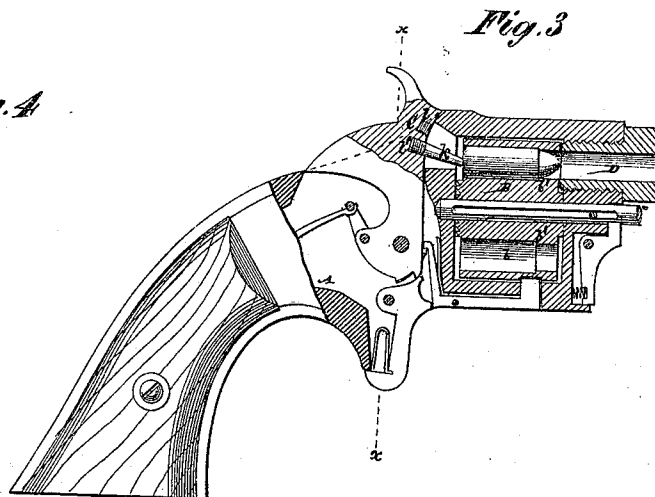
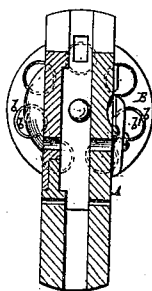
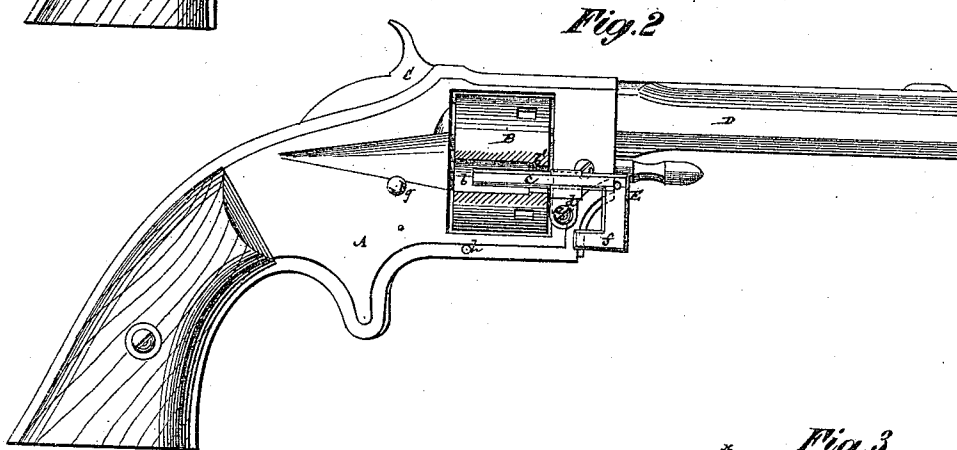
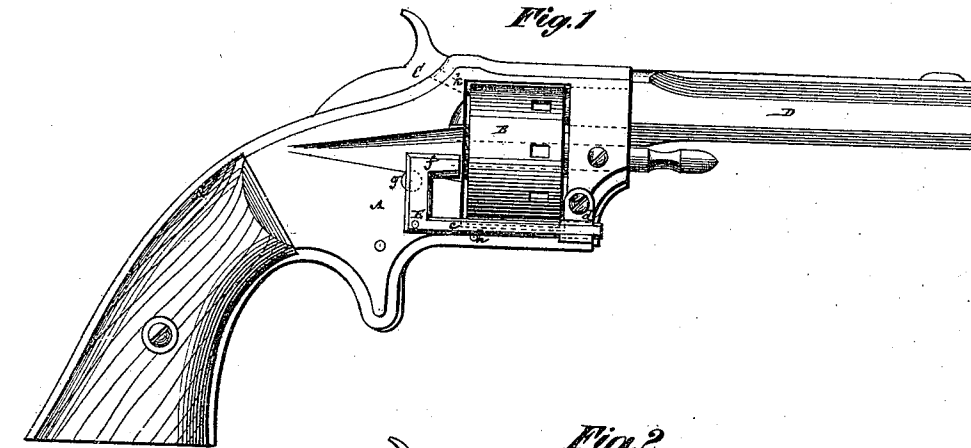


E. T. STARR.
REVOLVING FIRE-ARM.

No. 175,518.

Patented March 28, 1876.



