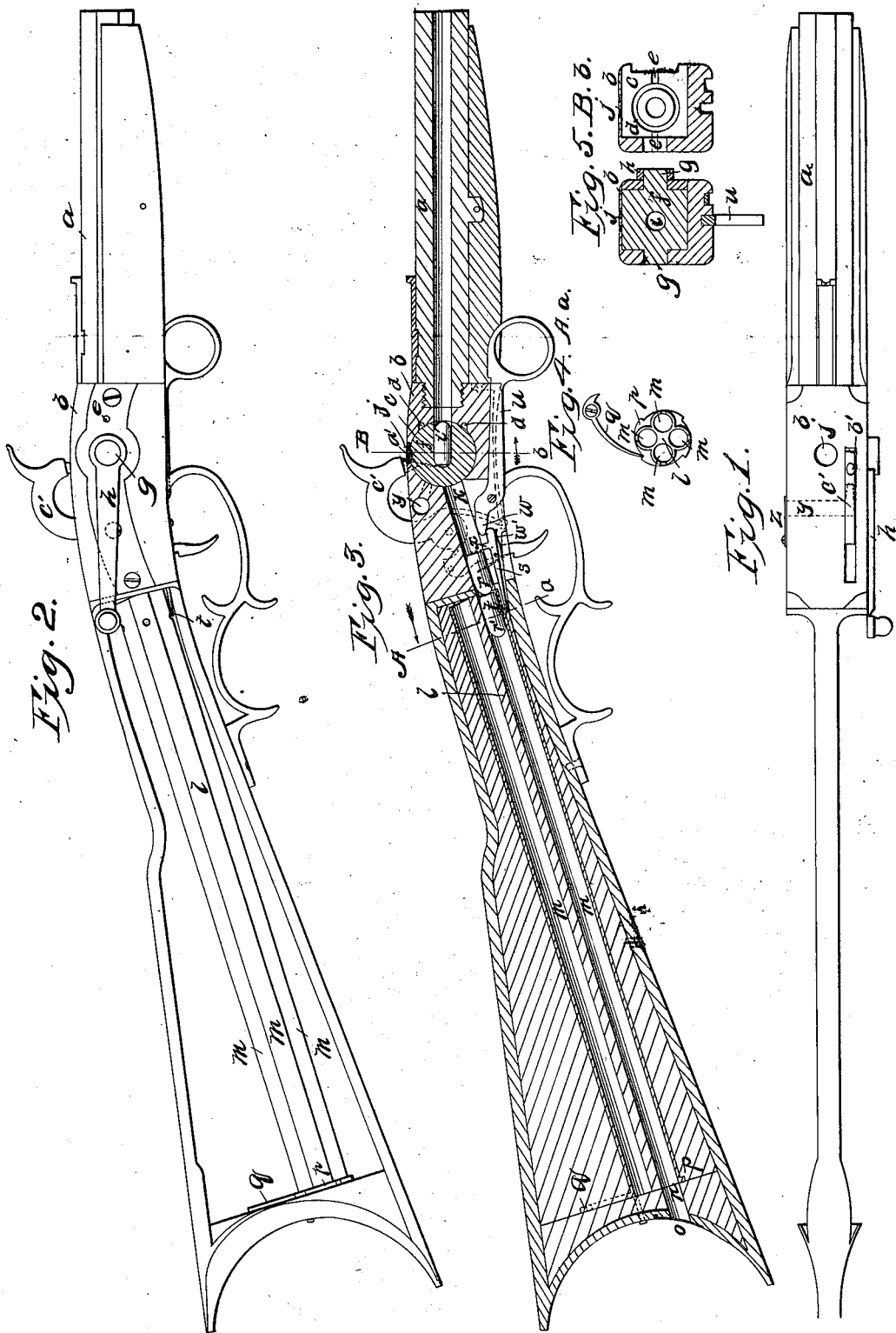


A. D. PERRY.
FIREARM.

No. 6,945.

Patented Dec. 11, 1849.



UNITED STATES PATENT OFFICE

ALONZO D. PERRY, OF NEW YORK, N. Y.

IMPROVEMENT IN FAUCET-BREECH GUNS.

