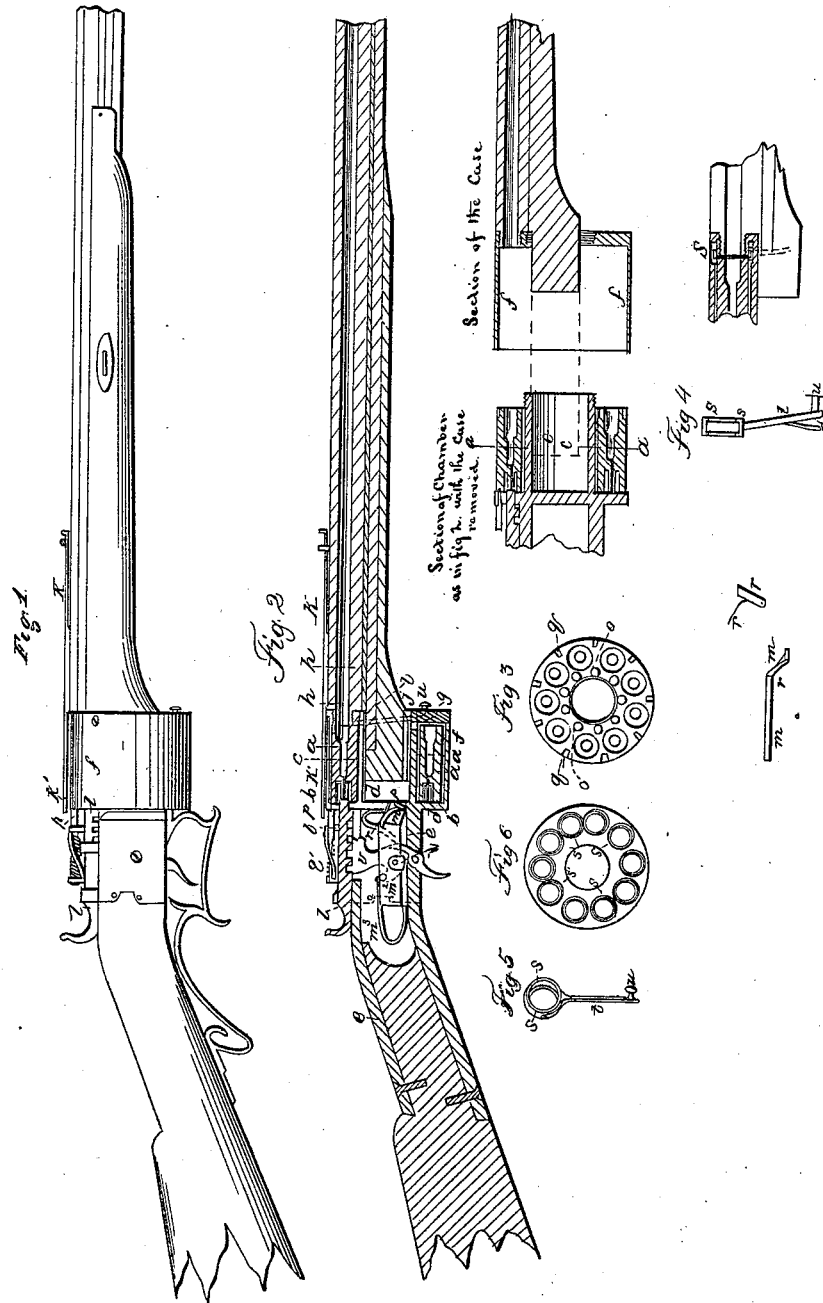


T. F. STRONG.
Revolver.

No. 698.

Patented Apr. 21, 1838



UNITED STATES PATENT OFFICE.

THEO. F. STRONG, OF NORTHAMPTON, MASSACHUSETTS.

IMPROVEMENT IN MANY-CHAMBERED-CYLINDER FIRE-ARMS.

Specification forming part of Letters Patent No. 698, dated April 21, 1838.

To all whom it may concern:

Be it known that I, THEODORE F. STRONG, of Northampton, in the county of Hampshire and State of Massachusetts, have invented certain Improvements in the Construction of Many-Chambered-Cylinder Guns or Fire-Arms, of which the following is a specification.

In the accompanying drawings, Figure 1 shows the gun as it appears externally when ready for use, and Fig. 2 a section exhibiting the interior arrangement of the lock and revolving cylinder.

a a is the many-chambered cylinder, the chambers of which terminate in nipples to receive percussion-caps at their back ends, the nipples being each contained in an excavation or nipple-chamber, *b b*, formed in the cylinder and guarding it from injury. The cylinder revolves upon a tubular axis, *c c*, which is in one piece with the circular plate *d d*, the stock-strap *e e* and the general iron attachments forming the case of the lock and connecting these parts with the stock. The chambered cylinder is surrounded by a cylindrical case or box, within which it revolves, said case or box being closed at each end by stout plates of metal. The periphery of this case is shown at *f f*. The end *g* forms one solid piece with or is firmly attached to the part *f f*, and is made thick, as shown in the drawings, and it is so made because it constitutes a cover to the open ends of the chambers. This end will have the effect of arresting a ball in case of accidental discharge of a loaded chamber not opposite to the barrel of the gun. Through this end *g* there is a perforation, into which the end *h h* of the barrel is securely screwed.

