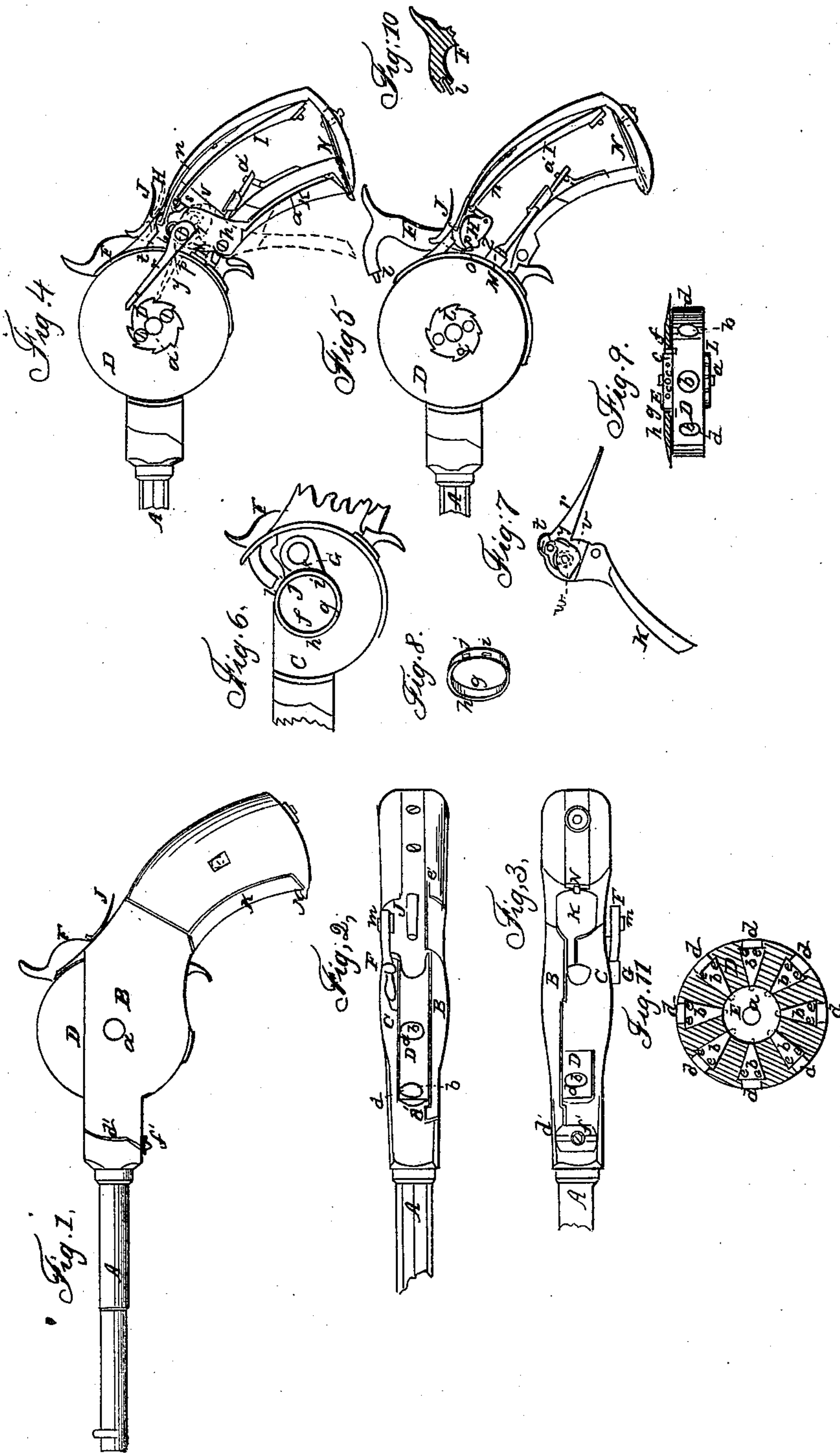


W. WRIGHT.

Revolver.

No. 11,917.

Patented Nov. 7, 1854.



UNITED STATES PATENT OFFICE.

WENDELL WRIGHT, OF NEW YORK, N. Y.

IMPROVEMENT IN FIRE-ARMS.

Specification forming part of Letters Patent No. **11,917**, dated November 7, 1854.