Witnesses.
R. R. Rabeau
Fred Hamme

E. T. Starr

UNITED STATES PATENT OFFICE.

EBEN T. STARR, OF NEW YORK, N. Y.

IMPROVEMENT IN REVOLVING FIRE-ARMS.

Specification forming part of Letters Patent No. **175,518**, dated March 28, 1876; application filed November 6, 1873.

To all whom it may concern:

Be it known that I, EBEN T. STARR, of the city, county, and State of New York, 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 of the same, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a side view of a revolving fire-arm having my invention applied to it. Fig. 2 is a similar view of the same with the revolving cylinder partly broken away, and with the shell-extractor in a changed position. Fig. 3 is a sectional longitudinal view of the rear and operating portion of the arm; and Fig. 4, a transverse section, in part, at the line *xx* in Fig. 3.

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

My invention relates to that class of revolving fire-arms in which the cartridge is inserted from the rear of the cylinder.

The invention consists in a novel and advantageous construction of the shell-extractor, which is composed of a sliding rod or bar and swinging yoke. It also includes a novel arrangement of a movable nose on the hammer, to adapt it to both center-fire and rim-fire cartridges.

In the accompanying drawing, A represents the stock, B the revolving many-chambered cylinder, C the hammer, and D the barrel, of the arm.

The cylinder B is rotated, to bring its chambers *b* successively in line with the barrel, by the usual or any suitable means in the act of cocking the hammer. These chambers *b* I form with shoulders *b'*, or of a reduced diameter at their forward ends, to adapt them to flangeless cartridges, said shoulders acting as a stop or bearing for the forward end of the shell of the cartridge to rest against to resist the blow of the hammer when the cartridge is being exploded, and serving to retain the shell after explosion, but allowing of the free passage of the ball out of the chamber.

By using flangeless cartridges, as shown in Fig. 3, it is practicable to arrange a greater number of chambers in a cylinder of given di-

ameter. Cartridges with flanged heads, however, may be used in the same cylinder when desired, as, for instance, by charging only every alternate chamber.

The shell-extractor E consists of a rod or bar, *c*, fitted to slide on or through a swinging yoke, *d*, pivoted, as at *e*, to the stock or frame, on the off side of the latter relatively to the direction in which the cylinder B revolves and in front of said cylinder, so that, when the yoke *d* is swung downward and the bar *c* slid backward through the yoke, said bar lies in proximity to or against the side of the frame, and is out of the way, as represented in Fig. 1 of the drawing.

When it is required to remove the shell of an exploded cartridge, the yoke *d* is reversed or swung upward by suitably pressing on the bar *c*, and the latter then slid or projected through the yoke and chamber containing the exploded shell, (see Fig. 2,) so as to drive or force out the shell in the rear. This done, the bar *c* is slid in the reverse direction again through the yoke, so as to clear the cylinder, and the yoke swung to its normal position, with the sliding bar set backward against the side of the frame, as in Fig. 1.

A guard, *f*, may be attached to the back or opposite end of the bar *c* to that which presses on the shell to remove it, so that when the extractor is adjusted to its quiescent position, as in Fig. 1, said guard lies in close proximity to the rear end of the cylinder B, and acts as a stop to keep a newly-inserted or unexploded cartridge in the chamber, which it forces from dropping out in rear of the cylinder. This guard *f* may be formed by simply bending or shaping the back end of the bar *c*, as shown in the drawing.

The extractor E is held in its closed position against the sides of the frame by a spring, in conjunction with a catch, *g*, and stop *h*, or otherwise.

To adapt the hammer C to both center-fire and rim-fire cartridges it is fitted with a movable nose, *k*, which may be so changed or set in relation to the face of the hammer as, for instance, by constructing the rear end of the nose with a screw-thread, and screwing said nose into one or other of the two screw-holes

l l' in the hammer, that the point of the nose is made to strike either the center or rim of the cartridge, as required.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The shell-extractor E, composed of a sliding rod or bar, *c*, and swinging yoke *d*, arranged for operation in relation with the revolving cylinder B or its chambers *b*, substantially as specified.

2. The detachable nose *k*, in combination with the hammer C, formed with the two holes *l l'*, whereby the nose *k* may be applied to either one of said holes, so as to serve as a firing-pin for either center-firing or rim-firing cartridges, as shown and described.

EBEN T. STARR.

Witnesses:

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