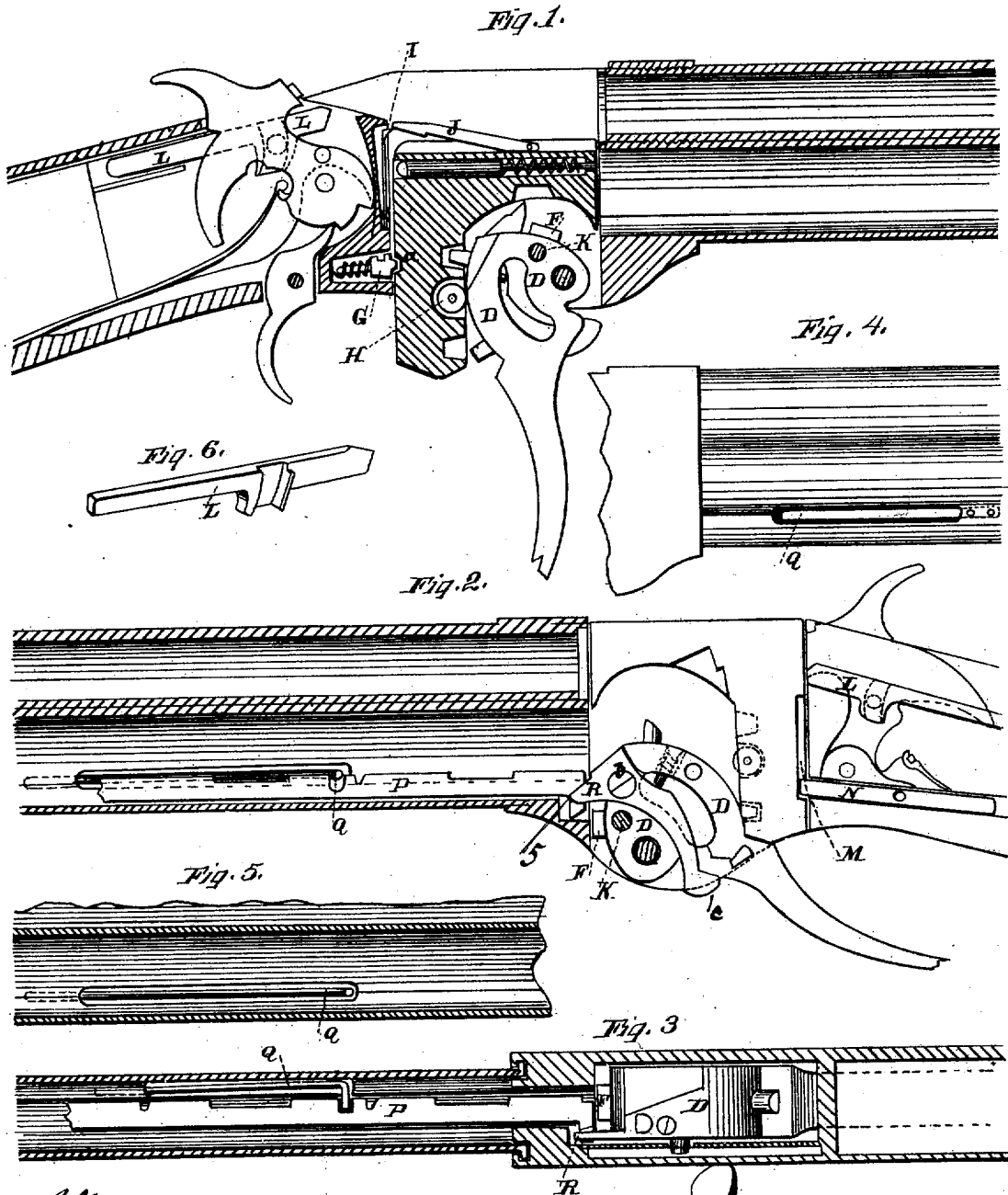


A. SCHNEIDER.
MAGAZINE FIRE ARM.

No. 252,145.

