T. T. S. LAIDLY.

Cartridge.

No. 55,676.

Patented June 19, 1866

Fig 7

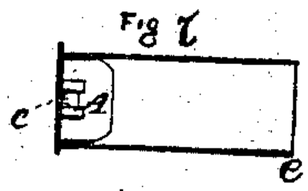


Fig 1

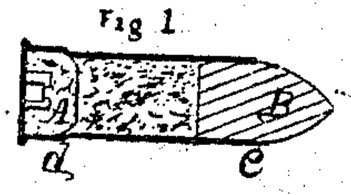


Fig 2.

Fig 3

Fig 4

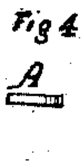
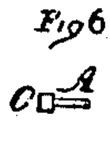


Fig 5

Fig 6



Witness,
R. G. Shurtleff
Geo. W. Waters

T. T. S. Laidly
Inventor.

UNITED STATES PATENT OFFICE.

THEODORE T. S. LAIDLEY, OF SPRINGFIELD MASSACHUSETTS.

IMPROVEMENT IN PRIMING METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. **55,676**, dated June 19, 1866.

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. 3 and 4, views of the anvil; Figs. 5 and 6, views of the anvil with the percussion-cap in place. Fig. 7 represents the cartridge-case after firing.

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

The nature of my invention consists in inserting in the cartridge-case an anvil, A, punched from sheet metal, and receiving a percussion-cap, and holding the anvil firmly in its place by means of a shoulder formed below the head of the cartridge by reducing the diameter of the case a portion of its length.

The cartridge is fired from a barrel, the chamber of which is the frustum of a cone. The case conforms to the chamber after the explosion, the shoulder disappears, and the anvil can be withdrawn, recapped, inserted, and made fast, as before.

The advantages that I claim for this cartridge are, the firmness with which the anvil is held in place, thereby securing certainty of fire; the small weight of the anvil; the small volume it takes in the cartridge-case; the ease with which it is taken out, recapped, and replaced, thereby enabling the sportsman to use the same cartridge-case several times, and thus diminishing the cost of his ammunition.

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

Punch out from sheet metal the anvil A, of the proper width to allow it to enter the cartridge-case with a snug fit. Its thickness should be such as to resist the blow of the hammer without yielding. Put on a percussion-cap, press the anvil to the bottom of the cartridge-case, which has already been drawn and headed, force the case into a die which is about three or four hundredths of an inch smaller in diameter than the cartridge-case, until the shoulder thus formed is brought against the anvil. The case is then ready for the charge of powder and ball. Ream out the chamber of the gun to a uniform taper, so that the cartridge will just enter with a snug fit at its two extremities. After the cartridge has been fired pull out with a pair of pliers the anvil, renew the cap, replace the anvil in the bottom of the case, and force the case into the die, reducing the diameter as before, forming a shoulder for the anvil to rest on. In this way the cartridge-case may be used over a number of times—as many as ten or twelve times.

This style of cartridge can be used to great advantage where the space occupied by the powder is considerable in length, as in cartridges of small caliber with large charges.

I am aware that cartridges have been made by securing the anvil in the head of the cartridge-case, the head being formed by reducing the rest of the case to a smaller size. Cartridges made in this way cannot be reloaded, like that of mine above described, and which possesses this great advantage.

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

The combination of the cartridge-case with an anvil, A, which is of such shape that it holds the percussion-cap in a central position within the case against the head, and is held firmly in its place by resting against a shoulder formed in the case below the head after the anvil has been inserted, in the manner and for the purpose above described.

T. T. S. LAIDLEY.

Witnesses:
R. G. SHURTLEFF,
GEO. W. WATERS.