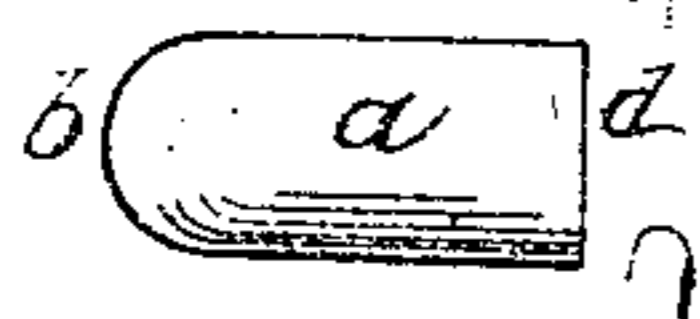
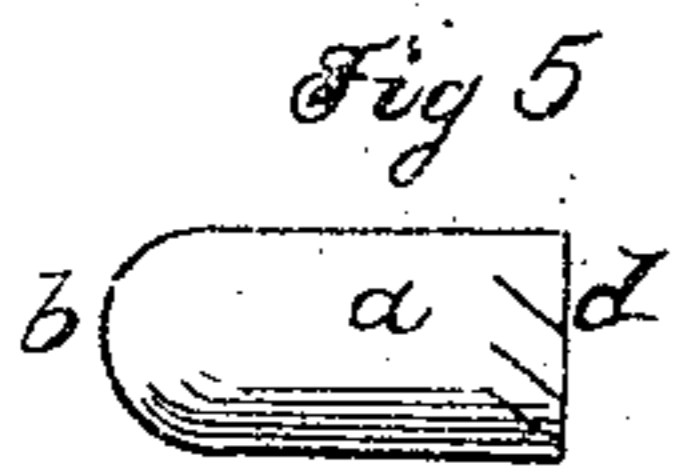
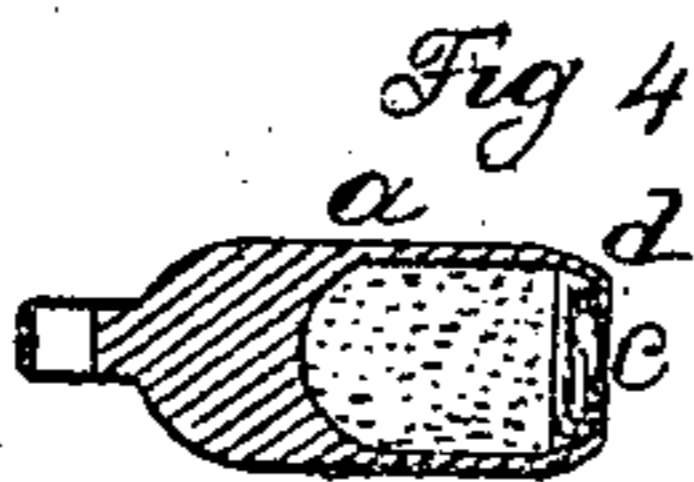


A. D. PERRY.

Cartridge.

No. 7,147.

Patented Mar. 5, 1850



} Fig 6



} Fig 7

# UNITED STATES PATENT OFFICE.

ALONZO D. PERRY, OF NEW YORK, N. Y.

## IMPROVED WINGED METALLIC CARTRIDGES.

*Specification forming part of Letters Patent No. 7,147, dated March 5, 1850.*

*To all whom it may concern :*

Be it known that I, ALONZO D. PERRY, of the city, county, and State of New York, have invented certain new and useful Improvements in the Loaded Ball or Cartridge for Fire-Arms; and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known, and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an elevation, and Fig. 2 a section, of a loaded ball on my improved plan; and Figs. 3 and 4, like views of a similar ball, with my improved mode of firing-magazines attached to it.

The same letters indicate like parts in all the figures.

My improvements relate to that class of cartridges or loaded balls in which the ball is made cylindrical, with a spherical or pointed end, and the rear part hollow, to contain the charge of powder.

The first part of my invention consists in slitting the rear end of the hollow part of the ball, at given distances apart, around the periphery, and in lines parallel or slightly oblique to the axis, so that, after the charge of powder, with a gun-cotton or other equivalent cap over it, has been inserted, the slitted parts can be bent in, overlapping each other, to secure the charge, and which, when the ball is discharged from the barrel of a gun or other fire-arm, will be spread out by the force of the discharge, and form spiral wings to give a rotary motion to the ball, to guide it in a straight line; and the second part of my invention consists in forming the forward end of the ball with a nipple, to which is fitted a percussion-cap, so that, when the ball strikes and enters a magazine, &c., the explosion of the cap may ignite the body struck, when this is used in combination with a ball having wings or other means for guiding or keeping the cap in front.

In the accompanying drawings, *a* represents a ball, with the forward end *b* semi-spherical, and the body cylindrical and hollow from the rear end about two-thirds of the length, to

contain the charge of powder, which is covered with a cap of gun-cotton, *c*. The rear end is cut at given distances apart, as shown in the two sectional Figs. 5 and 6. The cuts should be made inclined, or in lines parallel with the axis, (the former being preferable,) and transversely in lines tangential to a circle of less diameter than the ball, so that, after the charge has been inserted, the slitted end can be forced in all around, to inclose the charge of powder with the covering-cap and overlap each other. The ball so made and loaded, when discharged from the barrel, will leave the parts *a* forced out by the pressure within, and assume the form represented in Fig. 7, which will constitute a series of spiral feathers or wings, that will give to the ball rotary motion to direct it in its course and insure its moving with the head foremost. When I wish to use such balls for the purpose of firing magazines, &c., I form the head part *b* with a nipple to receive a percussion-cap, so that when the ball strikes the explosion of the cap may communicate fire. When the ball is made with a nipple and cap, it is important that it should, at the same time, be made with the feathers or wings for guiding it, that it may move head foremost, as experience has shown that when made without such feathers or other means of guiding, they are quite as liable to move sidewise as endwise. But I do not wish to limit myself to the use of the nipple and cap, with the mode of guiding the ball herein specified, as other modes may be substituted.

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

The method of inclosing the charge of powder in the hollow part of the ball by slitting its rear end and bending in the parts so slitted, substantially as herein described, that when the ball is discharged the parts so slitted may be forced out, to become feathers or wings to guide the ball, substantially as described.

A. D. PERRY.

Witnesses:

R. W. LOWBER,  
A. P. BROWNE.