Patented Jan. 10, 1882.



Witnesses
 Geo. H. Strong
 Albert P. Cook

Inventor
 Alois Schneider
 By Dewey & Co. Attys

(No Model.)

3 Sheets—Sheet 2.

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Fig. 7.

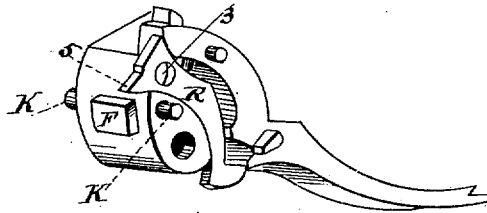
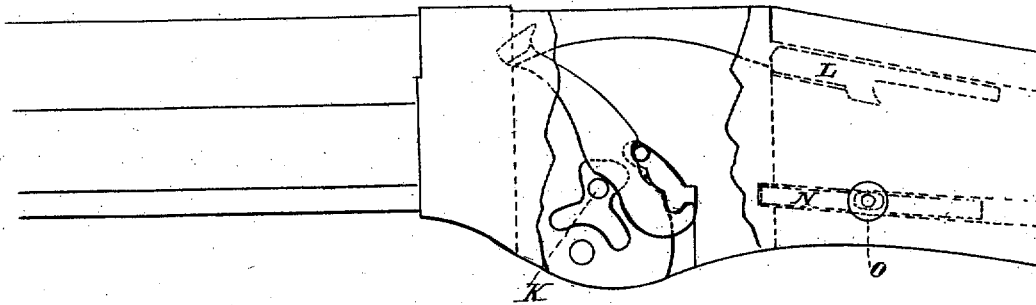


Fig. 8.



Fig. 9.



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(No Model.)

3 Sheets—Sheet 3.

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Fig. 10.

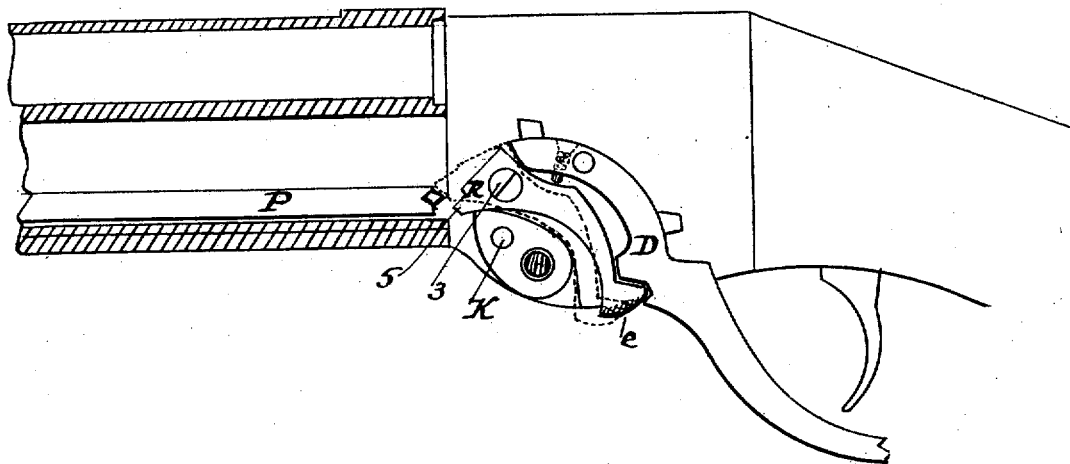
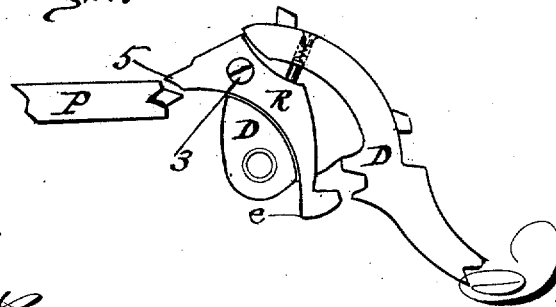


Fig. 11.