If preferred, a separate piece of wood, *i i*, forming a part of the stock of the gun, may be attached to the barrel; or it may, as in many fowling-pieces, be finished entirely of iron. The end *i'* of the stock is represented as passing into the tubular axis of the chambered cylinder, and there is an opening at *j*, or in some other part of the forward end of the hollow axis *c c*, which will allow of the escape of the discharged powder, should such discharge accidentally take place in one of the chambers—an accident not likely to occur, but one the bad effects of which are effectually prevented by this escape-vent and the arresting of the ball.

The breech and barrel ends of this fire arm form two distinct parts, which are attached to each other by means of a screw, allowing of their ready separation.

The cylindrical case *f f* and its end *g* constitute one part with the barrel of the gun, pistol, or other arm, and into the center of the plate *g* the tubular axis *c c* is screwed, the circular plate *d d* entering and forming the back end of the cylindrical case *f f*. To keep the two parts in their due position when screwed together, the spring *k k'* has a pin projecting down at its end *k'*, which falls into a notch or opening on the edge of the head-plate *d d*.

The hammer *l l* slides on the upper side of the lock in a line with the axis of the barrel, so as to strike directly upon the percussion-cap. It is forced forward by a rack-and-pinion movement in the manner distinctly represented in the drawings, the general operation of the main-spring *m* in producing this effect being like that in many other locks, as is also the action of the trigger.

By the operation of cocking the chambered cylinder is turned so as to bring a fresh or charged chamber into the place opposite to the bore of the barrel, and this I effect in the following manner:

A lever, *m m'*, turns on a fulcrum at *m²* by the return of the tumbler *v*, on the shaft of which there is an eccentric, *w*, in consequence of which, when the gun is cocked, the end *m'* of the tumbler is raised and carries with it a latch, *n*, attached to it by a joint-pin, and this latch, bearing against the sides of suitable depressions made for that purpose in the back end of the chambered cylinder, pushes it round.

Fig. 3 shows the end of the chambered cylinder, *o o* being the depressions upon which the latch operates. To hold the cylinder in place, a bolt, *p*, is forced forward by a spiral spring and is made to catch in the notches or depressions *q q*, Fig. 3. The cocking of the gun draws the bolt *p* back, so as to allow the chamber to turn by the action of the latch. A spring attached to the bolt has a catch on its end, which falls into a notch at *q'* on the top of the hammer, and consequently retracts the bolt; but the bolt not being able to slide back as far as the hammer does, the catch is disengaged from the notch, the bolt is shot forward, and the latch *n* having at this time performed its office, the bolt enters the proper notch or

depression and confines the cylinder. A slight spring, *r*, bears upon the latch so as to force it forward and cause it enter the depressions *o o*.

Instead of the bolt *p* for holding the cylinder in its place, with its spiral spring and the catch *g*, I have devised another mode of effecting the object intended to be accomplished by that apparatus.

In Figs. 4 and 5, *s* is a ferrule or ring, which is to be so situated that it may be made to embrace the rear end of the barrel where it comes in contact with the revolving chamber, and may also embrace each chamber successively.

Fig. 6 shows the open ends of the chambers, the dark lines *s's* which surround them representing grooves, into which the edge of the ferrule may pass. The shank *tt* of the ferrule *s* has a button, *u*, on its lower end and works upon a joint-pin at its center. Its situation on the gun is shown by the dotted lines on the place *g* in Fig. 2. The ferrule *s* occupies the part above named, which is represented by the dark lines above and below the screw in the rear of the barrel and extending into the chambered cylinder. By pressing the finger on the nut *u* the ferrule *s* is drawn entirely onto the rear of the gun-barrel and the cylinder is at liberty to revolve, and when it turns round so as to present another chamber to the bore of the gun the ferrule *s* will be forced into the

grooves by the spring *t'*, Fig. 4, surrounding it, which will hold it firmly in its place. The ferrule is made to swivel on the upper end of the shank *t*, as shown in Fig. 5.

Having thus fully described the construction and made known the operation of the gun or other fire-arm a right to which I desire to secure by Letters Patent, I do hereby declare that what I claim as my invention therein is—

1. In forming a case to the revolving chamber-cylinder, in the manner described, with heads completely inclosing the opening of the chambers and percussion-caps, excepting that one of each which is to be discharged, the forward head being so fixed as to arrest a ball in the event of an accidental discharge of one of the chambers.

2. The combination of the foregoing case with the aperture through the tubular axis, for the purpose set forth.

3. The combination of the respective parts of the lock, constructed substantially in the manner described, consisting of the combined action of the hammer and bolts with the tumbler lever and latch, for the purpose of revolving the cylinder and discharging the piece.

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Witnesses:

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