(No Model.)

G. W. SCHOFIELD.

Revolving Fire-Arm.

No. 227,449. **Patented May 11, 1880.**

Fig. 1.

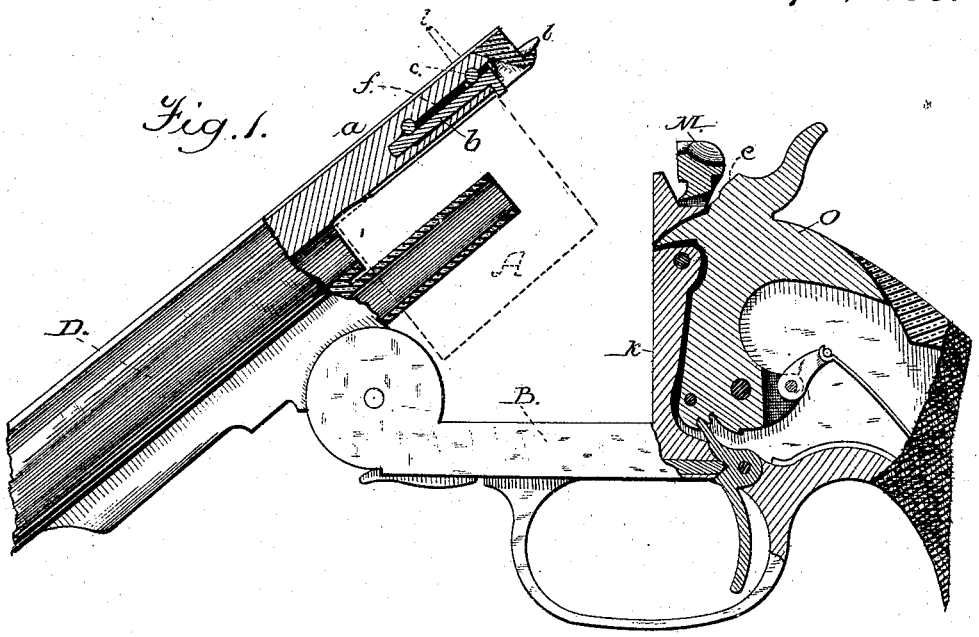


Fig. 2.

Fig. 3.

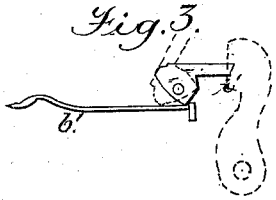


Fig. 4.

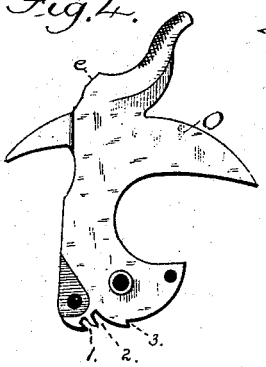


Fig. 5.

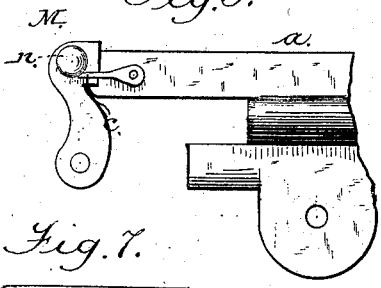


Fig. 6.

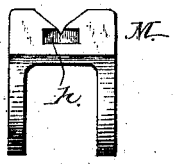
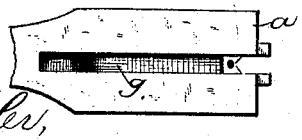


Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORGE W. SCHOFIELD, OF UNITED STATES ARMY.

REVOLVING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 227,449, dated May 11, 1880.

Application filed April 8, 1880. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. SCHOFIELD, an officer of the United States army, have invented certain new and useful Improvements in Revolving Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The objects of my invention are to provide a ready and convenient means for removing the cylinder from a revolving fire-arm, and for holding it securely in its proper place when in the arm, and a means by which the hammer of a jointed fire-arm is moved backward to a safety-notch and held there by bringing together the two parts of the arm from the position of open and broken down to that of the locked position ready for use.

To this end the first part of my invention consists of a spring-cylinder stay or hook inserted in a hole in the barrel-extension above the cylinder, or placed in a recess cut into said barrel-extension on its under surface; (in either case the stay is held in place by a pin or screw which passes over or under it, fitting in a notch or against a shoulder on its surface near one end and leaving the other end free to vibrate as the cam-pin or the pawl is turned) of a cam-pin or a pivoted pawl passing through or pivoted in the barrel-extension over the cylinder and above the cylinder-stay, which serves, when in one position, to hold the hook end of the stay fixedly over the edge of the rear end of the cylinder, so that the cylinder cannot be moved from its position in ejecting cartridge-shells, and when moved to another position frees the hook end of the stay, which then springs upward clear of the cylinder, and thus prevents its removal from the arm. When the arm is closed, ready for use, the cylinder-stay cannot be moved by the shock of firing or other cause, as the cam pin or pawl is held down positively by the barrel-latch when in that position.

The second part consists of a quarter-cock or safety notch, 1, on the tumbler and a beveled surface on the hammer in front of the thumb-piece, so arranged that by closing the arm from the position of unlatched and broken down the hammer is carried back so far as to bring the sear or point of the trigger into the quarter or safety notch, thus bringing the fire-point a little to the rear of or about on a line with the front face of the recoil-shield *k*, Figure 1, which prevents its being touched by a cartridge.

