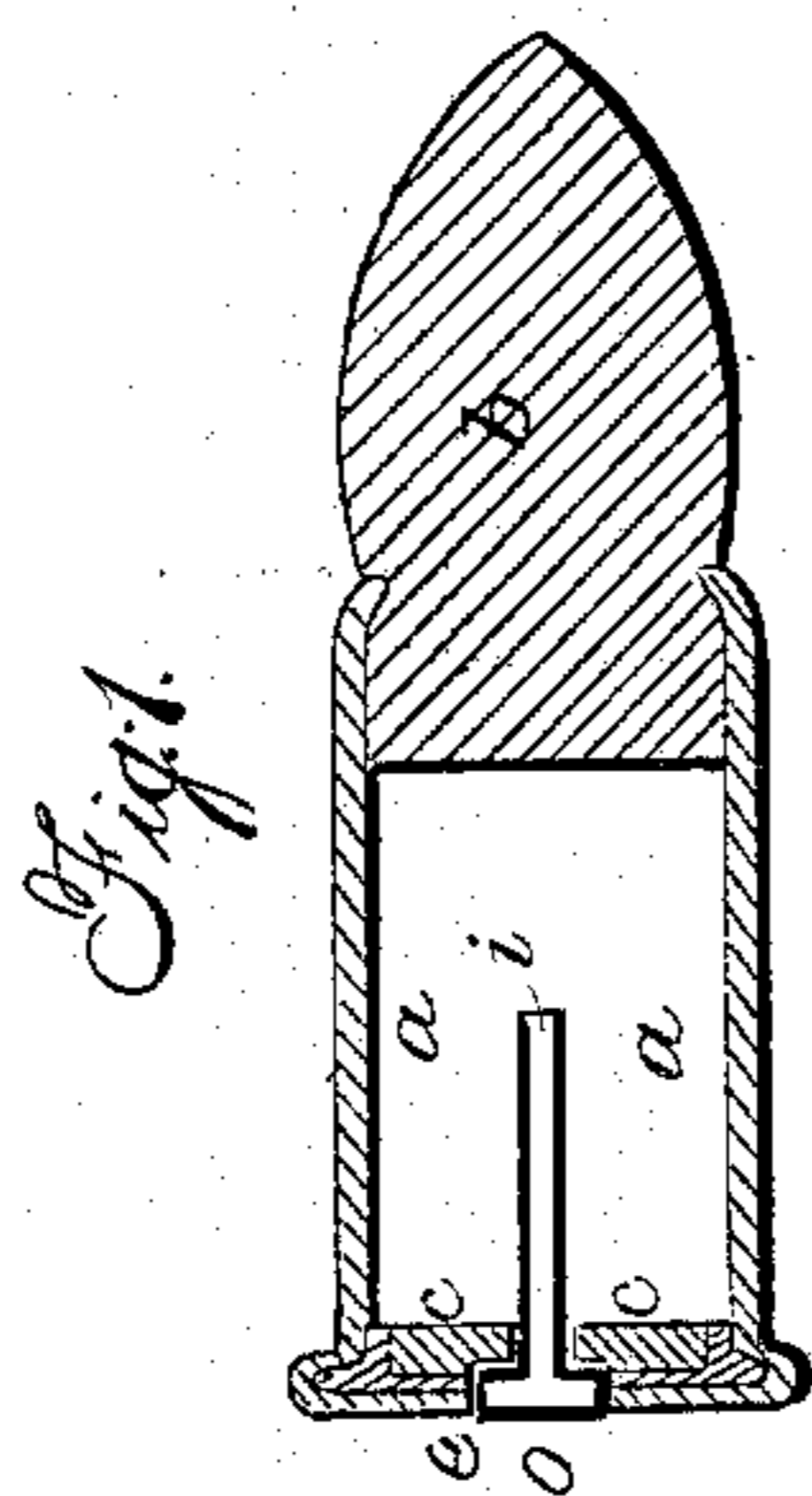
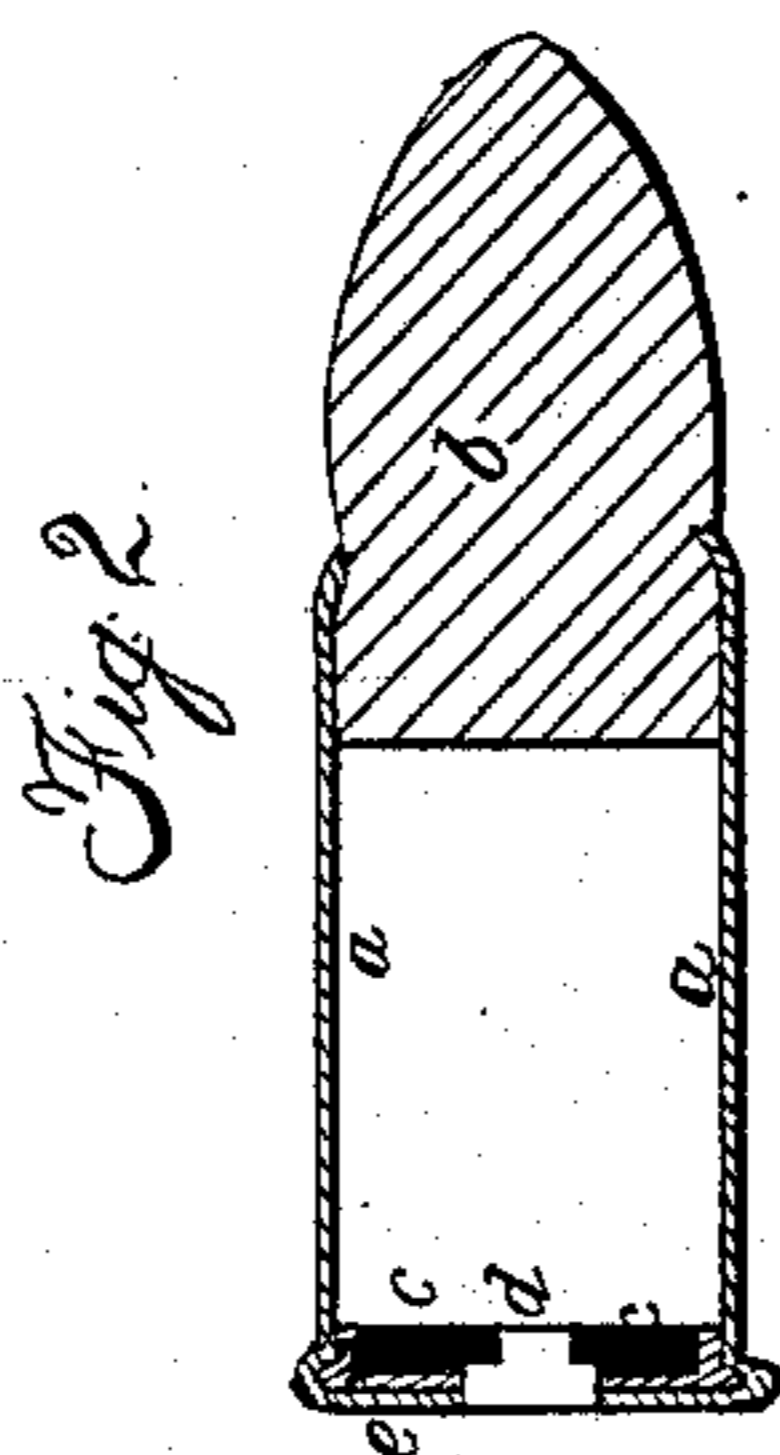


