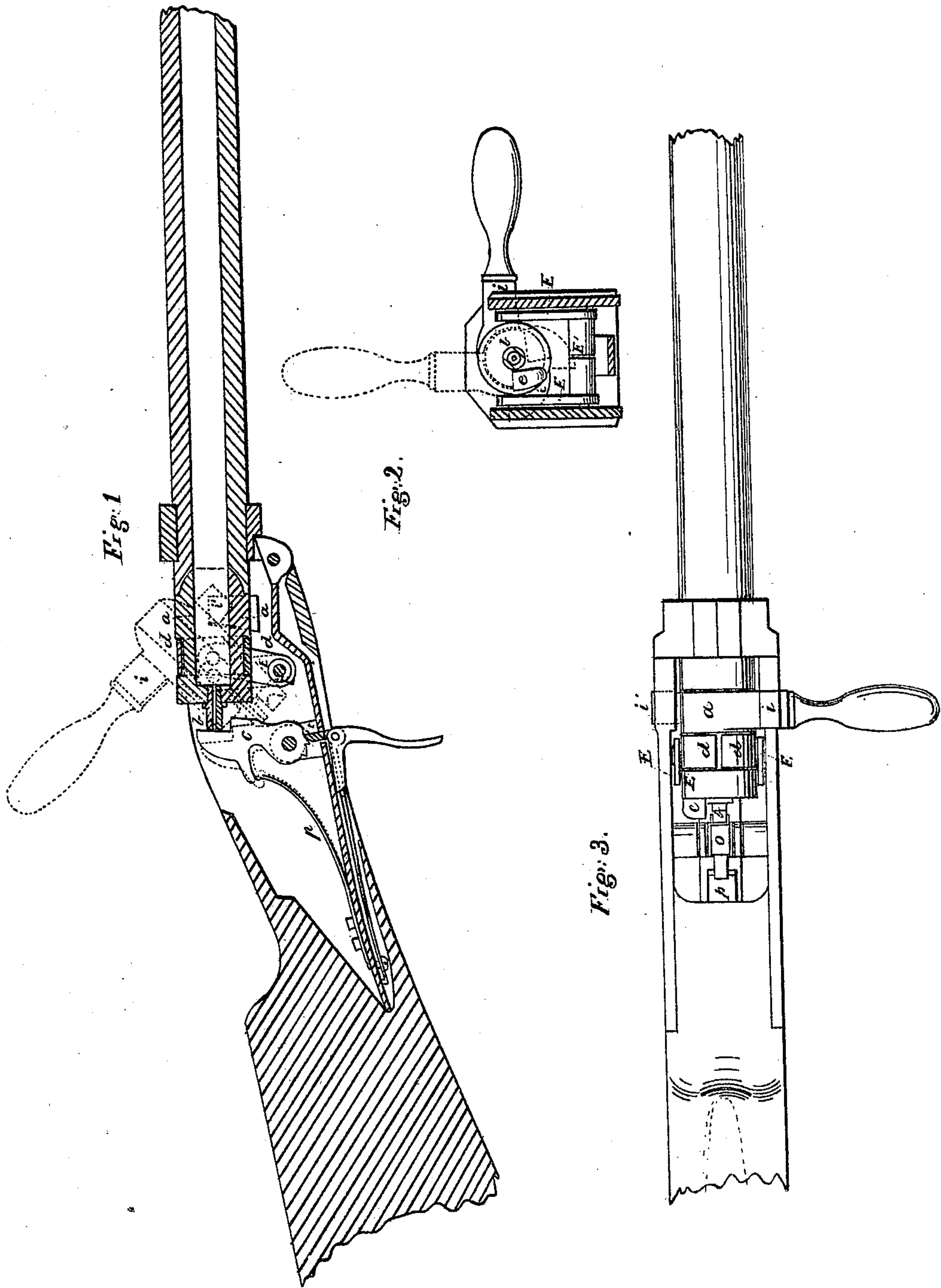


G. A. BLITTKOWSKI.
Breech-loading Fire-arm.

No. 17,136.

Patented April 28, 1857.



UNITED STATES PATENT OFFICE.

G. A. BLITTKOWSKI, OF NEW YORK, N. Y.

IMPROVEMENT IN FIRE-ARMS.

Specification forming part of Letters Patent No. 17,136, dated April 28, 1857.

To all whom it may concern:

Be it known that I, GUSTAV ADOLPH BLITTKOWSKI, of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the annexed drawings, making a part of this specification, in which—

Figure I is a side view or longitudinal section. Fig. II is a transverse section on the line *xx* of Fig. I. Fig. III is a top view; and similar letters indicate similar parts throughout.