Specification forming part of Letters Patent No. 6,945, dated December 11, 1849.

To all whom it may concern:

Be it known that I, ALONZO D. PERRY, of the city, county, and State of New York, have invented new and useful Improvements in Fire-Arms; and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known, and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of a gun on my improved plan; and Figs. 4 and 5, cross-sections of the same, taken at the lines A a and B b of Fig. 3.

The same letters indicate like parts in all the figures.

My invention relates to that class of fire-arms in which the charge is introduced at the breech into a vibrating cylinder, which receives the charge in one position, and then, by turning a part of a revolution, brings said charge on a line with the bore of the barrel, and into position to be discharged.

In all the fire-arms of which I have any knowledge made prior to my invention in which the charge was introduced into a vibrating breech placed within a fixed chamber, the periphery of the breech constitutes the bearing and turning surface all around the chamber, to which it closely fits.

I have found by repeated experiments that the objection to this is, that the cylinder soon becomes fixed in consequence of the accumulation of condensed gases, which will be driven by the force of the discharge into the closest-fitting joint, and after a few discharges causes the surfaces to unite with an adhesion so strong that the arm ceases to be operative.

The object of the first part of my invention, to avoid the defect above pointed out, consists in hanging a vibrating breech, which is inclosed in a chamber, on journals, that its periphery may turn freely in the chamber; and this part of my invention also consists in combining, with the above mode of hanging the vibrating breech in a chamber, the making of a groove or grooves in the inner periphery of the chamber around the bore of the barrel, and

extending out at the side or sides, for the free escape of gases and smoke from the discharge, to prevent the accumulation of the deposits of smoke on the periphery of the breech and chamber, thus preventing all clogging or danger of fire being driven back into the charger.

The second part of my invention consists in combining, with a vibrating breech, a charge-holder for containing a series of cartridges or charges, and located in the breech of the stock, so that by vibrating the breech its mouth can be presented to the charge-holder to receive the cartridge, and then turned back to bring it in a line with the bore of the barrel for the discharge, the turning of the breech cutting off all communication with the charge-holder; and this part of my invention also consists in combining, with the charge-holder and vibrating breech, a transferring-lever, which takes the cartridge from the charge-holder and transfers it into the breech.

The position of the charge-holder relatively to the vibrating breech is such that in the act of discharging the gun the recoil tends to close the opening into the charge-holder, and thereby prevents any fire being thrown back into the charge-holder or magazine, and secures them from danger of explosion.

In the accompanying drawings, *a* represents the barrel attached to the breech-piece *b*, which is formed with a cylindrical chamber, *c*, with which the bore of the barrel communicates. The axis of this chamber is at right angles with the bore of the barrel. A groove, *d*, is formed in this chamber around the bore of the barrel, and concentric therewith, with two lateral branches, *e e*, leading to the outside of the breech-piece, one on each side, for the free escape of any smoke or gases which may pass between the breech and the rear end of the barrel; or these grooves can be variously arranged to produce the same effect.

The vibrating breech *f* is a cylinder fitted to the chamber *c* so as to turn therein freely, and at the ends it is provided with journals *g g*, which are fitted to and turn in the side plates of the breech-piece, and one of them extends out beyond the side plate sufficiently far to carry a hand-lever, *h*, by which the breech is operated.

The chamber, *i*, for the charge is made in the

vibrating breech, and extends from the periphery and runs in about two-thirds of its diameter to leave sufficient strength of metal to resist the force of the discharge.

The breech-piece has a hole, *j*, through the top, which communicates with the chamber of the vibrating breech when turned in the proper direction. By this means the gun may be used for loading at the breech without the use of the charge-holder.

The vibrating breech is turned by the lever to bring the chamber *i* to coincide with the hole *j* in the breech-piece. The charge is introduced by hand, the vibrating breech turned until the chamber coincides with the bore of the barrel, when it can be discharged; but when the charge is to be received from the charge-holder, then it is turned a little more than half-way around until the chamber *i* coincides with a hole, *k*, in the breech-piece nearly opposite to the barrel, and which communicates with the charge-holder *l*, which consists of four tubes, *m m m m*, attached together about a common axis, there being a journal at each end, on which they all turn, that each of the tubes may, in succession, be brought in a line with the hole or bore *k*.