Fig. 1 is a vertical longitudinal section of a fire-arm having my inventions applied, and showing the cylinder-stay *b* and its cam-pin *c* in position and the hammer standing at the quarter-cock. It also plainly shows the beveled surface *e* on the hammer in front of the thumb-piece, on which the barrel-latch M acts in closing the piece when the hammer is down, moving the hammer back to the quarter-cock. Fig. 2 is a view of the cylinder-stay *b* and of the cam-pin *c*, which operates the stay to hold or free the cylinder. Fig. 3 is a view of the cylinder-stay *b'*, made to work in a recess, *g*, Fig. 5, instead of a hole in the barrel-extension, and confined at its front end by a pin or screw passing under the stay *b'*, through a notch or bend in said stay, and of a pivoted pawl or cam, *i'*, operating in a slot cut in the barrel-extension to hold down or free the cylinder-stay, as does the cam-pin *c* shown in Fig. 2. Fig. 4 is a side view of the hammer *o*, showing more plainly than in Fig. 1 the quarter or safety notch 1 in the tumbler, and the beveled surface *e*, on which the barrel-latch M acts to throw the hammer back in closing the arm to the position of quarter-cock. Fig. 5 is a side elevation of a section of the barrel-extension *a*, showing the lever of the cam-pin *c*, said lever being securely held in the position for use by the projection *n* on the barrel-latch M. Fig. 6 is a front elevation of the barrel-latch M, showing the cavity *h*, into which the projecting end of the cam-lever *i'* fits when the arm is closed and ready for use, and by means of which it cannot be moved by the shock of firing. Fig. 7 is a bottom-plan view of a section of the barrel-extension, showing the recess *g*, made to take the spring cylinder-stay *b'*, Fig. 3.

In the drawings, A represents the cylinder, B the frame, D the barrel, O the hammer, and M the barrel-latch, of a revolving fire-arm.

A hole, *f*, Fig. 1, is drilled in the barrel-ex-

tension (the part of the barrel extending over the cylinder-cavity) *a*, Fig. 1, from its rear end toward the front, or a recess is cut on the under side of the same, as shown in Fig. 7, to receive the cylinder-stay. In either of these the hook end of the stay is free to move upward by its spring action when released by turning the cam-pin or cam-pawl enough to clear the cylinder, which can then be removed; and when the cam pin or pawl is turned back to position for use the hook end of the stay is pressed down, and held there, so that the cylinder is securely retained in its place. Giving the lever of the cam-pin or cam-pawl a quarter-turn upward, as shown in dotted lines, Fig. 1, allows the stay to spring up, freeing its hook entirely from the cylinder.

The end of the lever of the cam-pin *c* or cam-pawl *i'*, as the case may be, projects a little beyond the rear end of the barrel-rib extension *l*, Fig. 1, and its end is caught and firmly held in position for use by a notch in or a projection on the barrel-latch M. Thus it cannot be moved by the shock of firing or other cause when the arm is closed. This projection of the lever beyond the barrel also facilitates the operating of it by pressing it with the thumb or finger in raising it to take out the cylinder.

The hammer O is provided with three notches, 1 2 3, Figs. 1 and 4, in its tumbler part, as is done in some other fire-arms, the first two of which are safety-notches, but usually called "quarter-cock" and "half-cock" notches, respectively. The quarter-cock notch is so located that when the sear or the sear end of the trigger is thrown into it the fire-point of the hammer or fire-pin is held back of or in line with the plane of the face of the recoil-shield *k*, so that it cannot be touched by a cartridge in closing the arm. In this quarter-cock position also the cylinder cannot be revolved, and the arm cannot be unlatched without more force than would ordinarily be applied. The proper position of the hammer when the arm is to be opened is at half-cock.

The hammer O is also provided with a beveled surface, *e*, upon which the rear part of the barrel-latch M acts in being forced back by the barrel-extension, as the arm is closed when the hammer is down in its most forward position, far enough to bring the sear into the quarter-cock notch before a cartridge can touch the fire-point, as shown in Fig. 1.

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

1. The combination of a spring-cylinder stay or hook inserted in a hole or recess in the barrel-extension and secured there, a cam-pin serving by its rotation to lock and unlock the stay from the rear end of the cylinder, and a lever for turning the pin, substantially as set forth.

2. The combination of a spring-cylinder stay or hook, a cam-pin or its equivalent having a lever, which lever extends beyond the rear end of the barrel-extension, and the barrel-latch, by means of which the lever of the cam pin or pawl is positively held down, thus keeping the hook on the cylinder-stay down behind the rear end of the cylinder at all times when the arm is closed ready for use, substantially as set forth.

3. The combination, in a jointed fire-arm, of the hammer O, with its beveled or cam surface *e* above the firing-nose and in front of the thumb-piece, its quarter-cock notch 1, the barrel-latch M, and the end of the barrel-extension, for the purpose of throwing back the hammer to the position of quarter-cock by bringing the arm from the position of open to that of closed, substantially as shown and described.

4. The hammer O, with its beveled shoulder or surface *e* above the firing-nose, in connection with the quarter-cock notch, combined with the barrel-latch M, substantially as and for the purpose set forth.

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