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UNITED STATES PATENT OFFICE.

ALOIS SCHNEIDER, OF SAN FRANCISCO, CALIFORNIA.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 252,145, dated January 10, 1882.

Application filed June 27, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALOIS SCHNEIDER, of the city and county of San Francisco, State of California, have invented Improvements in Magazine Fire-Arms; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in magazine fire-arms; and it consists in certain details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figures 1 and 2 are longitudinal sections of a gun, showing my invention. Fig. 3 is a horizontal section through the barrel of the magazine. Fig. 4 is an outside view, showing the spring. Fig. 5 is a section showing spring. Figs. 6, 7, 8, 9, 10, and 11 are details of working parts.

In a former patent issued to me June 8, 1880, I have shown certain devices and improvements in the construction and operation of magazine fire-arms. My present application embraces certain improvements based upon this patent and one recently granted to me for an improvement in the magazine.

As the lower front corner of the breech-block is cut away to receive the operating-head of the lever, the effect of the recoil in firing is apt to tip the block slightly in its chamber. To remedy this I have formed a projection or lug, F, upon the front face of the head D, so that when the lever is brought up to close the breech this projection will press firmly against the front of the chamber in which the breech-block slides, while the rear face of the head D binds against the front of the vertical leg of the breech-block, thus holding the block as solidly as if it were continuous for the whole depth. The first downward movement of the lever releases the block, so that it can be drawn down fully.

In my former patent I employed a flat spring, which was fitted vertically into the rear portion of the breech-block chamber to press against the block and keep it tight in its movements. I have made an improvement in this by using a short bolt, G, the end of which is kept in contact with the rear portion of the breech-block by a spring. A shallow depression or indentation, a, is made in the breech-block at

a point where the pin will fall into it and retard the block, while the lever still acts upon the retractor and forces it to complete its movement in ejecting the empty shell. The continued movement of the lever afterward carries the block downward the remainder of the distance. A small anti friction roller, H, is fitted into the front of the vertical leg of the breech-block to relieve the friction of the head D of the lever while the block is temporarily stationary.

The spring I, which raises the rear end of the arm J to guide the ejected shells and throw them out of the chamber, is now fitted to stand vertically in a slot or groove in the rear of the breech-block chamber, instead of lying horizontally as in my former patent. The shell-extractor was formerly operated by a single pin from the head D, this pin working in curved faces on the rear edge of the extractor and close to the pivot-pin.

In order to give a greater leverage and more power to start shells which may stick in the chamber, I use a pin, K, which passes entirely through the head D, one end projecting so as to act upon the arm which cocks the gun, while the other end projects upon the opposite side and enters a slot in the guide-plate of the extractor-arm at a considerable distance above its pivot. As the head D is rotated to throw the breech-block down this pin acts powerfully upon the extractor and starts the shell from the chamber, the motion of the extractor being then continued by the pin at its rear in the same manner as formerly described. By this construction only one pin is necessary, and it may be loosely inserted into the head, so as to be easily withdrawn when necessary.

A slide, L, is operated by a pin which connects it with the hammer, and when the hammer falls the slide is forced forward and fills the slot at the side and rear of the breech-block opening in the frame, which is made to receive the head of the extractor as it comes back. The use of the slide L is to exclude dirt.

Whenever it is desired to convert this arm into a single breech-loader and not disturb the cartridges which are within the magazine it will be preferable to limit the movement of the breech-block so that it will only be depressed sufficiently to uncover the end of the

barrel and admit the insertion of a single cartridge from the rear in the usual manner for breech-loaders. This is effected by making a channel, M, of sufficient length in the rear of the breech-block, and a short bolt, N, in the frame is moved by a button, O, on the side of the frame. When pressed forward this button moves the bolt N into the channel M, and the movement of the breech-block is then limited by the length of the channel. By drawing the button back the breech-block is allowed its full motion, and the gun is again converted into a repeater.

