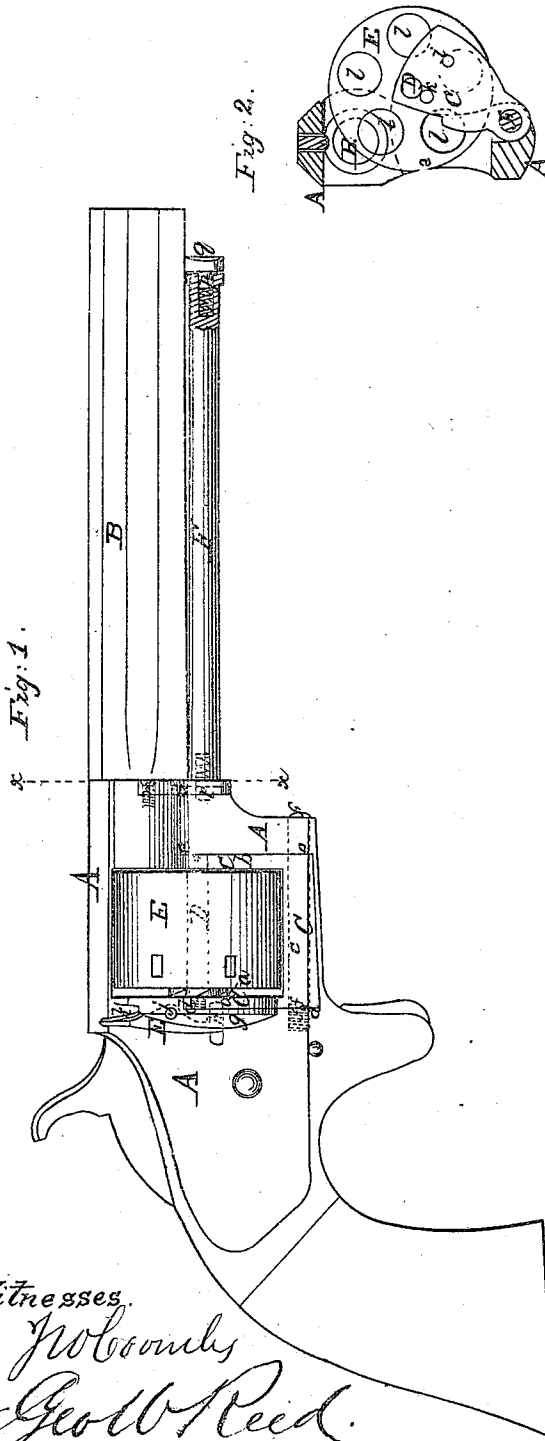


H. A. BRIGGS & S. S. HOPKINS.
REVOLVING FIREARM.

No. 41,117.

Patented Jan. 5, 1864.



Witnesses.
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UNITED STATES PATENT OFFICE.

H. A. BRIGGS AND SAMUEL S. HOPKINS, OF NORWICH, CONNECTICUT, ASSIGNORS TO THEMSELVES AND C. A. CONVERSE, OF SAME PLACE.

IMPROVEMENT IN REVOLVING FIRE-ARMS.

Specification forming part of Letters Patent No. 41,117, dated January 5, 1864.

To all whom it may concern:

Be it known that we, H. A. BRIGGS and SAMUEL S. HOPKINS, both of Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Revolving Fire-Arms; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a pistol with our improvements. Fig. 2 is a transverse section of the same in rear of the cylinder, showing the cylinder in position for loading. Fig. 3 is a transverse section of the same in the plane indicated by the line *x x* in Fig. 1. Fig. 4 is a perspective view of the swinging frame, in which the cylinder axis-pin is supported.

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

In revolving-cylinder fire-arms which load at the rear of the cylinder there have been many different constructions of the frame and modes of applying the cylinder to provide for loading. One mode of applying the cylinder which admits of a very simple construction of the arm is to attach its axis pin to a swinging support, which permits the cylinder to swing outward from the other parts of the arm in a lateral direction; but as the said pin has only been attached at one end to such support the attachment has not been sufficiently firm or durable. The object of the first part of this invention is to afford a better support for and more durable attachment of a so applied cylinder; and to this end it consists in the employment within the main frame of the arm of a laterally-swinging frame constructed to support both ends of the axis-pin and to fit within recesses in the main frame.

The second part of the invention consists in a novel mode of applying a plunger, in combination with a cylinder having such a swinging movement as is above specified, for the purpose of expelling the discharged cartridge-shells from and cleaning the chambers, whereby, while remaining attached to the arm, the said plunger is permitted to have the necessary

movements for the purpose, and when not in use is permitted to lie close under the stationary barrel out of the way.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

A is the main frame of the arm, of a form substantially like the frame of many other revolving fire-arms, and made all of one piece.

