

I. M. MILBANK.
Metallic Cartridges.

No. 136,168.

Patented Feb. 25, 1873.

Fig. 1.

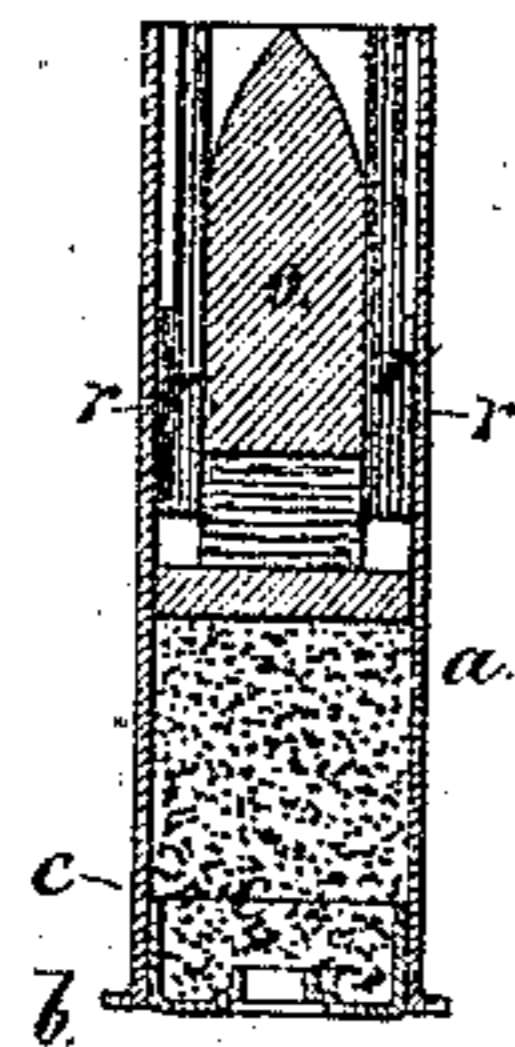


Fig. 3.

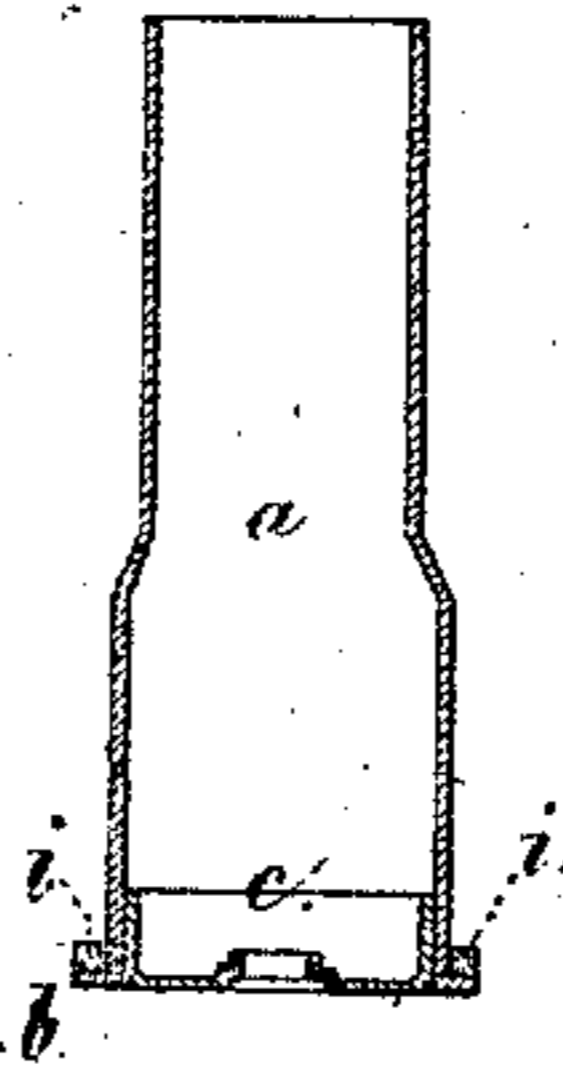


Fig. 4.