The usual method for securing the magazine in this class of guns is by pins or screws, and it is not easy to remove when desired for repairs or other purposes.

In my improvement I form the lower end of the magazine with two or more inclined lugs, and suitable openings are made in the frame for their reception. Inclined slots from these openings, like screw-threads, receive the lugs, and a partial turn of the magazine secures it firmly in the frame. The other end is held by the wood of the stock and the usual bands.

In a patent recently granted me for a method of locking the cartridges within the magazine and preventing them from moving, except when the gun is to be loaded, I described a rod rotating within a channel or groove in one side of the magazine, and having notches which fit the flanges of the shells when this rod is rotated to a proper position for that purpose, while the opposite side of the magazine had corresponding slots to receive the flanges from that side. I have found that the notched rod is sufficient without other holding device. This rod P is preferably fitted into a channel formed in any suitable manner on the lower side of the magazine. The rod is cut away upon one side, so that it lies in its channel. This side completes the interior of the magazine, as it is cut away in a corresponding curve, and the cartridges will be free to move; but when the rod is turned so that one of the angles of the cut-away portion is uppermost this angle will project into the magazine. Notches are cut in this angle to receive the flanges of the cartridges, as before described. The rod is held in the position which presents the flat side to the cartridges, so that they move freely over it by a torsional spring, Q, upon one side of the magazine, and this keeps the rod in this position at all times, except just as the lever is brought up and the breech closed. The spur 5 of a lug or supplemental lever, R, pivoted on the forward part of head D at 3, strikes the projection on rod P and turns the rod so as to lock the cartridges in the magazine as the breech closes.

The lug R, instead of being fixed upon the head D, as in the former patent, is pivoted to one side, and on one end projects a little below the lower part of the head, outside the frame, so that

it may be moved by the pressure of the finger, and the inner end or lug, R, thrown forward. This is done when it is desired to leave the locking-rod P in its ordinary position, so as to charge the magazine, and is effected by pressing upon the projecting end e just before the lever is brought close up, and this throws the point of the lug R down and forward, so that it will pass beneath the lug on the rod without turning the latter. This leaves the rod with its grooved or cut-away part forming a part of the magazine chamber, and the latter is consequently free for the cartridges to move in it. They may then be inserted through an opening in the side of the frame in the usual manner. The lug R is returned to its place at the next movement of the lever by a suitable spring.

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

1. In a magazine-gun, a vertically-moving breech-block provided with a downwardly-projecting leg, in combination with an operating-lever provided with a head, D, pivoted between the downwardly-projecting leg and the forward wall of the frame, and provided with a lug, F, adapted to bind against the forward wall of the frame and steady the breech-block when the breech is closed, substantially as and in the manner described.

2. The rear wall of the frame, provided with a vertical slot and vertical inserted spring I, in combination with the pivoted guide-bar J and vertically-moving breech-block C, all constructed as set forth.

3. The vertically-moving breech-block C, having the shell-extractor moving in a chamber on one side of the breech-block opening and the cocking-arm upon the opposite side, in combination with the actuating-head D of the lever, having a single supplemental pin, K, extending through from side to side, so as to operate both the cocking-arm and to start the extractor, substantially as herein described.

4. In combination with the frame provided with a groove in which moves the head of the extractor, the slide L, connected with and moved by the hammer in its fall, so as to close the end of said groove in the frame into which the head of the extractor moves to seize cartridge, substantially as herein described.

5. The rotating cartridge-locking rod P, having a projection at the end, by which it may be turned, in combination with the lug R, pivoted at 3 to the forward part of head D, so that the travel of its projecting spur 5 is past the projection on the end of rod P, and adapted to be thrown down and kept from operating the rod, substantially as herein described.

In witness whereof I have hereunto set my hand.

ALOIS SCHNEIDER.

Witnesses:

FRANK A. BROOKS,
S. H. NOURSE.