To all whom it may concern:

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

Figure 1 is a side view of a pistol constructed according to my improved plan. Fig. 2 is a plan or top view of the same. Fig. 3 is an inverted plan or an under view of the same. Fig. 4 is a side view of the same, the cap at one side of the chambered cylinder being removed in order to show the parts of the lock and the manner in which the cylinder is rotated. Fig. 5 is a side view of the same with cap removed, and also some portion of the lock. Fig. 6 is a view of the inner side of the casing in which the chambered cylinder is fitted, showing the circular recess in which the nipple-boss and fire-ring fits, and also showing the box or recess in the casing which contains the detonating pills. Fig. 7 is a detached view of the cocking-trigger and pawl which operates the chambered cylinder. Fig. 8 is a detached view of the fire-ring. Fig. 9 is a detached edge view of the chambered cylinder. Fig. 10 is a section of the upper part of the hammer, showing the adjustable pin at the end of the hammer. Fig. 11 is a section of the chambered cylinder, the plane of section being transverse with the axis of the cylinder.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to certain new and useful improvements in revolving or repeating fire-arms; and it consists, first, in the employment or use of a thumb-trigger, so arranged and connected with a cocking-trigger that the thumb-trigger may be operated by the thumb while the other is operated by the hand.

My invention consists, secondly, in counter-sinking the end of the stop which locks or retains the chamber-cylinder, for the purpose of enabling said stop to enter the chambers of the wheel when the chambers are charged with the powder and ball.

My invention consists, thirdly, in having an

adjustable or flexible pin secured in the end of the hammer, in a manner as will be presently shown, said pin yielding or adjusting itself to the proper cavity in which the detonating pill is placed when the hammer descends, and thereby preventing "miss-fires" and the wearing of the nipple-boss in consequence of the hammer being out of line with the cavities therein.

My invention consists, fourthly, in having a nipple-boss attached to one side of the rotating cylinder, and having said nipple-boss fitted within a corresponding recess in the casing and covered with a fire or guard ring, arranged as will be hereinafter shown, for the purpose of preventing double explosions.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the barrel of a pistol, having at its inner end a casing or socket formed of two caps or cheek-pieces, B C, within which a rotating chambered cylinder, D, is fitted, the axis *a* of the cylinder working in the cheek-pieces. (See Fig. 1.) The cylinder D is fitted vertically between the cheek-pieces, and is perforated with a series of radial chambers, *b*, (see Figs. 2, 3, 9, and 11,) each of which receives the necessary amount of powder for a charge. The several chambers *b* have their vents *c* on the periphery of a boss, E, at one side of the cylinder D, as shown in Fig. 9. The chambers *b* have their orifices smaller in diameter than the portions immediately below them, (see Fig. 11,) *d* representing the orifices, and *e* the shoulders formed by the enlargement beneath them. This enlargement is formed by an expanding-bit, and the object of so forming the chambers is to increase their capacity within a moderate-sized cylinder, so that they will hold the necessary amount of powder for a charge, and also have sufficiently small orifices to receive the balls, which rest, of course, upon the powder.

The nipple-boss E, when the cylinder is adjusted between the cheek-pieces B C, fits within a circular recess, *f*, in the inner surface of the cheek-piece C, (see Figs. 6 and 9,) and a ring or band, *g*, Figs. 6, 8, and 9, which I term a "fire-ring," encompasses the boss and fits snugly around it and between the boss and recess, said ring having a flange, *h*, on its inner edge,

which fits in a recess cut in the cylinder D around the boss. (Shown more particularly in Fig. 9.) The ring *g* is perforated with two holes, *i j*, the hole *j* being in line with the hammer F, (see Fig. 6,) and the hole *i* being in contact with a box or receptacle, G, in the cheek-piece containing detonating pills *k*.

The hammer F is of the usual form, and has a pin, *l*, inserted in its end and secured therein by india-rubber or other elastic material, which is wrapped around it (see Fig. 10,) the rubber or other elastic material keeping said pin firmly in its place and at the same time allowing it to yield or give laterally, so that it may, upon the descent of the hammer F, adjust itself to the cavities of the vents *c* in the periphery of the boss E, and thereby insure the ignition of the pills therein, said pin by its flexibility compensating for any moderate aberration in the descent of the hammer. The hammer F is secured to a tumbler, H, by a pin or screw, *m*, the tumbler being within the stock of the pistol, as usual, and provided with the ordinary spring, I. (See Figs. 4 and 5.)