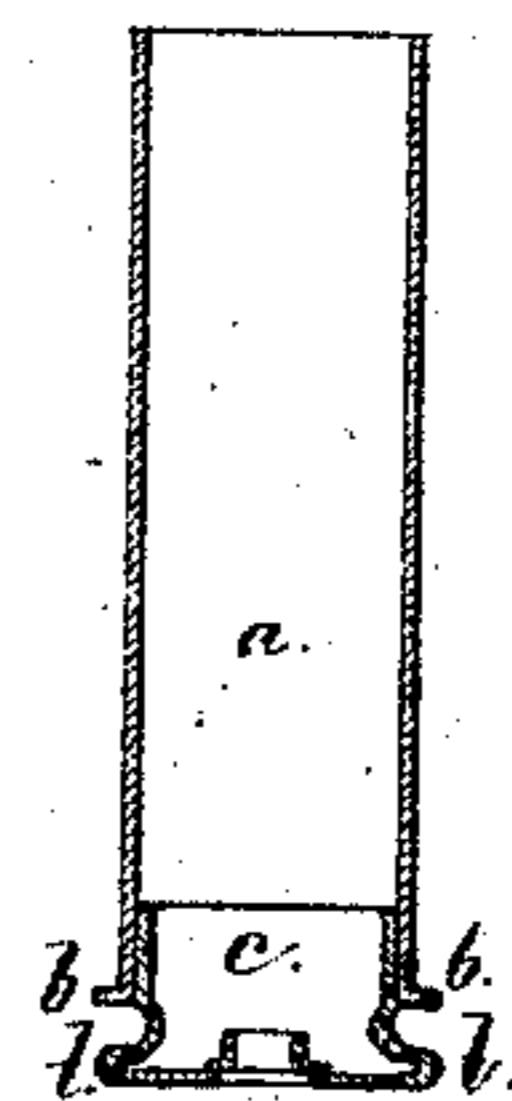


Fig. 2.

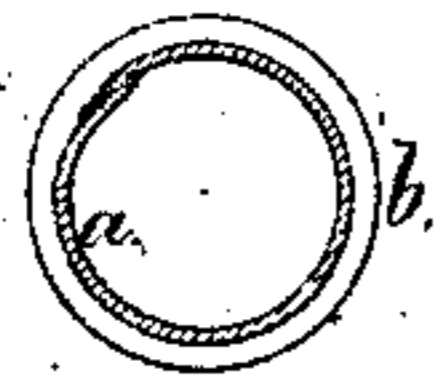
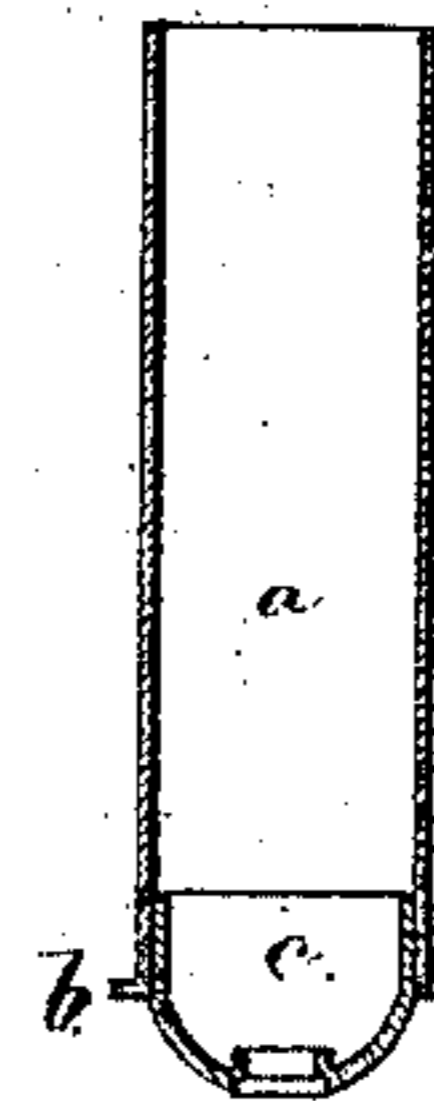


Fig. 5.



