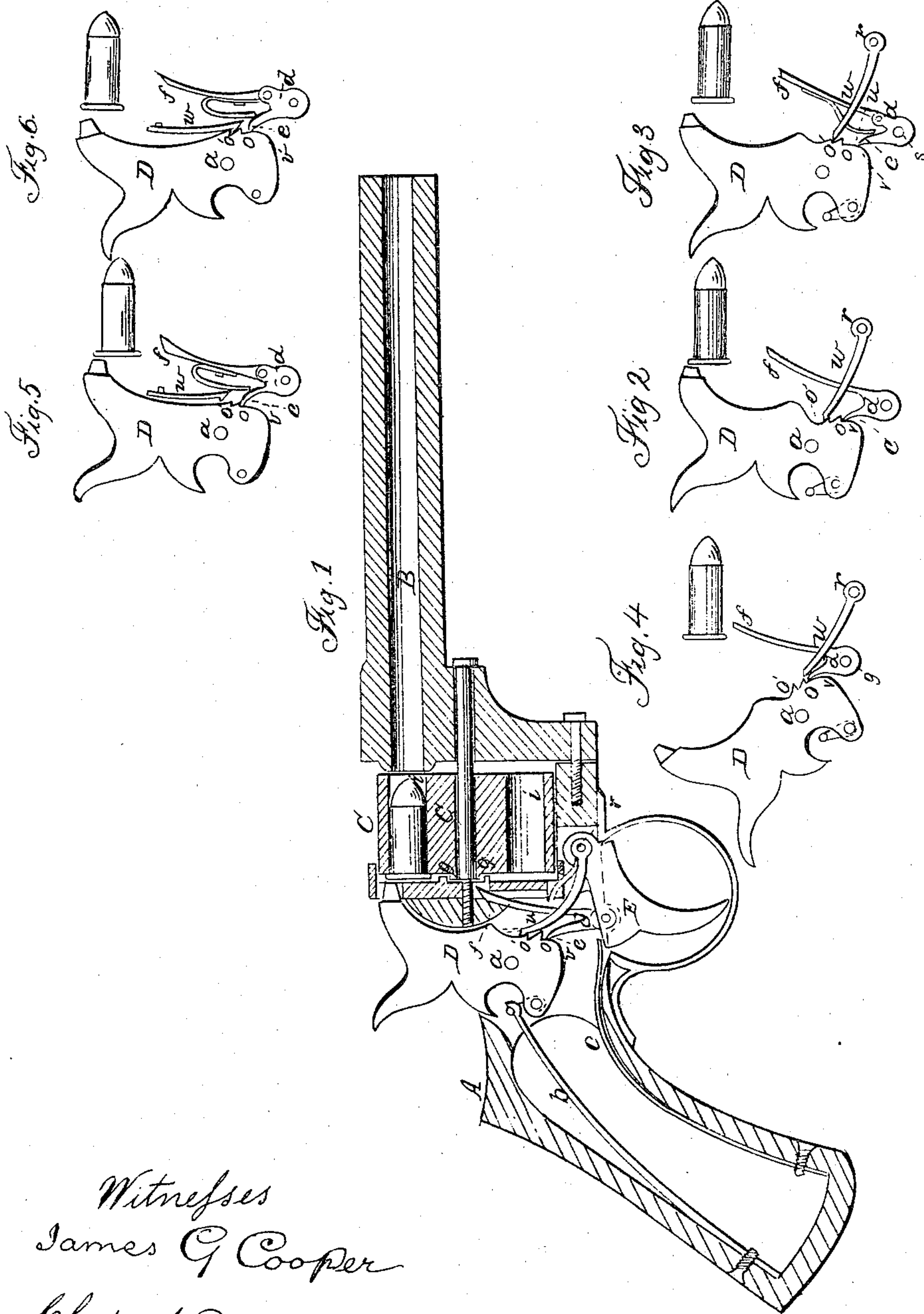


S. W. WOOD.

Revolver.

No. 39,619

Patented Aug 18, 1863



Witnesses
James G Cooper
Chas. A Davis

S W Wood

UNITED STATES PATENT OFFICE.

S. W. WOOD, OF CORNWALL, NEW YORK.

IMPROVEMENT IN FIRE-ARMS.

Specification forming part of Letters Patent No. 39,619, dated August 18, 1863.

To all whom it may concern:

Be it known that I, S. W. WOOD, of Cornwall, county of Orange, and State of New York, have invented certain new and useful Improvements in Revolving Fire-Arms, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification.

