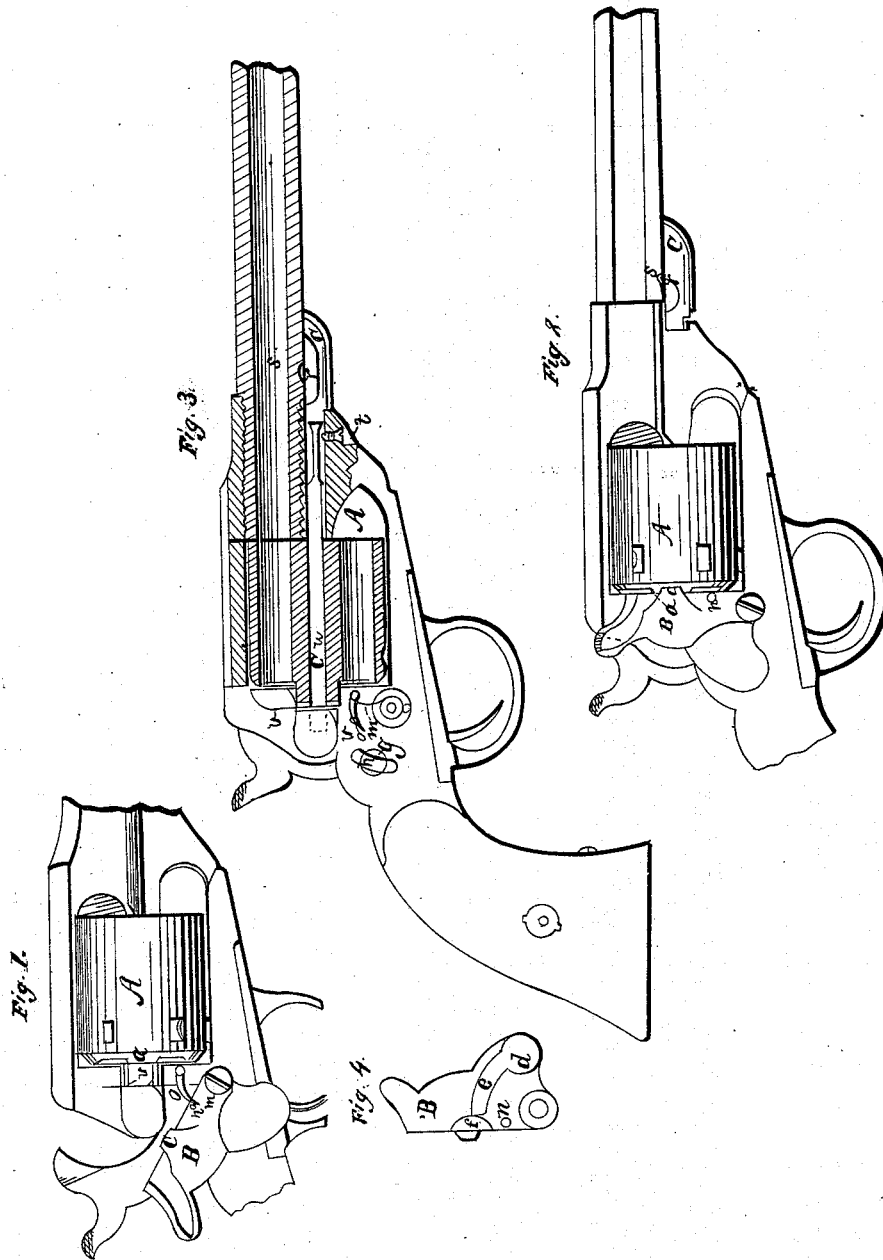


W. MASON.

Revolver.

No. 53,539.

Patented Mar. 27, 1866.



Witnesses:  
*J. D. Patton* William Mason  
*H. H. Heaton* By atty. A. B. Snighton.

# UNITED STATES PATENT OFFICE.

WILLIAM MASON, OF ILION, NEW YORK, ASSIGNOR TO E. REMINGTON  
& SONS, OF SAME PLACE.

## IMPROVEMENT IN REVOLVING FIRE-ARMS.

Specification forming part of Letters Patent No. 53,539, dated March 27, 1866.

*To all whom it may concern:*

Be it known that I, WILLIAM MASON, of Ilion, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Revolving Fire-Arms and in Cartridge-Case Extractors therefor; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figures 1 and 2 represent so much of the exterior of a revolving fire-arm as will illustrate my invention, the hammer and extractor being shown in different positions in the two figures. Fig. 3 represents a longitudinal section through the barrel and cylinder and a small portion of the frame, the remaining portions being shown in full. Fig. 4 represents a view of the inside or working face of the cartridge-case extractor, it being represented as removed and turned around for this purpose.