Witnesses,

Char. H. Smith
Geo. D. Parker

Inventor

Francis M. Milbank
Lemuel W. Serrell atty.

UNITED STATES PATENT OFFICE.

ISAAC M. MILBANK, OF GREENFIELD HILL, CONNECTICUT.

IMPROVEMENT IN METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 136,168, dated February 25, 1873.

To all whom it may concern:

Be it known that I, ISAAC M. MILBANK, of Greenfield Hill, in the county of Fairfield and State of Connecticut, have invented an Improvement in Cartridges for Fire-Arms; and the following is declared to be a correct description of the same.

This cartridge is made with a cylindrical sheet-metal cylinder that is separate from the base, and the sheet metal is turned with an outward flange that is employed in drawing the cartridge-case out of the gun. The separate base, secured within the rear end of the case, closes said case and sustains the recoil of the explosion. An elastic wad of felt or similar material is introduced within the sabot, between the ball and the wad, to lessen the concussion on the ball and prevent the same being shortened and spread by the inertia.

In the drawing, Fig. 1 is a vertical section of the cartridge-case, and Fig. 2 is a cross-sectional view of the same. Figs. 3 and 4 represent sectional views of the case in slightly-modified forms.

The cylindrical case *a* is made of sheet metal, with a flange, *b*, bent outwardly, and of a width sufficient for the retractor or claw of the gun to grasp in pulling the case out of the chamber of the gun. The base *c* is secured within the cylindrical case at the rear end. By this construction I am enabled to make use of tinned sheet-iron or other strong and hard metal that could not be drawn to shape by dies in the ordinary manner, because I can roll up the sheet in the form illustrated in Fig. 2. The edges, however, of the sheet should be made feather-edged by filing or grinding, or by dies, so that the surface will be sufficiently true and smooth.

When the base *c* is made of sheet-metal soldered into the case *a* the lapping edges of the case will be united, to a greater or less extent, by the solder. This case *a*, with its outward flange, however, may be provided with a base of paper or similar material, secured by soluble glass or cement; and, if desired for fitting the chamber of the gun, the forward end of the case may be contracted, as seen in Fig. 3.

Where considerable strength is required in the flange, or where the fire-arm has a recess around the rear end of the chamber that requires to be filled up, the ring *i* may be applied at the forward side of the flange *b*, as seen in Fig. 3, and secured by solder or otherwise.

In magazine-guns the tube containing the cartridges should be as small as possible. I provide for this by making the flange *b*, that is turned outwardly at the rear edge of the cylinder *a*, very narrow, as in Fig. 4; and contract the base to form a flange, *l*, of a diameter not larger than that of the flange *b*.

The ball *o* is within the wooden sabot *r*, as seen in my patent No. 123,351, with a wad of felt.

In some instances it is preferable to form the rear end of the cartridge-case hemispherical, as seen in Fig. 5, which can be done with my improved cylindrical case with the outward flange for drawing out the case from the gun. This hemispherical end to the cartridge is much stronger to resist the blow of the hammer than the flat base of same thickness of metal.

I am aware that a cartridge-case has been made of a tube with a flange around its rear end and a movable base; and also that a case has been made of a rolled-up sheet, with a flange at the rear end turned inwardly into a groove in the periphery of the base. Neither of these forms is adapted to the purposes for which I employ my cartridge.

I claim as my invention—

The cartridge-case made of a sheet of metal rolled into a cylindrical form, with a flange projecting outwardly around its rear end, combined with a base inserted within said case, and secured permanently with solder or other material that simultaneously unites the lapping edges of the case at the rear end, as set forth.

Signed by me this 26th day of April, 1872.

I. M. MILBANK.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.