

I. M. MILBANK.

Improvement in Metallic Cartridges.

No. 125,830.

Patented April 16, 1872

Fig. 2.



Fig. 1.



Fig. 3.

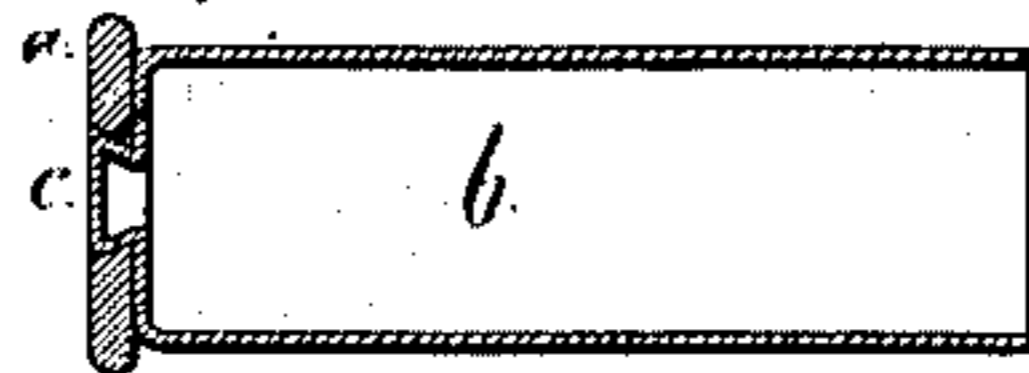


Fig. 4.

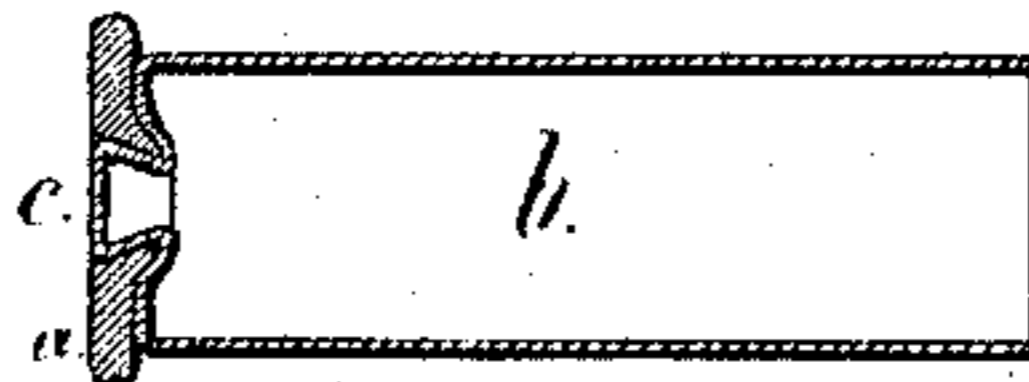
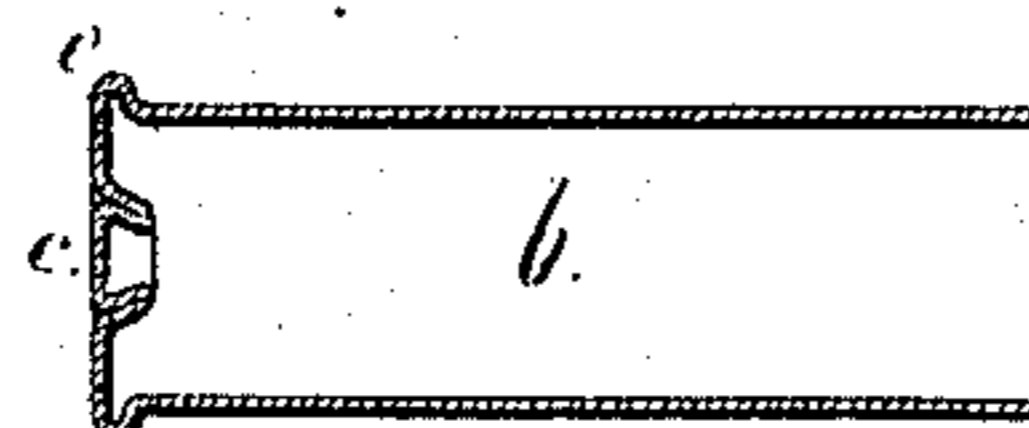


Fig. 5.



Witness.

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UNITED STATES PATENT OFFICE.

ISAAC M. MILBANK, OF GREENFIELD HILL, CONNECTICUT.

IMPROVEMENT IN METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 125,830, dated April 16, 1872; antedated April 5, 1872.

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 and made an Improvement in Cartridges for Fire-Arms; and the following is declared to be a correct description of the same.

Cartridges have been made with a projection containing the fulminate at or near the middle of the base, but the said projection has been struck upon the side with a hammer, or else an anvil has been crimped into the metal to prevent the blow driving the fulminate into the powder-space and to furnish a resistance to effect the detonation. Both these forms are objectionable, because the projecting teat is not adapted to fire-arms that have hammers acting in line with the axis of the gun; and in the case where an anvil is introduced it has to be inserted at the time the plastic fulminate is inserted, and there is risk of the anvil not being thoroughly secured in place; besides, the parts are expensive to make, and the cartridge cannot be recharged with fulminate.

My invention is made for obviating all the aforesaid difficulties; and consists in a cartridge having a dovetailed or conical fulminate-chamber made in the sheet metal of the case, with the smaller end of the cone forming the mouth of the fulminate-chamber, and into this chamber the fulminate or detonating material is introduced in a plastic state, mixed with sand or pulverized glass, that sufficiently fills the space to form a resistance and cause the explosion of the fulminate by a blow upon the center of the rear of the base.

By this construction the conical mouth of the fulminate-chamber directs the whole force of the detonation into the powder and insures the explosion of the same, instead of the flash being deflected from the powder, as is usually the case where an anvil is made use of, and frequently causes the cartridge to miss fire.

In the drawing, Figure 1 is a section of the sheet-metal case *b* before the fulminate-chamber *c* is spread into a conical form. Fig. 2 is a section of the base *a*. Fig. 3 represents the case after the base *a* has been put upon the chamber *c* and the latter pressed endwise to flatten the same and spread the chamber into the conical form necessary for receiving the detonating material, and simultaneously securing the base *a* to the case. Fig. 4 shows a slightly different form of base, so as to make the conical fulminate-chamber deeper. Fig. 5 shows the same conical fulminate chamber, but without the external base. In this case the sheet metal is folded around the fulminate-chamber, and I remark that the base of the case may be strengthened by solder; and, if desired, a ring may be soldered around the case to take the place of the hollow flange *e*.

The detonating material may be varnished after it is pressed into its conical cavity, or adhesive material may be added to the mixture of fulminate, and ground glass or similar grains of hard material.

The base *a* may be more fully secured to the case by solder, and, if desired, the rear end of the fulminate-chamber may be made concave, as in my patent for primers dated May 31, 1870.

I do not claim a conical chamber in a cartridge-case for the reception of a metallic anvil against which the fulminate is exploded.

I claim as my invention—

A primed cartridge-case, in which the fulminate described is introduced into a conical chamber, substantially as described, whereby the ordinary anvil is dispensed with.

Signed by me this 14th day of July, A. D. 1871.

I. M. MILBANK.

Witnesses:

HAROLD SERRELL,
GEO. T. PINCKNEY.