S. S HOPKINS

Revolving Fire-Arm.

No 113,053. Patented March 28, 1871.

Fig: 1.

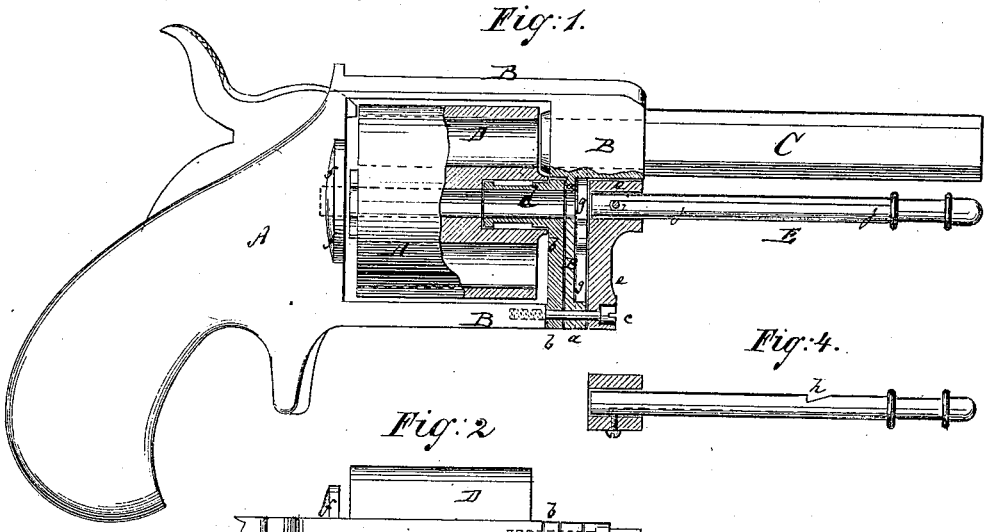


Fig: 4.

Fig: 2

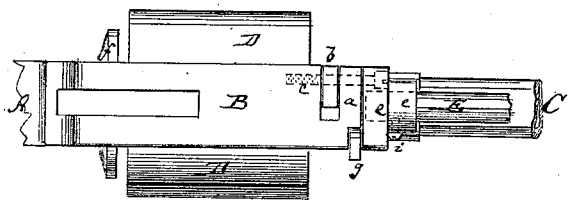


Fig: 3.

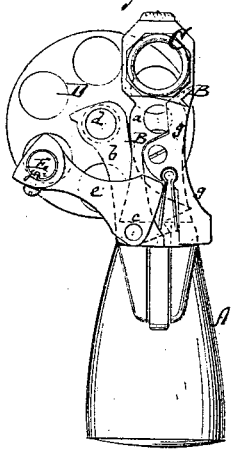


Fig: 5.

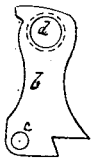
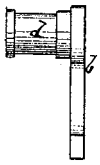


Fig: 6.



Witnesses:

C. Raetting.

Wm H. C. Smith.

Inventor:

S. S. Hopkins.

PER Munn & Co

Attorneys.

UNITED STATES PATENT OFFICE.

SAMUEL S. HOPKINS, OF NORWICH, CONNECTICUT, ASSIGNOR TO THE HOPKINS & ALLEN MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN REVOLVING FIRE-ARMS.

Specification forming part of Letters Patent No. **113,053**, dated March 28, 1871.

To all whom it may concern:

Be it known that I, SAMUEL S. HOPKINS, of Norwich, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Revolving Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

Figure 1 represents a side view, partly in section, of my improved fire-arm. Fig. 2 is a detail inverted plan view of the cylinder-frame. Fig. 3 is a front-end view of the fire-arm. Fig. 4 is a detail side view of the base-pin and pivot. Fig. 5 is a detail side view of the swinging link which holds the cylinder. Fig. 6 is a detail edge view of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to revolving fire-arms, and will be first described in connection with all that is necessary to a full understanding thereof, and then clearly pointed out in the claims.

Against the inner face of the front bar, *a*, of the frame B is placed a swinging plate or link, *b*, which is pivoted at its lower end by a pin, C, to the frame, as shown. The cylinder D of the fire-arm is hung upon a tubular projection, *d*, of the link *b*, the bore of the tube extending entirely through the plate *b*, as shown in Fig. 1. That portion of the bore of the cylinder D which receives the tube *d* is enlarged to such an extent that the remaining portion will be equal in diameter with the opening through the tube *d*, as is also shown in Fig. 1.

E is the base-pin. It is fitted through the front bar, *a*, and through a link, *e*, pivoted to the face of the same, and is in line with the axis of the cylinder D and tube *d* when the arm is in a firing position. In this position the base-pin can be pushed through the tube *d* and cylinder D into a socket provided in the recoil-shield *f*, said socket being indicated by dotted lines in Fig. 1. The cylinder, during the process of firing, will thus revolve on and be in part supported by the base-pin, but also by the tube *d*, being thus securely held and steady in action.

When the base-pin is withdrawn from the cylinder and link *b*, as in Fig. 1, the cylinder will still be supported by the tube *d*, and cannot be disengaged from the frame; but it can, in this case, be swung laterally on the pivot *c*, to protrude partly beyond the side of the frame, as in Fig. 3, and permit ready access to its chambers for cleaning and loading purposes.

In order to lock the base-pin in the aforesaid socket of the recoil-shield within the frame B, I have arranged a spring-catch, *g*, on the side of the frame, between the links *b* and *e*. The said catch is, by its spring, held in contact with the base-pin, and locks into a notch, *h*, of the same when in the desired position. This catch, being arranged at the side of the frame, is more convenient and reliable than the catches for base-pins heretofore employed. They were usually applied to the front end of the frame and locked with their narrow points into the pins, thereby giving a less firm hold and producing more friction during motion. Moreover, by being at the side, the catch is in a better position for manipulating the swinging cylinder and base-pin by the fingers of the left hand.

The base-pin is, as above stated, made to slide in the tube *d*, bar *a*, and link *e*; but the latter has a projecting stop, *i*, entering a longitudinal groove, *j*, of the base-pin, or an equivalent device, which prevents the said pin from being entirely withdrawn from the link *e*.

When the cylinder is to be reloaded or cleaned the base-pin is withdrawn from it, as well as from the link *b* and bar *a*, as in Fig. 1, but remains in the link *e*, and can be swung on the same into line with the chambers of the cylinder to clean the same.

Suitable stops may be provided on the link *e* or frame to arrest the link in its two positions, so as to bring the base-pin in line with the center of cylinder for the firing position, and with the line of chambers for the cleaning position. The base-pin, not being detachable, cannot become lost, and has still all the motions of a loose pin. So, also, the cylinder, being always sustained on the tube, cannot be detached and lost, and is as easily loaded and cleaned as one detachable.

The improvement in the arrangement of the spring-catch above described is also applica-

ble to other revolving fire-arms not containing the remaining features of this invention, and vice versa.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the swinging link *e* and longitudinally-adjustable base-pin with the pivoted link *b*, tube *d*, and cylinder D, all arranged to operate substantially as herein shown and described.

2. The spring-catch *g*, arranged at the side of the frame, for locking into the sliding base-pin of the fire-arm, substantially as herein shown and described.

SAMUEL S. HOPKINS.

Witnesses:
A. T. CONVERSE,
C. D. LESTER.