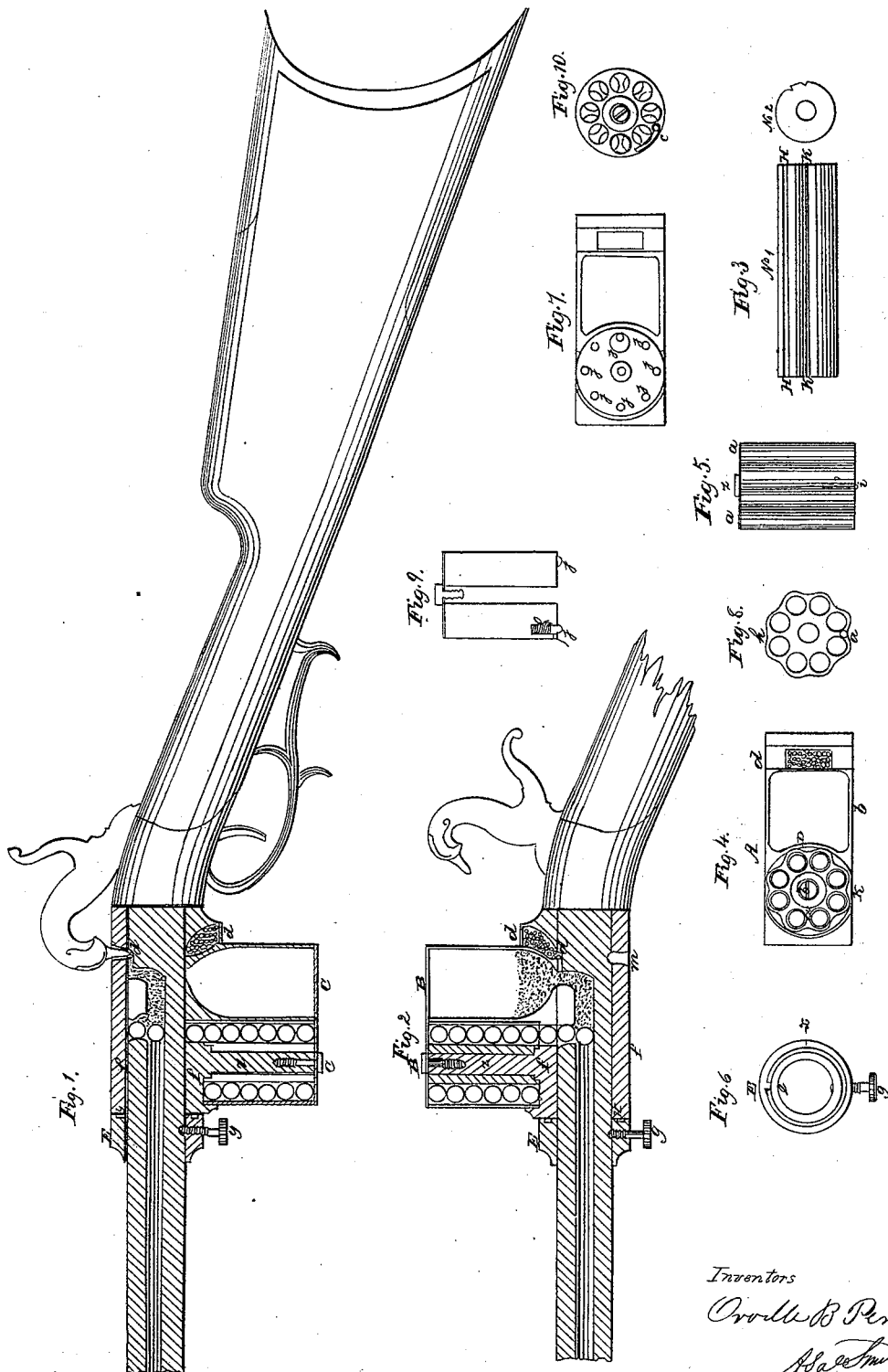


PERCIVAL & SMITH.  
Magazine Fire-Arm.

No 7,496.

Patented July 9, 1850.



Inventors  
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# UNITED STATES PATENT OFFICE

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## IMPROVEMENT IN CHARGERS ATTACHED TO FIRE-ARMS.

Specification forming part of Letters Patent No. 7,496, dated July 9, 1850.

