

E. JAQUITH.
Revolver.

No. 832

Patented July 12, 1838.

Fig. 1.

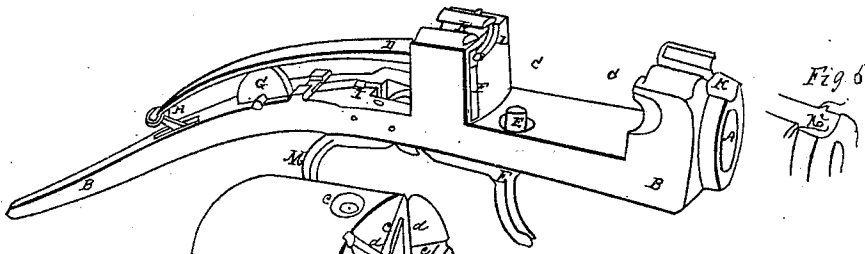


Fig. 2.

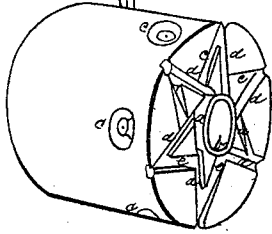


Fig. 6.

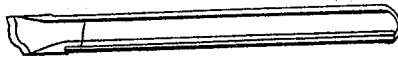


Fig. 3.

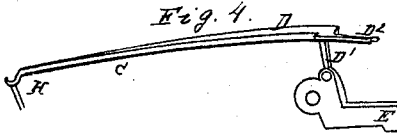


Fig. 4.

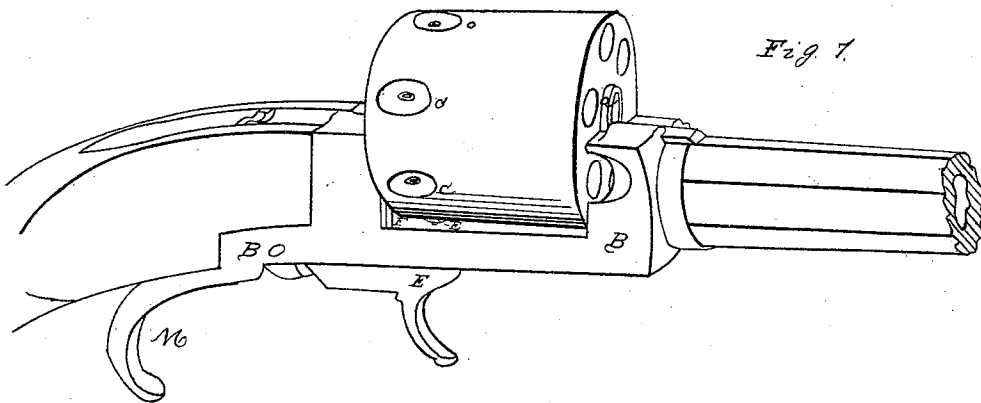


Fig. 7.

UNITED STATES PATENT OFFICE.

ELIJAH JAQUITH, OF BRATTLEBOROUGH, VERMONT.

IMPROVEMENT IN MANY-CHAMBERED-CYLINDER FIRE-ARMS.

Specification forming part of Letters Patent No. 832, dated July 12, 1838.

To all whom it may concern:

Be it known that I, ELIJAH JAQUITH, of Brattleborough, in the county of Windham and State of Vermont, have invented a new and useful Improvement in the Construction of Fire-Arms; and I do hereby declare that the following is a full and exact description.

My fire-arms, in common with several other kinds, have a revolving many-chambered breech, and as in Colt's and Whittier's the axis of my revolving cylinder is parallel with that of the barrel; but instead of being below the barrel and hinging the chambers to be discharged successively up into a line with the barrel, the axis of my cylinder is above and the chambers are in turn brought down into contact with the barrel. This arrangement, in case of any accidental ignition of the neighboring charges, renders the forward hand of the person using the gun more safe. The cylinder containing the chambers is in my fire-arm a hollow cylinder having an open central aperture of convenient size, through which the marksman can take aim. The cylinder, when adjusted to its place, rests and turns upon a ring which projects for that purpose at each end around this central aperture, as in Figure II, *a*, and these rings or arbors rest on and turn in cavities or bearings fitted to receive them, as represented in Fig. I, *L*; and for the purpose of holding the cylinder in its place a sliding bolt (represented in Fig. III) passes through the cavity *K K* and through the central aperture of the cylinder, Fig. II, *b*; and this bolt, having its lower surface fitted to the curve of this aperture and filling only about one-third of the contents of the aperture, allows a convenient space above it for taking aim through the cylinder. To remove the cylinder for the purpose of charging it, this bolt is withdrawn and the cylinder liberated, and when the latter is re-adjusted the bolt is slid back and attaches it firmly to the piece. To keep the bolt in its place when adjusted, a spring, *k*², Fig. V, is attached to the lower side of the cavity. A projection from this spring enters a suitable notch or hole, *k*³, Fig. VI, at the lower side of the bolt. The charges in this cylinder, like those of many other guns, are primed by percussion-caps; but the nipples to receive these caps are depressed somewhat deeply into the external cy-

lindrical surface just behind the rear of each chamber, as in Fig. II, *c*, thus protecting them from accident. The cock or hammer, Fig. I, *E*, which strikes and explodes these caps, strikes up from below, being attached to the mainspring *D* by a stirrup, and the end of this mainspring, acting in grooves cut in the rear end of the cylinder *d*, Fig. II, brings round another chamber each time the fire-arm is cocked and the mainspring thereby depressed.