Similar letters of reference, where they occur in the separate figures, denote like parts of the arm in all the drawings.

My invention consists, first, in the use or application of a cartridge-case extractor applied to the exterior of the frame of a revolving fire-arm, so that by operating it by the thumb or finger the empty cases may be withdrawn from the chambers as the cylinder is revolved to bring them within the reach of the extractor.

My invention further consists in combining with the extractor a hook that acts in conjunction with the beveled end of the cylinder to insure the passage of the flange of the cartridge-case within the influence of the hook, so as to be caught and drawn out by it.

My invention further consists in forming a recess in the extractor for the head of the cartridge-case to enter, so as to admit of its being drawn out, turned, and ejected with ease and certainty.

My invention is applicable to the alteration of revolving fire-arms already constructed, so as to convert them into rear-loaders and enable me to use metallic cartridge-cases in them, but can be applied to new arms also, if desired.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The barrel, frame, and hammer are of the

ordinary form and construction. The cylinder A is beveled off at its rear, and as seen at *a*, so that the hook of the extractor may take under the flange of the cartridge with more certainty.

At the side of the frame, in rear of the cylinder, and so that it may be conveniently operated by the thumb with which the hammer is usually drawn back, I arrange a cartridge-extractor, B, that has upon it a hook, *c*, or its equivalent, for catching forward of the flange of the cartridge so that it may be drawn out. The extractor covers a portion of the rear end of the cylinder. It has upon its under or inside face, first, a circular recess, *d*, and leading from it a curved recess, *e*, extending toward what may be termed the "front face" of the extractor, and, finally, a spherical recess, *f*, at, near, or under the hook *c*, as shown at Fig. 4.

On the pivot or hammer pin *g* there is a button, *h*, Fig. 3, which is turned with the hammer as it is raised up or let down. When the hammer is on the half-cock notch the button *h* is in such position as that it will take the curved groove *e*, and thus allow the extractor to be freely worked by the thumb; but while this button is in the groove *e* the hammer cannot be brought back to the full-cock notch, and it is necessary, before the hammer can be brought to the full-cock, that the extractor should be let down against the rear of the cylinder, or to the end of its downward motion, so as to bring the ring-recess *d* opposite to the button, and then the hammer and button can freely swing back or forward. Thus the extractor locks the hammer and the hammer locks the extractor under different circumstance; but both conducive to a safe use of the arm.

The object of what I call the "spherical recess" *f* is to allow the cartridge-case, as it is drawn out, room to turn or change position, and thus come out easily, for while its tendency is to come out in a straight line, or in the line of the chamber, the extractor moving in the arc of a circle draws down the rear of the cartridge, and this recess *f* admits of the slight turning of the case and allows it to be readily ejected.

At *n* there is a spring-bolt in the extractor, which, when the extractor is down against the cylinder, shoots into a recess, *m*, in the frame

and holds the extractor firmly enough until the operator desires to use it, when a little force will move the spring-bolt as it moves over an inclined plane, *o*, leading from the recess, which aids it back.

The hook *c*, I have represented as being permanent on the extractor, and of the same piece with it; but the hook may be hinged, and by means of a spring be thrown in front of the flange of the cartridge, so as to take hold of it when the extractor is operated.

*O* is the base-pin. Its general form is seen at Fig. 3. There is a projection on it at *r*, which takes into a notch, *s*, in the under side of the barrel when the pin is clear down in its place. A screw, *t*, is also passed through the frame, so that its point will be a guide for the base-pin and prevent it from being drawn too far, for when the shoulder *u* on the base-pin comes against the point of the screw it can go no farther.

I have shown the ratchet of the cylinder as made upon a part, *u*, extended or projected from the cylinder, and have also formed a re-

cess in the frame, so that the cylinder and ratchet may be introduced or removed from the frame by a sidewise motion.

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

1. In combination with a revolving-cylinder fire-arm, a pivoted and hooked cartridge-case extractor, arranged to operate in connection therewith, substantially in the manner herein described.

2. In combination with a hook upon the extractor, the beveling of the rear end of the cylinder so as to insure the entrance of the hook between the flange of the cartridge and the cylinder, substantially as described.

3. The recess *f* in the face of the extractor for allowing the cartridge-case to turn or move while it is drawn out in a curved line from a straight chamber, substantially as described.

WILLIAM MASON.

Witnesses:

W. H. THOMAS,

O. H. P. ANDREWS.