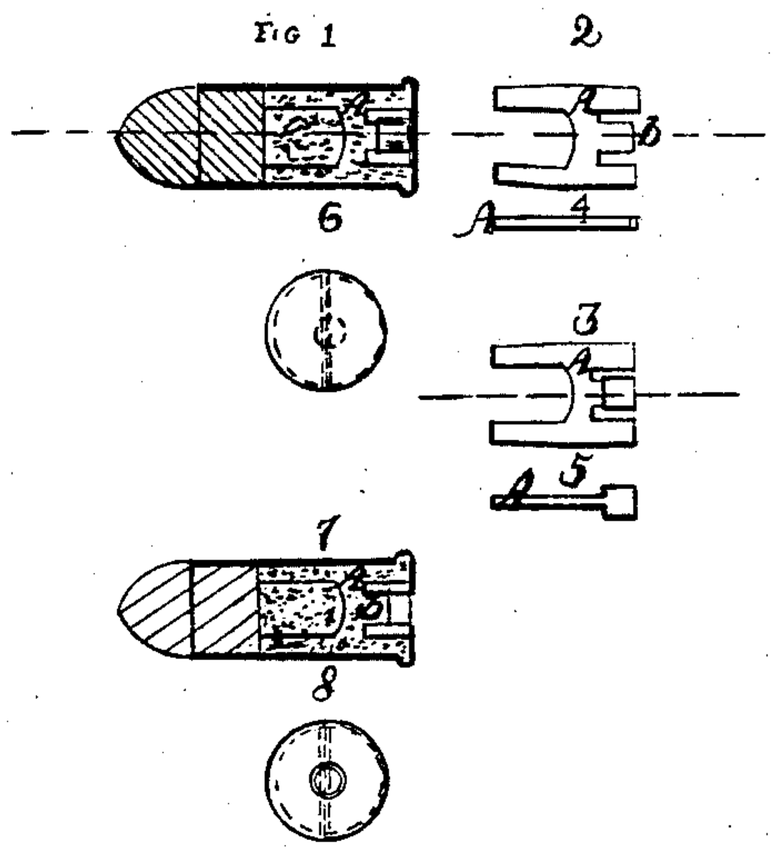
T. T. S. LAIDLY.

Cartridge.

No. 51,324. Patented Dec. 5, 1865.



Witness
Edward Ingersoll
R. G. Shurtleff

UNITED STATES PATENT OFFICE.

T. T. S. LAIDLEY, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN PRIMING METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. **51,324**, dated December 5, 1865.

To all whom it may concern:

Be it known that I, THEODORE T. S. LAIDLEY, of Springfield, Massachusetts, have invented a new and Improved Primed Cartridge; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal section through the axis of the cartridge. Figs. 2 and 3, a view of the anvil for the cap; Figs. 4 and 5, a side view of the anvil for the cap; Fig. 6, an end view of cartridge; Figs. 7 and 8, longitudinal section and end view of cartridge, with hole in the end for the cap.

Similar letters of reference indicate in the different figures like parts.

The nature of my invention consists in inserting in the cartridge-case, of whatever material it may be made, an anvil, A, punched from sheet metal. This anvil receives a percussion-cap on one end, and the other end rests against the ball, wad, or shot. The taper of the cartridge-case prevents the anvil from blowing out when the cartridge is fired, but when desired to be used again, can be readily taken out, a fresh cap put on, and inserted in the case, which can thus be used several times.

The advantages which I claim for my cartridge are: greater safety in handling and transportation, from the percussion-powder occupying only a small space in the center of the end of the cartridge, where it is well protected from accidents, and greater economy from being enabled to use other materials for cartridge-cases than copper, and from using the same cartridge-case for several fires by simply removing the percussion-cap and substituting a fresh one.

To enable those skilled in the art to make and use my invention, I will proceed to describe the process of manufacturing it.

The anvil A is punched out from sheet metal of sufficient thickness to resist the blow of the hammer, and of such width as to allow it to enter the case with a snug fit. This will insure its being always in the axis of the cartridge. A percussion-cap is placed on the end *b* and then inserted in the case and pressed to the bottom; the case is then tapered by being forced into a taper hole of the right size. The powder is poured in, the ball inserted and forced into its place resting against the end of the anvil, as seen in Fig. 1. The case is then crimped over the ball, and the cartridge is ready to be fired. To reload the shell, press it in the direction of the flat sides of the anvil, and the anvil will drop out; remove the old cap, put on a fresh one, insert it, and load the cartridge as before. In this way the same case may be used several times by simply renewing the cap, and the operation is so simple that any one can perform it.

A hole may be made in the end of the cartridge, so that the hammer or firing-pin shall strike the cap direct, the escape of gas to the rear being prevented by a flange on the cap.

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

The combination of an anvil, A, with the cartridge-case of a primed cartridge, the said anvil, not attached tc the case, receiving the percussion-cap or priming on one end, the other end resting firmly against the projectile, and of such shape that when inserted it takes a central position, and cannot be blown out of the case which has been tapered or contracted at its forward end, the whole as above described and for the purpose specified.

T. T. S. LAIDLEY.

Witnesses:

EDWARD INGERSOLL,
R. G. SHURTLEFF.