*To all whom it may concern:*

Be it known that we, ORVILLE B. PERCIVAL, of the town of East Haddam, county of Middlesex, and State of Connecticut, and ASA SMITH, of the city, county, and State of New York, have made and invented certain Improvements in the Constructing, Loading, and Discharging of Fire-Arms; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of our invention consists in the modes of constructing and using a magazine containing powder, balls, and percussion-seed, and attached to the breech of the gun, and made to turn over chambers in the breech of the gun and drop balls, powder, and percussion-seed through perforations in the barrel of the gun near the breech, and be turned back half-way around under the breech to cut off all communication and prevent explosions in the magazine when the charge in the gun is fired.

In using the gun the mode is to drop two balls at first through the orifice in the barrel of the gun near the breech, one of which will lie in the chamber and prevent the powder from escaping in the act of loading, while the second ball dropped in will be between the first ball and those in the magazine until the magazine is turned half around, as aforesaid, under the breech of the gun, when the cylinder to which the magazine is attached, and which revolves, as aforesaid, on the breech of the gun, holds the second ball in its place in the space through which balls are introduced into the ball-chamber until the magazine is again inverted, or the second ball drops into the ball-chamber from which the first is discharged.

The bore of the gun should be rather smaller than the ball-chamber, and the thickness of the gun at the breech equal to the diameter of the ball, in order to prevent the powder of the charge from rising above the second ball, if too small, or, if too large, the magazine could not revolve.

For a more comprehensive description the drawings are referred to as forming a part of this specification, as follows:

Figure 1 is a longitudinal section of the gun

loaded, and exhibiting also the interior of the magazine.

Fig. 2 is a like longitudinal section of the gun and magazines in the act of loading the gun.

Fig. 3, No. 1 is a section of that part of the gun which is covered by the revolving magazine, and has two creases, H and K, to clean the bore of the said revolving magazine. No. 2, Fig. 3, exhibits the form of the creases H and K by a transverse section.

Fig. 4 is the bottom of the revolving magazine, of which *a* is the ball-magazine, *b* the powder-magazine, and *d* the percussion-seed magazine.

Fig. 5 is a front elevation of the exterior of the ball-magazine detached from the gun.

Fig. 6, E is a cylinder-stop to be set in its place as a washer; also against the cylinder to which the magazines are attached by the screw Z, Fig. 4. It is set in its place by the screw *g*, Fig. 6. On the inner side of E is a groove, *x*, with a stop, *l*, opposite the set-screw *g*. This stop *l* serves to regulate the operation of the marksman in the act of loading, being placed so as to bring the magazines over the orifices in the breech of the gun and allow the powder and ball to run into their respective chambers.

Fig. 7 is the exterior view of the revolving cylinder, being a plane surface, to which the magazines are fitted, and on which the ball-magazine revolves as the ball-chambers in the same become exhausted. In Fig. 5 is a stop, *i*, which is forced into the orifices *jjj* in Fig. 7 by the spiral spring O in Fig. 9, which orifices are calculated to hold each ball-chamber of Fig. 5 exactly over the orifice in the breech of the gun to let the ball into the gun in the act of charging, with ball-chambers of the capacity of the one exhibited in the drawings. The marksman, after six discharges, must turn the ball-magazine, Fig. 5, one-eighth of a revolution on the pivot 2, Fig. 2, which will bring six more balls over the orifice in the breech of the gun, when the magazines are inverted in the act of charging, and thus also for the successive chambers.

Fig. 8 is the bottom of the ball-magazine, showing the position of the orifice *u*, into which the stop *i*, Fig. 5, operates.

Fig. 9 is a vertical section of Fig. 5, cutting O in Fig. 8, and *jj* in Fig. 7.

Fig. 10 is a thin circular stop, of brass or other suitable material, perforated with as many holes as there are chambers in the ball-magazine. It is furnished with a click, *c*, to hold the solid parts over the holes, so that the balls may not run out of the ball-magazine when the chambers are filled with balls and the marksman is in the act of firing.

What we claim is—

The revolving ball-magazine, as above speci-

fied, in connection with the revolving cylinder.

ORVILLE B. PERCIVAL.  
ASA SMITH.

Witnesses to signature of Orville B. Percival:

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Witnesses to signature of Asa Smith:

J. JAY HOWARD,  
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