Figure 1 is a vertical longitudinal section, showing the interior mechanism for operating and discharging the arm. Fig. 2 is a detached view of the hammer and pawls with the hammer resting upon the cartridge. Fig. 3 is also a detached view of the hammer and pawls with the hammer on guard or slightly off the cartridges. Fig. 4 is a similar view with the hammer at full-cock and in position to descend upon the cartridge. Fig. 5 represents the pawl *w* in a different position, being secured to the frame of the arm, directly in front of the hammer, instead of being hinged to the pivot of the trigger. Fig. 6 is a view representing the hammer on guard, the guard-pawl having engaged the upper notch.

The nature of my invention consists in the arrangement, hereinafter set forth, of two pawls operating in the same notches on the face of the hammer, one pawl to revolve the cylinder and discharge the arm by simply pulling the trigger, while the other pawl holds the hammer on guard or at full-cock, and is liberated by the pawl hinged to and operated by the trigger. The pawl holding the hammer on guard or at full-cock is of such length that when lifted or raised out of either of the notches on the face of the hammer it permits said hammer to descend upon and explode the cartridge or percussion-cap.

To enable others skilled in the art to make and use my improved revolving fire-arm, I will proceed to describe the same in detail.

The stock A, barrel B, and cylinder C are similar to such parts in other pistols or revolvers, the cartridges being inserted and withdrawn from the cylinder through a hinged door, and require no detailed description here. The hammer D is pivoted at *a*, and is thrown forward to explode the cartridge or percussion-cap by means of a mainspring, *b*, and the trigger E, after the discharge, is returned in position by means of a sear-spring, *c*.

To the heel of the trigger E is pivoted the forked spring-pawl *d*, one prong, *e*, taking into the notch *o* to discharge the arm by pulling the trigger only, while the other prong, *f*, takes into a ratchet-wheel, *g*, formed on the end of the cylinder C, to turn said cylinder and to bring each of the chambers *i* in succession in line with the bore of the barrel.

It will be observed that as the pawls *e f* are actuated by the trigger E, by one pivot at *s*, unless one of the chambers *i* shall be directly in line with the bore of the barrel the pawl *e* will not liberate the hammer and the arm cannot be discharged.

To the pivot *r* of the trigger E is hinged what I shall designate a "guard pawl," *w*. This pawl *w* performs several offices—viz., that of arresting and holding the hammer on guard, or slightly off the cartridge or percussion-cap, to prevent accidents by premature explosion while carrying the arm about the person or when in use carelessly, and to retain the hammer at full-cock, taking into the notch *o* when it is desired to raise said hammer by the thumb, instead of operating to discharge the cartridge by means of the pawl *e* and trigger E alone. When the hammer D is at its lowest position (see Figs. 1, 2) it bears upon the face of the hammer, above the notches *o o'*, while the pawl *e* falls below both these notches *o o'*. To place the hammer on guard, slightly off the cartridge or percussion-cap, the fixed pawl *w* takes into the notch *o'*, (see Figs. 3, 6,) and to place the hammer at full-cock by raising it with the thumb the pawl *w* engages the notch *o*, Fig. 4. In raising the hammer on guard, or to the notch *o'*, as in Figs. 3, 6, or to full-cock, Fig. 4, it will be observed, does not change the position or interfere with the pawl *d*; and to discharge the arm while in either of these positions and retained by the pawl *w*, by pulling the trigger E the end *e* of the pawl *d* passes up, the lower face, *u*, Fig. 3, of the hammer, beneath the pawl *w*, is thrown forward by the heel *v* of the hammer, acting as a cam, and, lifting the pawl *w* out of its notch, retains it and permits the hammer to descend upon and explode the cartridge or percussion-cap. The pawl *w* is placed directly over the pawl *e* and operates (to hold the hammer on guard or at full-cock) in the same notches *o o'* in the face of the hammer D, and

is of such length that when lifted or forced out of either of these notches *o o'* rides upon the back of the pawl *e*, permitting the hammer to descend; and when the pawl *e* shall have passed below these notches *o o'*, and from beneath the pawl *w*, said pawl *w* rests upon the face of the hammer above them, (see Figs. 1, 2, 5,) and the arm is again in readiness to be placed on guard, drawn to full-cock by the thumb, and discharged, or discharged by simply pulling the trigger.

The pawl *w* may be placed in different positions, as shown in Figs. 5, 6, and in dotted lines, Fig. 1, by being secured to the frame *A* in front of the hammer *D* and extending downward, and perform the same offices without departing from my invention.

Having thus fully described my improved revolving fire-arm, what I claim therein as new, and desire to secure by Letters Patent, is—

The arrangement herein described of two pawls operating conjointly in the same notch *o* on the face of the hammer, the pawl *d* to discharge the arm by pulling the trigger simply, while the other pawl, *w*, holds the hammer on guard or at full-cock, and is liberated by the prong *e* of the pawl *d*, hinged to and operated by the trigger *E* to discharge the piece, substantially as herein set forth.

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Witnesses:

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