The mainspring itself, *D*, occupies the middle of the gun and is directly over the hammer *E*, to which it is tied by a stirrup, *D'*, Fig. IV; but to give the mainspring a better purchase on the cylinder its forward end, *D*², Fig. IV, is carried considerably one side of the middle, and plays vertically in a firm and well-finished metallic box or mortise, *F*, and terminates at its foremost end in a small button or finger, which is fitted to follow the grooves in the cylinder. These grooves are of two kinds. One kind (marked *e*, Fig. II) is in a vertical direction and corresponds with the mortise *F*. Through one of this kind of grooves the end of the mainspring passes up each time the piece is discharged. This kind of groove is deepest at the external end and shallowest where it enters the next groove. The other kind leads from the internal end of one of those above described to the external end of the next, and is deepest at its internal and shallowest at its external end. Through one of this latter kind of grooves the end of the mainspring passes each time the pin is cocked, turning the cylinder while thus passing as far as from one vertical groove to the next, so that when the piece is discharged the cylinder stands still and the end of the mainspring passes through a vertical groove and snaps into the deeper end of the next lateral groove, and when the piece is cocked the end of the mainspring turns the cylinder while passing along this lateral groove and snaps into the deeper and external end of the next vertical groove.

In order to allow the mainspring to snap successively from the shallow part of one groove to the deeper part of the next, it has a slight motion endwise, and to procure this motion it is (instead of being screwed firmly to the gun) tied by a stirrup at the rear end, *H*, to the shank on which the wooden breech is fastened,

and, being strained over a friction-roller, G, for a fulcrum, is again still farther forward tied by a stirrup to the cock or hammer. Now this stirrup at the rear end of the mainspring has an inclination or slant, which hugs the spring endwise against the rear end of the cylinder and causes it to snap readily from the shallow end of one groove into the deeper part of the next.

To enable other workmen to manufacture my fire-arms, I will mention that my experience suggests that iron is the best material for the foundation or the part represented in Fig. I, into which the barrel is screwed at A, and into which the cylinder is inserted at C C, and to which the wooden stock or breech is attached. For the cylinder, Fig. II, I think the best material is the softest and best cast-steel. I will also mention that the portion of the mainspring which plays in the mortise F should be stiff and strong and well finished, and fitted to the mortise to prevent lateral motion and to prevent its binding in the mortise by bending.

Fig. VII represents a perspective view of the gun, like parts in the figure being represented by the same letters of reference, as in the other drawings.

For the better understanding the mode of construction the reader is referred to the annexed drawings and the following explanation of the drawings.

Fig. I, B represents the foundation of the gun or the part to which the other parts are mostly attached. A represents the orifice into which the barrel is inserted; C, the place into which the cylinder is inserted; D, the mainspring; E, the hammer or cock; F, the mortise or box in which the mainspring moves vertically and which deprives it of lateral motion; G, the friction-roller over which the mainspring is strained; H, the stirrup which ties the mainspring to the foundation and presses it forward against the cylinder; I, a feather spring acting on the trigger as is common in many kinds of gun; K, an aperture where the bolt slides to confine the cylinder; L, one of the two bearings on which the rings or arbors of the cylinder rest; M, the trigger.

Fig. II represents the cylinder, in the farther or hidden end of which the chambers are bored. *a* represents one of the rings or arbors on which the cylinder turns. *b* is the central aperture, through which the bolt passes, and through which aim is taken. *c* shows the cones or nipples for the percussion-caps, which are considerably depressed for greater security. *e e e* represent the vertical groove through which the end of the mainspring passes when the piece is discharged. *d d d* are the lateral grooves through which the end of the spring passes while the cylinder is turning and the piece is cocking.

Fig. III represents the bolt which keeps the cylinder in its place, and at the same time allows room above it for taking aim. This bolt should have a spring or catch to prevent its dropping out accidentally. See also Figs. IV, V, VI, and VII, in which the same parts are indicated by the same letters.

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

1. The fixing a many-chambered cylinder above the barrel of the piece, so as to bring in its revolution its successive chamber down into a line with the barrel, in the manner herein described.

2. The employing a hollow cylinder, through the central aperture of which aim may be taken in the manner herein described.

3. The liberating and fastening the cylinder by means of a bolt, which, instead of filling the central aperture of the cylinder, fills only its lower portion and leaves room above it for taking aim, as herein shown and explained.

4. The compound action of the mainspring by a motion both endwise and vertical on grooves in the rear end of the cylinder, for the purpose of producing and regulating the revolution of the cylinder by the act of cocking, the whole combined in the manner herein set forth.

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Witnesses:

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