J is a trigger at the upper part of the stock, governed by a spring, *n*, which presses the catch *o* of the trigger against the edge of the tumbler H. When the hammer F is drawn back the catch *o* is forced into a notch, *p*, in the tumbler, and the catch retains the hammer in an elevated position, as shown in Fig. 5, and the hammer is "cocked," and by depressing the outer end of the trigger J the catch *o* is thrown from the notch *p* in the tumbler, and the hammer descends by the force of the spring I. The trigger J, I term the "retaining-trigger."

K is a trigger at the under side of the stock of the pistol. Said trigger works upon a pivot, *q*, and has a pawl, *r*, secured by a pivot, *s*, to its upper end, said pawl acting upon a ratchet, L, at the side of the cylinder D. (See Fig. 4.) The ratchet is provided with a small spiral spring, *t*, which keeps the end of the pawl upon the ratchet. The trigger K is acted upon by a spring, *a*, which has a tendency to keep its lower end forced outward from the stock, as shown by the red lines in Fig. 4.

On the inner side of the upper part of the trigger K there is a "sear," *v*. (Shown in Fig. 7, and by red lines in Fig. 4.) This sear is secured to the trigger by a pivot, *w*, and is provided with a catch, *y*. In the edge of the tumbler H there is a notch, *z*, some distance below the notch *p*. (Shown more clearly in Fig. 5.)

M is a stop which works in a suitable guide, *a'*, within the stock. This stop has its outer end of cylindrical form, and of a size corresponding to the orifices *d* of the chambers *b* in the cylinder D. The end of the stop M is countersunk, so as to fit over and partially cover the balls in the chambers.

At the lower end of the stock there is a clutch or fastening, N, which slides back and

forth, and has sufficient elasticity to throw up a notch at the end of the catch over the end of the trigger when the catch is moved outward, as shown in Fig. 4.

The cheek-piece B is movable, and is fitted to the side of the pistol by means of a dovetail joint, *d'*, at one end, and a lip, *e'*, at the opposite end, (see Fig. 2,) the dovetail joint being covered by a button, *f'*, on the under side of the pistol. (See Figs. 1 and 3.) The axis of the cylinder D at one end fits in the cheek-piece B.

This pistol may be used in the ordinary way, or as the usual single-barreled pistols, by loading at the muzzle and drawing back the hammer and springing the trigger J with the thumb; but when quick firing is required the cylinder D is taken from the pistol by detaching the cheek-piece B, loaded and replaced, and the trigger K is relieved from the catch or fastening N, and is forced outward by the spring *u*, as shown by the red lines in Fig. 4. The thumb is placed upon the trigger J, which is kept down in order to prevent the catch *o* from acting upon the tumbler H, and the trigger K is drawn toward the stock, and the pawl *r* acts upon the ratchet L and rotates the cylinder D, while the catch *y* on the sear fits in the notch *z* in the tumbler and raises the hammer F, the stop M being forced into the orifice of one of the chambers by the forward movement of the upper part of the trigger. The cylinder is thereby properly retained in position, and by still drawing the trigger K toward the stock the catch *y* will pass beyond the notch *z*, and the hammer falls and ignites the pill in one of the vents *c*, said vents being supplied with pills from the box G, the pills passing into the cavities of the vents through the hole *i'* as the boss E rotates.

By the employment of the two triggers J K premature explosions are avoided, as the hammer will be prevented from falling if the trigger J is not pressed down, and the hammer will remain cocked until this is done. The fire-ring *g* also prevents the fire from one pill, when exploded, from passing around and communicating to an adjoining pill, and consequently double explosions are avoided.

The device, as a whole, is durable, not expensive to manufacture nor liable to get out of order.

I do not claim the cylinder D separately, nor either of the triggers J K separately, for they have been previously used; but

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

1. The employment or use of the thumb-trigger F, arranged and connected with the cocking-trigger K, substantially as herein shown, so that the trigger F may be operated by the thumb, while the trigger K is operated by the hand.

2. Countersinking the end of the stop M which locks or retains the cylinder D as each

chamber is fired, for the purpose of enabling said stop to enter the chambers when the cartridge or powder and balls are within them.

3. The flexible pin *l* at end of the hammer *F*, whereby the pin is enabled to adjust itself to the vents *c* of the chambers *b*, and thus insure the ignition of the pills, as set forth.

4. The nipple-boss *E* at the side of the cylinder *D*, when said boss is inserted within a

cavity, *f*, in the cheek-piece, and encompassed by a fire-ring, *g*, for the purpose of preventing the explosion of more than a single chamber at once, or at one operation of the trigger *K*.

WENDELL WRIGHT.

Witnesses:

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J. W. HAMILTON.