My invention of improvements in breech-loading fire-arms consists in a peculiar method of constructing and operating certain parts at the breech, together with the lock, whereby I obtain greater security against accidental discharge, effect a perfect joint at the union of the breech-piece with the barrel, together with great simplicity of parts. The principal part consists of what I call a "rotating and oscillating breech-piece," into which the charges are put in loading. The detaching of this from the barrel effects the cocking of the piece, erects the open end, and brings it into a convenient position to insert the cartridge. In restoring the breech-piece the joint between it and the barrel is made perfect by a grinding action due to the turning of the former partly round in locking the same in place, until which locking has been accomplished the firing could not be effected, as, were the cock let off either purposely or by accident, it would not be able to reach and strike the nipple by reason of an obstruction which is not removed until the breech-piece is exactly in place and fully locked. The breech-piece is shown at *a*, and is a cylindrical plug of metal, conforming in diameter with the barrel. The front end is cone-shaped or hemispherical, being designed to fit into a like-shaped cavity in the end of the barrel. The plug is bored out also to a certain depth, but so as to leave sufficient thickness of metal for the necessary degree of strength at the end. On the end at *b* is the nipple for the cap, of usual construction, and at one side of this is a projection or stud, *c*, which stands out beyond the nipple. This is a safety-piece, and

stands in the line of travel of the hammer in all positions in which the breech may be other than that proper for firing. Near the back end of the plug there is a recess cut, which is embraced by a clamp-ring, *d*. The plug is held by this ring when detached from the barrel, and the ring itself is secured to the side plates by two links, *e*, which are attached to *d* by a pin or trunnion on each side, and to the side plates of the lock by a cross-bolt, *e'*. By this means the plug may be drawn directly backward in the first instance, in order to clear the forward end from the socket in the barrel, and next to turn upon the trunnion-pins on *d*, whereby the detached end may be thrown upward and clear of the barrel, (as in the duplicate lines in Fig. I,) and then the charge may be introduced. When the plug is in place, in connection with the barrel, the joint is made tight, and locked by giving it a rotary motion, whereby two strong projecting arms or pins attached to *a* are brought into two holes cut in either side plate, and a wedging effect given by a slant on one side of said holes, so that the plug is driven forward and the end brought to a bearing by a grinding action. These pins are seen at *i* and *i'*. *i* is prolonged to form an arm or handle to turn and otherwise operate the plug. The side plate, where the pin *i* enters, has its notch cut from the top edge downward. The other pin, *i'*, enters a hole cut through the side plate, and is chamfered off on the inside to let the end of the pin enter as it is brought round by the turning of the plug, though, instead of this hole, a projection on the inside of the plate would answer as well.

The lock is of very simple construction. The cock or hammer is formed in one piece with the tumbler, and stands immediately back of the plug, midway between the two plates, as seen at *o*, Figs. I and III. The mainspring is at *p*, and the sear with the trigger at *r*, as clearly seen in Fig. I. The operation is as follows: To detach the breech-piece, first revolve the plug by turning the handle from the horizontal position to the vertical one, as seen in Fig. II, the last position being shown in dotted lines. The pins *i* and *i'* are now clear of their fastenings, and the plug may accordingly be drawn back. In turning the plug the guard-pin *c* is brought round and strikes the front edge of the hammer *o*, pushing it back

to half-cock, and the drawing of the plug out of the socket in the barrel carries it to full-cock. The plug may now have its open end canted upward, turning upon its trunnion-pins on *d* as an axis, and as shown in the duplicate lines in Fig. I, when the cartridge may be dropped in. The end is now to be turned down, pointed toward the barrel, and pushed forward so that the conical part will enter the socket, as first described in Fig. II, so that the pins *i i'* will enter their clamp-notches and be driven firmly home. The cap may then be applied to the nipple *b*, when the piece may be fired. The guard-piece *c* does not get clear of the hammer-shank until the locking-studs are fully in place, so that by leaving those slightly out of their proper position the gun cannot be accidentally discharged.

I claim—

1. The rotating and oscillating breech-piece for receiving the charges, so attached to the stock as to be capable of being withdrawn from the end of the barrel and elevated to receive the charge, and to be returned thereto with a grinding and wedging action, whereby a secure and tight joint is effected, substantially as described.

2. The safety-guard *c* upon the end of the breech-piece, so placed as to prevent the cock from striking the nipple until the said breech-piece is secured in the barrel, as described.

G. A. BLITTKOWSKI.

Witnesses:

J. P. PIRSSON,

S. H. MAYNARD.