I. M. MILBANK.

Cartridge.

No. 62,283.

Patented Feb. 19, 1867.



Witnesses.

Geo. J. Walker

Chas. H. Smith

I. M. Milbank
per E. N. Senell
att'y

UNITED STATES PATENT OFFICE.

ISAAC M. MILBANK, OF GREENFIELD HILL, CONNECTICUT.

IMPROVEMENT IN PRIMING METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 62,283, dated February 19, 1867.

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 a certain new and useful Improvement in Cartridges; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a longitudinal section of a cartridge fitted with my improvement. Fig. 2 is a section of the case and its metallic base; and Fig. 3 is a section of my fulminate-tube.

Similar marks of reference denote the same parts.

The object of my invention is to provide a metallic cartridge-case that can be loaded and used as fixed ammunition, or may be loaded several times with powder and ball, so as to avoid carrying so much weight of cartridge-cases, and save their cost.

The nature of my said invention consists in a metallic base introduced within the sheet-metal case and soldered permanently in place, so as to afford the necessary strength to resist the blow of the hammer upon the fulminating material, which fulminate I introduce in a hollow cap having a tube projecting into the powder of the cartridge. These tubes and caps are changeable, so that when one has been fired it can be withdrawn from the case and another introduced and the case reloaded. By using these tubular caps the fire from the fulminate communicates with the gunpowder

near the center of the charge, rendering the same much more effective than when the fire is only at the rear end.

In the drawing, *a* is the sheet-metal cartridge-case or shell, of any usual size or shape; *b*, the ball. *c* is a metallic base sufficiently strong to resist the force of the hammer striking against the rear of the cartridge. This base *c* is permanently attached within the case *a* by soldering the same into its place, and the base *e* of the case *a* covers up the base *c*, so that said base *c* may be made of iron or other cheap metal.

Through the center of the base *c* is an opening, with a countersink at the rear portion, and into this I introduce the tubular fulminate-cap, formed with a hollow head, *o*, and a tube, *i*, extending any required distance into the powder-space of the cartridge.

The hammer of the fire-arm is to strike the cap *o* in the rear, to explode the fulminate contained therein.

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

The base *c*, soldered or brazed into the cartridge-case *a*, and covered by the base *e*, in combination with the fulminate-tube *i* and head *o*, setting within a countersink in the base *c*, as and for the purposes set forth.

In witness whereof I have hereunto set my signature this 16th day of October, A. D. 1866.

I. M. MILBANK.

Witnesses:

M. A. P. WARNER,
GEO. W. WARNER.