The tubes are all charged with a series of cartridges, one of the tubes put in a line with the bore, and the cartridges transferred one by one to the chamber in the vibrating breech, and when one tube is exhausted the next is turned in line, and so on until the whole is exhausted. The tubes are then recharged through a hole, *n*, in the shoulder-piece, which is covered with a movable cap, *o*.

To hold the series of tubes in place, there is a plate, *p*, at their rear end, with four ratchet-teeth, with a spring-pawl, *q*, which admits of turning the tubes in one direction only, the pressure of the spring being sufficient to hold them in place except when force is applied to turn them, which may be done in any manner desired.

When a cartridge is to be transferred to the chamber in the vibrating breech, the muzzle of the gun is dropped down, which causes the cartridges to descend by gravity toward the chamber of the vibrating breech. At the time of commencing this operation, by reason of a previous operation, a cartridge, *r*, lies in the permanent part of the charge-holder, between the cylinder and the next succeeding cartridge, *r'*, that is held by a stop-lever, *s*, located in a proper cavity in the breech-piece, and having a projecting pin, *t*, on the rear end of it, which passes through a hole in the tube *m*, to hold the cartridge *r'*, and to prevent the one, *r*, from running back, and the other cartridge, *r'*, from moving toward the vibrating breech.

When the muzzle of the gun is depressed, the cartridge *r* is carried by gravity against the periphery of the vibrating breech, so as to enter the chamber, when the breech is turned

back to bring its chamber in line to receive the cartridge.

A lever, *u*, which turns on a fulcrum-pin at *v*, is drawn back by the hand, which brings its arm *w* against the back of the cartridge to carry it home in the chamber of the vibrating breech, and this movement of the lever *u* liberates the stop-lever *s*, so that its forward end may be elevated by the spring *w'*. This liberates the next cartridge, *r'*, which runs down until its forward end strikes a projection, *x*, on the forward end of the stop-lever, which prevents it from going too far toward the vibrating breech. The vibrating breech is then turned to bring the cartridge which it has received in a line with the barrel. The lever *u* is then moved forward to its original position, which brings its arm *w* against the stop-lever, and depresses its forward end and elevates its rear end, that the pin or stop *t* may hold the cartridge opposite thereto in the proper place.

The pills of fulminating-priming are put into a magazine, *y*, in the breech-piece through a hole in the side plate, covered by a spring-valve, *z*, and this magazine communicates with the periphery of the vibrating breech by a hole of such capacity as to permit one pill to pass freely, but not more than one at a time.

The touch-hole *a'* in the periphery of the vibrating breech is sufficiently large to receive a pill, and the whole of the magazine (shown by red lines) is so located that in turning the vibrating breech back to receive a charge, either by hand or from the magazine, the touch-hole passes it in the back and in the forward movement, and in passing a pill will drop into the touch-hole, and as it passes by this hole twice, it is sure to receive the priming.

When the vibrating breech is in the required position for the discharge, the touch-hole lies directly under a hole, *b'*, in the top of the breech-pin, through which the hammer of the cock *c'* strikes; but if the lock should go off when the vibrating breech is not in position, the discharge cannot take place, for the priming cannot be struck by the hammer.

The lock may be made in any manner desired.

The charge-holder may be a single stationary tube, or with two, three, four, or more attached about an axis of rotation.

It will be obvious from the foregoing that the first part of my invention may be employed without the second, although the best results will be obtained when all are used in connection.

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

1. In combination with a vibrating breech turning within a chamber, the making of a groove or grooves in the inner periphery of the chamber, and extending out at the side or sides thereof, for the purpose and in the manner substantially as herein described.

2. I also claim the revolving charge-holder located in the breech of the stock, substantially in the manner and for the purpose specified.

time when the muzzle of the gun is depressed, and by which it is forced home into the vibrating breech, as described.

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3. And, finally, I claim the combination of the levers *s* and *w*, by means of which one charge only is permitted to fall forward at a

Witnesses:

R. W. SOWBER,
A. P. BROWN.