B is the stationary barrel, screwed into or otherwise secured to the frame A.

C is the swinging inner frame, which constitutes the principal feature of our invention. The side view of this frame presents the form of three sides of a parallelogram, the opposite sides or ends having just space enough between them to admit the cylinder endwise, and being fitted into recesses *d e*, provided for their reception within the opening of the main frame A, and the third side, *c*, being bored longitudinally for the reception of a pin, *f*, which passes through it and through the lower part of the front of the main frame A, and screws into the back of the said frame, the said pin being parallel with the bore of the stationary barrel and near the right-hand side of the frame A.

D is the cylinder axis-pin, passing through and fitting snugly within a hole in the front end, *b*, of the swinging frame, and being secured tightly into the rear end, *a*, thereof, and being parallel with the pin *f*. The cylinder E is fitted to turn freely on this pin. The ends *a* and *b* of the swinging frame and the recesses *d e* in the main frame which receive them are so formed that in *e*, as the swinging frame swings into the main frame, it is stopped in such a position that the axis-pin D is directly below the axis of the barrel, and that the chambers of the cylinder may by the revolution of the cylinder on the said pin be brought one at a time opposite to and in line with the bore of the barrel; and there is provided in the recoil-shield *g*, which forms part of the main frame A, a spring-stop, *h*, which locks the swinging frame in the above-mentioned position by entering a hole, *i*, in the rear end of the said frame. This stop is attached to a short lever, E, which works on a fixed fulcrum, *j*, and which has applied to it a spring, *k*, which

operates to press the stop *h* forward, the said lever being so arranged on the right hand side of the frame *A* that it can be operated to draw back the stop and unlock the swinging frame by the pressure of the thumb, while the arm is grasped in the usual manner in the right hand. There is another hole, *k*, in the rear end of the swinging frame to receive the stop *i*, and enable the said stop to lock the frame in the position shown in Fig. 2 and in red outline in Fig. 3, to which it is moved outward from the right side of the main frame to expose the open rear ends of the chambers for loading and for the expulsion of the exploded cartridge-shells. A fixed stop may also be applied to prevent the swinging out of the swinging frame and cylinder beyond the last-mentioned position.

The swinging frame, constructed as above described, having a long bearing on the pin *f*, which is supported at both ends, is very strongly attached to the main frame, and the axis-pin *D*, being supported at both ends in the said frame, makes a very steady and firm bearing for the cylinder, whether the swinging frame is in position for firing or for loading, and no strain to which the parts are subject in the operation of the arm will be liable to displace or injure the axis-pin.

F is the plunger for expelling the discharged cartridge-shells from the chambers *ll* of the cylinder, fitted to slide freely through a hole in a link, *G*, which is pivoted by a pin, *m*, to the front of the frame *A*, on the right side of the barrel, in such manner as to be capable of swinging outward laterally from the barrel, but which, when the plunger is not in use, lies snugly within a recess, *n*, provided for its reception in the front of the frame *A*, the plunger being at that time directly under the barrel, as shown in Fig. 1 and in black outline in Fig. 3, where it is held by two small spring-bolts fitted one into each end, the one, *p*, entering a hole in a fixed stud, *q*, under the

muzzle of the barrel, and the other, *r*, entering a hole in the front of the frame. These spring-bolts have their points rounded, so that they may slip easily into and out of their respective holes, above mentioned. When the cylinder is to be reloaded it is first brought to the position shown in Fig. 2 and in red outline in Fig. 3, and the plunger is pushed out from under the cylinder, still attached to the link *G*, which swings outward from the main frame till it (the plunger) comes to a position shown in red outline in Fig. 3 to enter a chamber of the cylinder, the rear end of which is clear of the recoil-shield. By pushing the plunger through the link *G* and into the chamber the cartridge-shell is expelled, and by drawing forward the plunger again the cylinder is permitted to be turned on its axis by hand to present the next chamber in position to receive the plunger, and by a repetition of the above operation the exploded shells are expelled from all the chambers, one after the other, and the cylinder is ready for reloading.

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

1. The laterally-swinging frame having a bearing on a long pin, *f*, which extends from the front to the back of the main frame *A*, and supporting the cylinder axis-pin both in front and in rear of the cylinder and otherwise applied, in combination with the main frame *A*, substantially as and for the purpose herein specified.

2. The plunger *F*, applied in combination with the laterally-swinging link and with a cylinder which is arranged to swing laterally out of the main frame, substantially as and for the purpose herein specified.

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Witnesses:

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