

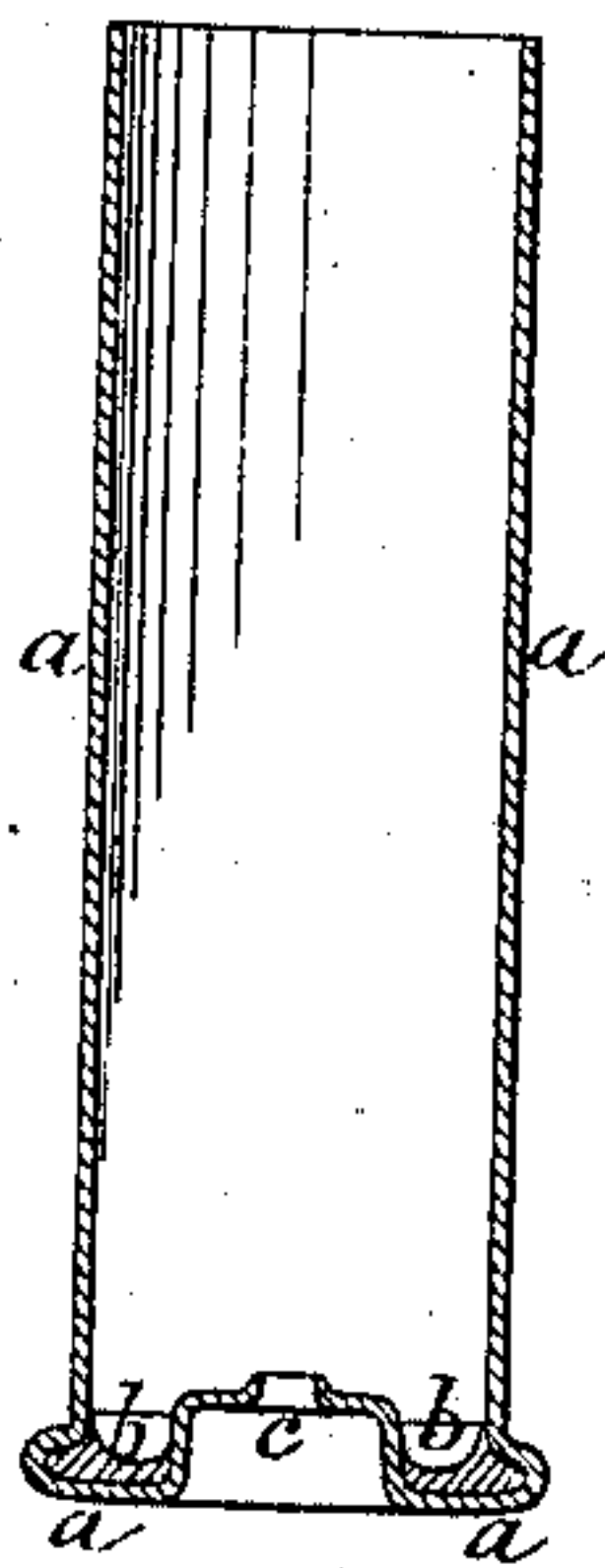
WILLIAM S. SMOOT.

Improvement in Metallic Cartridges.

No. 120,338.

Patented Oct. 24, 1871.

*Fig. 1.*



*Witnesses.*

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*By atty. A. B. Stoughton.*

# UNITED STATES PATENT OFFICE.

WILLIAM S. SMOOT, OF ILION, NEW YORK, ASSIGNOR TO HIMSELF AND E. REMINGTON & SONS, OF SAME PLACE.

## IMPROVEMENT IN METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 120,338, dated October 24, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM S. SMOOT, of Ilion, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Metallic Cartridges; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a vertical section through a cartridge-case to show the interior thereof.

I am aware that strengthening or re-enforcing washers of various forms and of different materials, have been used in metallic cartridge-cases to strengthen the thin shells at their heads; and that among these many devices solder has been poured into the case in a molten state so as to flow around into the head; or has been melted or rendered fluid in said case so as to flow around and attach to the head of the cartridge-case or shell.

I do not claim any of the above-referred to modes or means of strengthening the cartridge, as they all involve expensive material or tedious manipulations or both.

My invention consists in the introduction into a cartridge-case of a piece of lead, or other metal soft and tenacious enough to be upset or pressed in a cold state into, under, or around the head or flange of the shell or case, by means of a die

or follower of proper shape, and thus strengthen said head.

To enable others skilled in the art to make and use my invention, I will proceed to describe it with reference to the drawing.

The shell or case, made of thin metal, is represented at *a*; the lead pressed, driven, or upset against the inner head of the shell is shown at *b*; and at *c* there is a recess to contain the fulminate or priming. The filling and charging of the cartridge may be done in any of the usual well-known ways. The lead or other soft and tough metal may be dropped into the case in the shape of a ring; disk, or otherwise, and by means of a die, plunger, or follower pressed and driven into and under the head and the flange of the cartridge, and so strengthen it, and by a very cheap and expeditious process.

Having thus fully described my invention, what I claim is—

A cartridge-case strengthened by means of lead or other similarly-soft and pliable metal, pressed and upset into the head and under the flange of the cartridge, as described and represented.

W. S. SMOOT.

Witnesses:

H. H. BENEDICT,  
E. REMINGTON.

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